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**ASSESSING THE EFFECTIVENESS OF SUSTAINABLE PROCUREMENT IN
GHANA: A CASE STUDY OF NORTHERN REGIONAL COORDINATING
COUNCIL**

BY

MILLICENT ADIALI ISSAH

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2019

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MILLICENT ADIALI ISSAH

(UDS/MCM/0123/16)

**THESIS SUBMITTED TO THE DEPARTMENT OF MARKETING AND
PROCUREMENT, SCHOOL OF BUSINESS AND LAW, UNIVERSITY FOR
DEVELOPMENT STUDIES, IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF MASTER OF COMMENCE DEGREE
IN PROCUREMENT AND SUPPLY CHAIN MANAGEMENT**

MARCH, 2019

UNIVERSITY FOR DEVELOPMENT STUDIES



DECLARATION

I, Millicent Adiali Issah, declare that this project is the result of my original research and that no part of it has been presented for another degree in this University or elsewhere.

Signature:..... Date:.....

Millicent Adiali Issah

SUPERVISORS' DECLARATION

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University for Development Studies.

Signature:..... Date:.....

Dr. Stephen D. Kpinpuo



DEDICATION

This work is dedicated to my two sons, Tomlet Issah and Thomas Issah Junior, Charity
Alhassan a friend of mine, my Mother and all my Siblings.



ACKNOWLEDGEMENTS

My greatest thanks go to God Almighty for taking me this far in my educational career.

Special thanks to Dr. Stephen D. Kpinpuo and Mr Kwame Asamoah, for their time, direction and guidance in the supervision of this project work. Also to Dr. Alhassan Musah, Mr. Batola David for all the assistance towards the successful completion of this work.



ABSTRACT

Even though there is no doubt that an efficient public procurement system is necessary to ensure value for money in government expenditure, the systematic level of awareness and the degree to which the procurement process ensures sustainability is much less apparent. This study examines the effectiveness of sustainable procurement in the Northern Region of Ghana. The study employed the quantitative approach and descriptive design and targeted personnel of the Entity Tender Board Committee at the Northern Regional Coordinating Council (NRCC) and contractors who had executed projects within the Region. Using census and convenience sampling techniques, a total number of 50 respondents was selected. A structured questionnaire was the primary data collection instrument. The study found that although sustainable procurement encompasses social, economic and environmental implications, sustainable procurement practices (SPP) within the NRCC did not fully embrace the three sustainability dimensions. While SPP at the NRCC fully recognized the social and economic aspects, the environmental aspects of sustainability were not duly observed. This environmental lapse was attributed to factors such as the influence on SPP by politicians, difficulty in getting the support of colleagues and other management staff, and high cost associated with sustainability in the procurement process. This was particularly an intriguing finding as the level of awareness of respondents with regard to the tri-dimensional sustainability practices (social, economic and environmental) at the NRCC was found to be high. The NRCC, therefore, must work to ensure full environmental inclusion through such interventions as formulation of related policies, implementation of such policies, and establishment of indicators for measuring SPP operations and impact. It is also recommended that members of the procurement units be further trained on how to include the social, economic, and environmental aspects of SPP in their work schedules.



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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The increasing cost of public procurement is a problem worldwide. Traditionally, the focus of procurement is to ensure efficient purchasing through low cost purchasing of quality materials and award of contracts. However, the dynamism in today's market, coupled with intense competition, requires every organization to be innovative in its delivery of services while ensuring that work delivered is standard. According to a study conducted by the Economic Cooperation and Development(OECD, 2007), the expenditure of government on procurement alone exceeds US \$2,000 billion and this represents 7% of the world's GDP. This implies that to reduce cost and ensure effectiveness in the procurement process, there is the need for outstanding practices through key strategic areas that are connected with the overall process. As stated by Peprah, Brako and Akosah (2018), the procurement process in today's world is moving gradually from a clerical unit with no strategic plans to a very efficient socio-economic unit which should have an enhanced strategic plan to maintain effectiveness and add value to services rendered. In most developing countries, this is lacking(Asare & Prempeh, 2017). This has therefore made most of these countries to join efforts with international developmental partners such as the World Bank, the International Trade Centre, UNCTAD and many other bodies to bring a change in their procurement process. Most of these countries have therefore reformed their procurement processes, strategies,



foundations as well as the entire workforce. These changes and reformations have therefore impacted pressure on how the procurement function works to achieve both its internal and external orders and procedures. The ability to attain a procurement goal is therefore both an internal and an external affair involving the interconnection between various elements, professionalism, employees, resources and the organizational structure of the procurement unit. The regulations governing the procurement process, the structure of the procurement whether centralized or decentralized, the internal policies of the organizations, all need to be factored in during the procurement process since they all influence the performance of the procurement function.

This is not different from Ghana. According to Seyram (2016), the decentralization of Ghana mandated that, within every region, there should be a coordinating council; hitherto called the Regional Coordinating Council, with the authority to monitor and evaluate the progress of Metropolitan, Municipal and District Assemblies (MMDAs) within the region. This decentralization planning system also gave authority to MMDAs to act as planning authorities and spearhead the operations of procurement practices within the Metropolitans, Municipals and Districts Assemblies with the Regional Coordinating Council acting as the watchdog over these activities and coordinating all roles on the formulation of policies. A function of the Coordinating Council is to gather, share information and ascertain the means through which the MMDAs are working towards the achievements of the region-wide developmental set goals. They also need to identify those MMDAs who are lagging, the reasons for their lagging and report to the national level for the necessary assistance or action to be taken. Another important role is



that the council need to monitor all the procurement practices that take place in the region against corrupt practices and inefficiencies so that trust could be established within the procurement process. From the Public Procurement Act (2016)in Ghana, procurement deals with acquiring products and services at minimal cost possible with no compromise to quality. Therefore, everything that is done on the price review should be geared towards the best cost possible signifying the attainment of the right and affordable cost with the right quantity, possessing the right quality within the right time and in the right place. Emphasis should also be placed on the direct benefit to individuals. Hence for a procurement to be described as efficient, the attainment of all these five qualities (affordable, right quantity, right quality, right time and benefit or useful) should be observed. When all these five qualities are observed, then the procurement process is said to be sustainable. Therefore, organizations that are involved in the procurement process need to find various means of ensuring sustainability of such public procurement effectiveness.

According to the Transparency International (2012), procurement is said to be sustainable when the organization widens its framework to meet the needs of the society or economy through effective services, works or utilities in a manner that ensures value for money. Therefore, Public Procurement Sustainability is a means of meeting the needs of society with regard to provision of products, infrastructure and services at minimal cost. Sustainability Public Procurement (SPP) benefits the organization and the society while ensuring the minimization of damage to the environment. SPP is therefore used as a policy instrument to support the transition towards sustainable production and



consumption. The process concerns effective use of public funds to maintain sustainable development. From the production and the manufacturing process through to its use and disposal, the product or service must be environmentally friendly from the manufacturing, usage and disposal; every product produced or service rendered has an environmental impact on the society which needs to be seriously considered. According to Manyenze (2013), organizations seeking to improve sustainability in the environment must work with the suppliers to reduce material toxicity or the amount of package used on the products. The focusing on the environmental sustainability aspect of procurement may provide a transitional route toward complete sustainability.

A study by Lengwiler and Wolfstetter (2006) indicates that the prevalence of corruption in African countries is due to weak institutional structures coupled with the lack of effective monitoring processes. From Jones (2007), public procurement is usually perceived as an area of waste that impregnated with widely circulated fraud. As stated by Ameyaw, Mensah and Osei-Tutu (2012), when procurement laws, regulations and policies are not properly enforced, corruption reigns. Wilson (2004) posited that in a situation where there are substantial system loopholes coupled with flexibility in legal and systems of administration with lack of transparency and excessive discretionary powers invested to politicians, corruption prevails unless there is the zeal to ensure a concerted effort of ensuring stringent implementation of laws and policies to accomplish goals of the organizations. Various studies in Africa have indicated the existence of massive corruption in the public procurement system and this act is undertaken by violating laid down procedures governing the procurement process. Besides, the mere existence of



weak enforcement processes, rules and regulations governing the procurement process does not necessarily scare others from indulging in procurement malpractices.

1.2 Statement of the Problem

The 2016 Corruption Perceptions Index (CPI), released by Transparency International, posited that Ghana is ranked 7th in Africa and 56 out of the 168 countries listed in the world. This means that the nation remains one of the most corrupt countries in the world (Transparency International, 2016). Though corruption exists in every part of the globe, Lengwiler and Wolfstetter (2006) indicated that the quantity of corruption involved in public procurement is huge. In sub-saharan Africa, it is estimated that, for every 100 public contracts given, 70 is marked as transactions of massive corruption, often leading to 20-30% cost overrun. As stated by the Transparency International (2016), the cost associated with corrupt acts existing in Africa alone amounts to some 148 billion dollars yearly. An additional study by the World Bank (2014) reported that between 50% – 70% of the budget of Ghana is procurement related after personal emoluments. From the studies of Osei-Tutu, Badu and Owusu-Manu (2010), corruption that associates the systems and procedures governing procurement in the country results from the actions and inactions of stakeholders in the procurement sector. These stakeholders are the politicians, public servants, clients, consultants, contractors and suppliers. With a Consumer Price Index (CPI) index of 48% in 2010 and an exceeding jump to 346% score in 2016, there is no doubt that corruption is a major problem and a significant impediment to effective resource utilization in the delivery of services.



Hence, to ensure that every purchase is done with the concept of value for money in mind, the effectiveness of the procurement process in the public sector should be a priority for all stakeholders. Besides, as stated by Peprah et al (2018), there is limited research studies done in this area and especially in the Northern Regional Coordinating Council (NRCC). A systematic assessment of the level of awareness and the degree to which the procurement process ensures sustainability is undoubtedly critical. This research thus presents a detailed discussion of the concept of sustainable procurement, its awareness within stakeholders of the procurement cycle, and the degree of implementation of procurement practices at the NRCC. This way, potential gaps could be identified and practical implications determined in order to help ensure both effectiveness and sustainability of public procurement at the NRCC.

1.3 Objective of the Study

1.3.1 General Objective of the Study

The primary objective of this research work is to examine the effectiveness of sustainable procurement practices at the Northern Regional Coordinating Council (NRCC) in the Northern Region of Ghana.

1.3.2 Specific Objectives

Specifically, the research work intent

1. To determine the level of awareness of sustainable procurement practices at the NRCC.
2. To identify key sustainable procurement practices adopted at the NRCC.



3. To examine the role of the NRCC in ensuring sustainable procurement practices in the Northern Region
4. To determine the extent to which procurement practices at the NRCC promotes sustainability.
5. To examine the factors affecting the implementation of sustainable procurement practices at the NRCC.

1.4 Research Questions

1. What is the level of awareness of sustainable procurement practices at the NRCC?
2. What sustainable procurement practices are adopted at the NRCC?
3. What is the role of the NRCC in ensuring sustainable procurement practices in the Northern Region?
4. To what extent do procurement practices promote sustainability at the NRCC.
5. How may sustainable procurement efforts at the NRCC be enhanced?

1.5 Significance of the Study

The study provides relevant information to policy makers, individuals and groups alike ,as well as to contractors and consultants of sustainable procurement. This study is therefore essential for the realization of career development of public procurement practitioners and their regulators and, thus, of national development actors with an interest in protecting the public purse from both waste and abuse. In light of this, the study brings to bear various sustainable procurement practices which could help Public Procurement Managers to be proactive in their professional undertakings. Also, multiple



challenges in achieving sustainable procurement practices were examined and organized as guide for the RCC in developing appropriate measures to deal with such challenges. Management within the procurement sector are also guided in their dealings with environmental and societal issues of communities within which they operate.

Practically, the research would help put management of the NRCC on its toes in terms of implementation and monitoring of contracts awarded in a bid to ensure that all sustainability practices are adhered to. This way, management will be more relevantly positioned to positively impact the procurement process through service specification and implementation, evaluation and selection of supplier or contractors and the effective evaluation of performance by the contractors and suppliers. This could be done either by developing its own performance evaluation model or adopting an effective existing system to do the evaluation. It will also be a source of secondary information to be utilized by other researchers when conducting similar topics. The findings from this study will provide insight for researchers, academicians and decision makers in the Public sector who may be interested in studying procurement practices and its sustainability in Ghana.

1.6 Scope of the Study

The study seeks to examine the effectiveness of sustainable procurement in the Northern Region of Ghana. The role of RCC and its relevance in the public sector was examined. The study also discussed various challenges in implementing sustainable procurement practices in Ghana. The survey targeted employees of the Northern Regional Coordinating Council (NRCC).



1.7 Limitations of the study

The study was underpinned mainly by constraints such as problems in the data gathering process. Most of the respondents were not ready to disclose information for fear of breach of the Oath of Secrecy. However, they were made to understand that the information was meant for only academic purposes. Respondents were also assured of the confidentiality of the information. The study was also limited to procurement procedures within the NRCC.

Also, all the variables were measured using questionnaires which portrayed the perception of the respondents and hence may be influenced by biases. However, since the research was concerned with self-perceptions, it is not unreasonable to adopt the use of such responses from respondents.

1.8 Organization of the Study

The study is structured into five parts or chapters. The first chapter contains the introductory part of the study where study background, the statement of the study, the objectives of the study, the research questions, the significance / justification for the study, the scope of the study and the limitations of the study are presented. The second chapter looks at related theories and various literatures and reviews on the subject matter. The third chapter looks at the research methods for the study. The research methodology considers the design of the research, the population and sample size as well as the sampling technique. The chapter also comprised of the sources of data, data collection, the instruments for the data collection, methods of data collection, data analysis and ethical considerations for the study. The fourth chapter looks at analysis of the data and



research findings which are presented under each of the objectives of the study. Finally, the fifth chapter provides the summary of the research findings, conclusion, recommendations for the study and the areas for further research.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter draws attention to relevant works conducted in sustainable public procurement. The focus of this chapter is to make an explicit understanding of the

concept of public procurement and to address theoretical and empirical issues about the implementation of sustainable procurement practices. The review was organized under the theoretical review, empirical review as well as identification of the research gap. The Conceptual framework was also drawn to guide the study.

2.1 Theoretical Framework

The conceptual review is organized under the following sub-headings:

- Definition and Concepts of Procurement, Public Procurement and Sustainable Public Procurement
- Dimensions of Sustainable Procurement
- The Public Procurement Act
- Sustainable Procurement Practices in Ghana
- Maintaining Successful Sustainable Procurement Practices
- The Regional Coordinating Council and Sustainable Public Procurement
- Factors affecting the implementation of Sustainable Procurement Practices

2.1.1 Definition and Concepts of procurement, public procurement and sustainable public

Procurement

Procurement, according to Conway (2012), entails the process through which goods and services are obtained through the processing and preparation of requisition by issuing a receipt and approval of invoice for payment and services from preparation and processing of a requisition through to receipt and approval of the invoice for payment. It involves the



plan for purchases, determination for standards, development for specifications, research and selection of appropriate supplier and value analysis of a product or a service to be delivered. It also entails the financing of goods and services, negotiations for effective price, making the purchase, administration of the contracts, inventory controls and disposal of waste and other related functions that involves the delivery of products and services. Procurement, in the view of Asare and Prempeh (2017) is defined as the process of acquiring goods and services from a supplier which could be an individual or organization. The process for procurement could be viewed as involving sourcing contracts, monitoring and evaluation of the contract and expedition based on a specified standard.

According to Kalubanga (2012), sustainable procurement is the process through which a firm acquire goods and services from a another firm or individual called a supplier with the aim of getting affordability in cost and benefits that will meet the requirements of a customer. It entails the process meeting the needs, utilities and services of the firm by ensuring that value for money is maintained for the organization, the society, the community and the economy as a whole while ensuring minimization of damages and risks to the environment. According to MOF (2017), in every procurement, the primary purpose for achieving the correct balance between the cost of the item and the following requirements referred to as the 5 R's of the procurement process.

- i) Right Quality Procurement which ensures that the right quality of products needed is purchased with a specification that are very precise and meets the



expectations of the entity. It should also meet the quality requirements of the bidder as well as maintaining the quality awareness.

- ii) Right Quantity requirement which ensures that extra cost associated with the purchase and the systemic overheads involved within the procurement process is eliminated. This could be done by buying massive quantities of the product instead of buying in small quantities. Therefore, there is the need to ensure that the right quantities of the commodity is bought in order to balance the extra cost which associates with buying smaller quantities.
- iii) Efficient Pricing System: Usually, the intention of public procurement should be geared towards the minimum price but should be such that it does not compromise quantity and quality.
- iv) Right Time and Place. This requirement ensures that the organization gets the product purchased at the right time. The firm from which the commodity is bought from should maintain that the product bought arrives at its destination at the right time and at the right place.
- v) Right Source by making sure that the source of delivery of the purchased have meets all the requirements financially and technically for the product needs.

From the study of Seyram (2016), procurement is a means of purchasing, hiring or obtaining a commodity, a property or a facility on a value-added cost with the correct amount, at the right period, in the right place to be effectively used by a firm while marinating the pact agreement with the PPA, Act 914 enacted in 2016. With this concept in mind, the management of a firm ensures that they become economically self-controlled, become liable, clearness, behaves morally good and delivers their services



that is in line with the objectives of the company. This is what pushed the amendment and guided the PPA, Act 914 in the country; to ensure that public expenditure is done with a value-added in mind (Public Procurement Act, 2016). However, this objective remains in the dark.

Public procurement

The Public Procurement Act of Ghana, 2003 (Act 663), defined the concept of public procurement as a means of acquiring the best products and services in the right quantity, with good quality and achieved at the right time and place which the society tend to be extensible benefit from (Public Procurement Act, 2016). This implies that the public procurement process ensures that organizations or firms acquire goods and services with public funds and hence ensuring sustainability is very necessary everything done with the public fund should benefit the mass. The public procurement process is very comprehensive and operates from proper planning of the procurement process, efficient allocation of funds or budget, inviting other firms for bidding, the evaluation of the bidding process, the awarding of the contract to a qualified contractor, ensuring proper contract management, measuring performance, ensuring effective monitoring auditing and reporting. Government procurement is one of those subjects that have been under study recently, perhaps due to the high levels of public corruption involved during the delivery of services. A study by Basheka (2009) revealed that the concept of public procurement is one of the contributory factor for corruption in government and a breeding ground for most public corrupt practices.



The concept of public procurement is now recognized as a tool for government policy and a stage for maintaining wider economic, social and environmental change(OECD, 2007). However, there is argument as to which international regulations permits for a wide view of the procurement process than a business process. If the various countries become conscious of the economic, social and environmental aspects of the procurement process, best criteria can be enacted to ensure that the public procurement is implemented without damage to the society and the procurement process. With the concept of sustainability in public procurement now gaining grounds and becoming very necessary to include in every country's procurement process, it is time to embark on various studies to create awareness of the concept of sustainability in developing countries. These countries need to divert their attention from the previous focus on economic benefit of the procurement process to ensuring sustainable public procurement systems which includes environmental benefits of the procurement. The concept of sustainability in procurement that was originally implemented in 2002 by the UN World Summit in Johannesburg included concepts such as planetary, socio-cultural, economic and environmental considerations(Borland, 2009). It entails the process, through which the procurement process looks beyond the traditional concepts of ensuring economic benefits and making decisions and plans to achieving a value-added cost in association with social benefits of the procurement and more importantly the environment risks that could likely surface. The process therefore ensures and maintains a balance in developments through economic, social and environmental implications against the needs of the business and the society. This concept of sustainability in the public procurement if implemented effectively can be used to target the vulnerable and social disadvantage and the excluded



in the economy(Asare, 2016). Public procurement is a significant and yet understudied phenomenon in Ghana. The country has since independence struggle to eliminate the weakness and fraud that exist in public procurement. Recent efforts have been the quest to review the Public Procurement Law of 2003 to integrate clearly spelt out Sustainable procurement component(Sewoanu, 2012).

With regard to this, the Government of Ghana in 1960 enacted the Contracts Act, 1960 (Act 25) and Ghana Supply Commission Act which was reviewed later in 1990 by PNDC law 245. In 1976, the Ghana National Procurement Agency Decree, 1976 (SMCD 55) was passed by the Supreme Military Council(Public Procurement Act, 2016). In 1979, another law, the Financial Administration Decree (SMCD 221) was also passed. The inadequacy of these laws has called for a paradigm shift in terms of focus on public procurement demanding for sustainability indices. The integration of sustainable components in public procurement offers the added advantage of improving ethical behavior of suppliers / contractors especially, and the public at large, reducing harmful emissions and waste generation; improving air and water quality; increasing the wealth and health of the society (hence improve living standards),improving working conditions - health and safety, labour standards, reducing labour agitation.

Sustainable Procurement

When a procurement is carefully designed and implemented to include sustainability practices, the system leads to an improvement in efficiencies, reduction of potential cost and create competitive advantage for the business as society now moves and embraces



this principle(Fitzgerald & Shepherd, 2018). The concept of sustainability in procurement is therefore the means within which an institution strives to meet its stated goals by producing products or services that meet the expectation of the society and at the same time achieve value for money in terms of benefits to the individual or society and the economy as a whole with the intention of minimizing environmental damage (Njeru, 2015) . In addition to this, sustainable procurement can also be defined as ensuring the social and ethical responsible during the process of purchasing, minimizing environmental damage through the supply chain process and delivering solutions that are economically sound and adheres to the ethics of the business industry (Abunyewah, Boateng, Nyaning, Artorful, & Owusu, 2013). According to Kwadzo (2014), sustainable procurement includes all the processes of acquiring goods and services without neglecting the social benefit of the product and its environmental impact on the people and communities while maintaining value for the service rendered. It includes the process of buying goods and services that considers the social, economic and environmental impact that those actions will have on the people and community who are to benefit from the process. It is about the consideration of the make of the products and services to be rendered, the place where these goods and services are coming from, whom these products and services belong, how these services will be beneficial to the society it is to serve, how the products and services would be delivered and how the remains will be disposed of to minimize its risk on the society. The process of sustainability also involves taking into consideration, the economic benefits of the service, the environmental benefits as well as the social benefits or impact in the choices to be made. The process therefore includes the optimization of the products or services in terms of price, quality,



availability and its environmental impact and social impact that are linked to the products or services to be rendered(PWC, 2010)

In this modern times where sustainability issues are becoming very important in the developmental agenda of countries, it is necessary for countries to shift their focus of public procurement practices from just ensuring economic benefits to SPP systems resulting in long term benefits to every individual but not for governments alone. SPP addresses the environmental, social and economic outcomes of procurement practices from the design process through manufacturing and finally the usage and disposal. According to Asare (2016), inappropriate production and consumption practices have left many African countries with worsened climatic conditions, abject poverty, and environmental degradations. SPP takes the environment, social and economic factors of the procurement process into consideration. It supports the policies for ensuring free, fair and transparent services to both the supplier and society; and also ensure benefits to the long-term economy and maintain accountability.

Very important to the formulation of policies of sustainable procurements involves the definition of when the procurement process is said to be sustainable. One means of which one can determine how sustainable procurement can be is the adoption of an approach termed as the Whole Life Cycle (WLC) which could be applied as either an asset or as a multiple asset level (Kwadzo, 2014). The Whole Life Cycle approach is mostly applied as a sourcing strategy to assist people take a decision between competing options in the procurement process. This is to ensure that contracts awarded and the decisions taken on



contracts to be awarded are based on the cost assumptions over the entire life cycle of the goods and services but not just the upfront capital cost. The WLC can also be used during the evaluation of the tender stage. As stated by Oluka and Basheka (2013), one needs to be very careful when choosing the WLC so that cost does not substitute impact on the environment option. As noted, the practice of procurement processes in Ghana do not include most of these sustainability considerations and practices.

Using an international comparative study, Brammer and Walker (2007) posited that there is the need for policy makers to always emphasize on the various aspects of the SPP since there are different interpretations and meanings from different countries and as such there is no any apparent way to approach the SPP concept. This implies that more research is needed in the SPP area, especially in the Ghanaian context. Maintaining SPP ensures a balanced development economically, socially and environmentally. As stated by Boomsma (2008), SPP could be adopted as a means of tackling socially disadvantaged individuals and the exclusive. SPP gives the opportunity for consumers to exert control on the production process as well as the benefits and disposal of the goods or products. In public procurement, public sector organizations and the community acquire goods and services from third parties. It also takes care of money spent in the provision of key services in the of education, health, social care and welfare of the citizens. SPP ensures that the provision of such services are delivered through a competitive process. Effective public procurement is therefore very important for the provision of public goods and services.



2.1.2 Dimensions of Sustainable Procurement

According to the Government of Western Australia, sustainable procurement contains three dimensions; the social aspects, economic dimensions and environmental dimensions (Islam & Siwar, 2013). This is also supported by Willard (2012) that, the economic, social and environmental size is the three-legged stool metaphor in which if one leg is weak, will make the sustainability unstable. These three pillars must be fulfilled to achieve sustainable procurement. This means that the procurement process must look beyond the necessary criteria of price, quality and service when deciding on procurement decision. The up-front cost of procurement is not only considered, but consideration of whole a life cycle cost must be emphasized when awarding the contract. Another dimension in the field of procurement need embedment of sustainability principle in the procurement process. There is requirement to reduce waste, procurement risk and increase competition through the consideration of environmental issue in the procurement process (Kalubanga, 2012). Many procurement organizations consider environmental issue and issues relating to society and economy in their design and implementation of procurement process.

Social Dimension

Every action that involves buying involves social implications and the concept of SPP could be used to drive improvements socially. For instance, the conditions of working for workers in public contractors, the less privileged in the society, accessible to disabled, employment for the marginalised in the society, child labour and supporting fairness in trade. According to Bofinger, Ketikidis, Koh and Cullen (2015), social activities that



need to be considered during the procurement process include the consideration of human health and safety, support to small and local businesses by helping them to develop, employing and training the less privileged group in the society and supporting and implement the regulatory requirement during the procurement.

Implementation of sustainable procurement ensure social responsibilities are achieved. It will also provide good image of organisations with sustainable practice and improve organisational reputations interms of sustainable procurements. Sustainable procurement also creates sustainable consumption and promote market for sustainable product. It leads to improvement in the local economic development. It ensures better alignment of organizational practices with organizational goals. It attracts and retain staff and at the same time provide an opportunity to lead by example. According to Government of western Australia, the suppliers adopt ethical practice and adherence to the legislative requirement and other actions which benefit society interms of inclusiveness, equality, diversity, regeneration and integration(Fitzgerald & Shepherd, 2018). The Government recognize other benefit of sustainable procurement on social life. Sustainable procurement enables the suppliers with ethical and social responsibility to gain government support interms of soliciting for suppliers, it promotes the development of upcoming and small businesses, it focuses on the disadvantages group in the society by providing them with employment and training and ensure the compliance with health safety requirement as well as other regulatory requirement. The attempt to link the social dimension to procurement originated in the 19th century in England, United State and France(Mccrudden, 2004). The ethics of carrying out the procurement activities in the



global world is under scrutiny due to exploitation of work forces under force labour condition in some major construction companies (Cathy and Shaun, 2011). The influence of stakeholders such as NGO's and consumers must be considered seriously because many firms go green in response to public pressure (Kiwili & Ismail, 2016). Sustainable procurement is used as mechanism to tackle the status discrimination and improve status equality. According to D'Souza, Taghian and Khosla (2007), there are some of the social activities that need to be considered during the procurement: The support to suppliers who are responsible to the government and fulfill their ethical standard and social responsibilities, to consider human health and safety either at the workplace or in the society, to support the small and local businesses by helping them to develop, employing and training the less privileged group in the society and supporting and implement the regulatory requirement during the procurement.

Sustainable procurement promote strong, health and just society, living within the environmental limits and promoting good governance (Brammer & Walker, 2011). The procurement is guided by certain principles such as; transparency, accountability, effectiveness and effectiveness, probity and fairness which contribute to the achieving value for money. It leads to socio-economic benefits ranging from creation of employment and providing training opportunities to the disabilities and solve long-term unemployment which lead to the elimination of child labour. It promotes and develop the local businesses and small medium enterprises by giving them opportunity to grow. Sustainable procurement also leads to management in consumption of raw materials and



energy which improve good resource management, chemicals in products, pollution emission and waste generations(Jones, 2013).

Environmental Dimensions

From the production and the manufacturing process through to its use and disposal. The product or service must be environmentally friendly from the manufacturing, usage and disposal; every product produced or service rendered has an environmental impact on the society which needs to be seriously considered. According to(Meehan & Bryde, 2011), organizations seeking to improve sustainability in the environment must work with the suppliers to reduce material toxicity or the amount of package used on the products. The focusing on the environmental sustainability aspect of procurement may provide a transitional route toward complete sustainability. Many corporations are now turning into green procurement in order to save the environment (D'souza et al., 2007). The green procurement can be distinguished in a few ways. Green product must provide some level of achievement by reducing the environmental impact of the procurement. It may include some strategies for recycling recycled content, using less toxic materials and product that will minimize packaging.

From the Chartered Institute of Purchasing and Suppliers, green procurement is a means of considering the environmental, social and economic results of a production process, consumption and disposal(Chari & Chiriseri, 2012). The Japan Ministry of Environment stated that green procurement is the method of ensuring that all procurement related activities such as the purchase of products and services have minimal environmental





effect. Per this concept, the relevance emanates as a result of the fact that companies ensure the implementation of green procurement as an aspect of their value chain management (VCM). The purpose of VCM is therefore to decrease the influence of the environment and help boost values with a view to the entire life cycle of business, going above the procurement of raw materials, suppliers in the procurement industries and including product use and disposal. The concept of green procurement is therefore anchored on the notion that companies could benefit at the same time from all the three pillars; namely economically, socially and environmentally (Bofinger et al., 2015). It also pertains to capacity to reduce the environmental impacts of government activities and uphold goals on environmental sustainability by integrating environmental conditions within the procurement process to be a component of the commitment of government to improving the environment and the quality of lifestyle of individuals in the society(OECD, 2007). Nowadays, many companies are advocating for green procurement and green purchasing policies to support the economics of the firm and brighten the firm's environmental aspect. Green purchases also assist to improving the effectiveness of the firm, reduce its liabilities and let the firm gains a competitive advantage over others. The reality is that policies of green purchases is an good and excellent means of finding products with cost effectiveness and improved rates (Samarasinghe, 2012).

Recently, the concept of green procurement has been the priority for most companies and it has been one of the major topics which is discussed under every business aspect. For example, earlier studies by Walker, Helen and Brammer (2012), Peprah, Brako and Akosah(2018)as well as Chien and Li-Hsing (2007)points to the same assertion. All these studies revealed that the concept of procurement is a hot topic for all businessmen today.



The motive behind developing environmental sustainability is to preserve the planet earth. This is because the earth is under serious crisis from the hazards of actions and inactions of men due to pollution and others like depletion of natural resources, effect of global warming, loss of most species and the effect from urbanization, population growth, growth of the economy, the intense nature of agricultural activities, increase in the use of energy, increase in transportation of goods and services. Various efforts have been made by both local and international companies and governments towards the endorsement of green procurement through the intensification of policies. This, mostly stems from the fact that green procurement positively leads to poverty reduction since the concept ensure the sustainable use of resources of the environment, ensures the efficient use of energy, and ensures the better evaluation of the ecosystem(OECD, 2014). The concepts of green procurement also have the potential to internalise the externalities of the environment by mainstreaming all the requirements for the development of sustainable policies into a better economic decision through effective resource pricing and the use of infrastructure. The United Nations Environmental Programme gave a summary of everything when they advocated that there is an increase in evidence to the fact that moving to and better embracing green procurement have several benefits(Kiwili & Ismail, 2016). There is a social and economic justification for the adoption of green computing and the report stipulates that there is the need for firms; both private and government, to double their efforts to engage in the economic transformation and governments should level the playing field for greener products and services by given out old and antiquated subsidies, reforming and redesigning their policies and giving a provision of new incentives, strengthening the infrastructure of the market as well as the

market-based mechanism, redirecting and relocating public investment and greening public procurement. The adoption and promotion of green procurement may help in the prevention of various problems regarding environmental policies, thereby create new business prospects for both governments and corporate entities. Besides, with the importance of this green procurement and the concept which needs to be better appreciated, there is the need to conduct more studies in this area. But according to ORPF (2014) cited in (Peprah et al., 2018), very few studies have been conducted concerning the awareness level of green procurement especially among public institutions in less develop nations. Furthermore, Low Income Countries (LICs) lack the awareness of sustainability in procurement, lack strategic policies ad plans on sustainable procurement, and lack the action plan or implementation strategies for sustainable procurement. In the African context, the concept of green or sustainable procurement is a great challenge due to poverty and other factors relating to lack of awareness of knowledge in sustainability and the lack of effective legal framework (Ferraz, Buhamra, Laroche, & Veloso, 2017). In addition, the study by Jerry (2000) cited in (Peprah et al., 2018) comments that the use of green procurement has been quite limited such that in about a decade, only some high-profile firms mainly those dealing with chemicals and those into the business of consumer goods sectors that have been exposed to green procurement pressures directly in order to practice(Blome, Hollos, & Paulraj, 2014).

Economic Dimension

The term economic in addition to the initial purchase price includes the cost of using products, the cost of maintaining the outcomes and cost of disposing of the products.





Economic sustainability also ensures that the product benefits the community or society economically (Adjei, 2010). According to Asare (2016), one component of the total cost of ownership is the beforehand price at which a product or service is purchased. To ensure long-term value for money, significant financial savings is required via setting out the lowest amount of a product. In procuring a product or services, the purchase cost, usage, maintenance and disposal should be assessed. In some other cases, sustainable production processes reduce the upfront costs of products (Berry, 2011). According to Alejandre, Traspaderne and Elgea (2010), sustainable procurement enhanced the development of new product market as well as improving the competitions of the enterprise and their considerations to environmental performance. Even though some products prove to have higher initial cost or up-front acquisition cost but lower running and maintenance cost that is whole life cycle cost. The sustainable procurement provides some other economic benefit. Sustainable procurement job opportunities through the use of local suppliers, green technology and creating market for recycled product. It leads to cost saving and reduction in the whole life cycle cost in other to achieve value for money. Sustainable procurement support both small and medium businesses and increase competition among the potential suppliers. It improves supply chain efficiently and at the same time ensures business continuity.

2.1.3 Relevance of Procurement Sustainability

With both government and private sector; customers, clients, government bodies and the public sector is giving pressure to the implementation of sustainable procurement practices. From the World Summit on the policies of sustainable practices in 2002, it was realized that relevant authorities with the power to make a change in the community

should try and promote public procurement practices that encourage development and the possible integration of sound environmental practices and products. Responding to this issues, the Business Operators and Professionals were very quick to design and implement all policies and strategic plans with emphasis on the development of sustainability. In addition, the UK strategy for Sustainability Consumption and Production is one organization that quickly responded to designing and implementing policies of sustainability in procurement. As a good step towards the implementation of sustainability measures, the Government of Europe established the Advisory Committee on Consumer Products and Environment to advice the government in sustainability issues. A study conducted in Europe and published in 2009 found that 80% of all purchases initiated sustainability procurement programmes in 2008 while as much as 90% considers the sustainability measures as critical to the survival of their business development and growth(Bocken, Short, Rana, & Evans, 2014). Organizations which practice procurement meet their needs for the provision of goods and services not on a private cost-benefit analysis, but with a view to maximizing the net importance for themselves and the entire world. In doing so, there is the need to consider incorporating extrinsic cost into every decision taken in addition to the decisions made on conventional procurement criteria for marinating cost and quality. These considerations are in three aspects: Environment, Economic and Social (also considered as the triple baseline). The most important areas to be considered environmentally is more efficient use of the raw materials in manufacturing activities, pollution and waste as well as energy savings. A review of available literature could avail that if sustainability is effectively ensured, it has the ability to ensure affordable cost, shorten timelines, encourage effective relationship



between stakeholders and give rise to increase in sales. It also results into reduction of risks, enhance reputation and improve margins. As stated by Geissdoerfer, Vladimirova and Evans (2018), the benefits that a firm can accrue in the adoption of policies and plans in procurement sustainability involves the will to exert control on the cost through the adoption of a wider approach to whole life costing, improving the internal and the external measures through the adoption of appropriate performance measurements, complying with issues in the environment and society, managing risks and reputations, building a sustainable supply chain and marinating this chain for the future involving local businesses and the community as a whole.

Key Legislature, Standard and Regulation of Sustainable Procurement Practices

In this country, there are various policies, laws and regulations that governs how the environment should be preserved. However, for the concept of sustainable procurement practices, there is no clear guideline on environmental sustainability. Even though, there are various laws and policies covering land degradations, preservations of water bodies, animals and other animals which are related to the concept of environmental sustainability in procurement practices there is clear laws on sustainable environmental procurement. During the 1930's the country registered concerns concerning land and environmental degradations and hence legislations to were necessary and various laws and regulations were therefore enacted within this time to deal with this issue. For example, during the year 1901, there was the enactment ad implementation of the Wild Animals Preservation Ordinance, followed by the enactment and implementation of the Rivers Ordinance Act in 1903. In 1907, the country saw the implementation of another





law which was concerned on forest reservation and by a year time the country established the forest department in the country. In 1925, the Mining Rights Regulations Ordinance was enacted and implemented. Thereafter, there was severe degradations in the Northern sector of the country ad this led to the enactment of an institution of land planning and soil erosion measures in those areas. The rules and policies that were introduced at that time led to the conservational practices in the agricultural sector dealing with the better use of land, water and grazing resources. The planning of these policies as well as the execution of these policies were the mandate of the Department of Agriculture and Forestry and the local people in the community. Then, came the land planning and Soil Erosion Ordinance was passed and implemented in 1953. This law saw an amendment in 1957 and the amendments dealt with the creation of permanent committees of the areas designated for planning. The country was however, the first to create an environmental performance rating and disclosure initiative dealing with pollution by the Environmental Protection Agency (EPA). This initiative was dubbed the AKOBEN and it provided access to information relating to the area of mining and other waste into the environment (Darko-Mensah & Okereke, 2013). The agency that was required to see to the smooth observation and implementations of these issues to protect the environment is the Environmental Protection Agency which was formerly called the Environmental Protection Council. The EPC was established and inaugurated as a public institution which was mandated with the oversight rights to devise measures in protecting the environment.



The EPC was established in the year 1974 through the National Redemption Council Decree, number 239 also termed the NRCD 239 in Ghana. The section 2 of this NRCD 239 mandated the Environmental Protection Council among other things to ensure the observance of proper safeguards in the planning and implementations of policies and rules and the observance of other rules and regulations that have been in operation and are likely to positively impact the quality of the environment (Yeboah & Mensah, 2014). The enactment and implementation of the EPA Act, 1994 otherwise called Act 490 was meant to create a corporate body referred to as the Environmental Protection Agency to replace the Environmental Protection Council. Currently, this is the institution which have been in operation and ensure compliance and adherence to all rules, regulations and laid down environmental assessment procedures and policies meant to ensure the effective planning and implementation of all developmental projects including the adherence of existing projects. From the Environmental Protection Agency is embedded the Environmental Policy, Sustainable Development Policy and General Legislative Framework. In the early, 1980's there was the Structural Adjustment Programme (SAP) and the Economic Recovery Plan (also ERP). The impacts of these two agencies led to the development and implementation of the Environmental Protection Agency (EPA) which entails sets of policy regulations, related investments and strengthening the activities of institutions towards the implementation of environmental sustainability measures and activities.

Currently, the issues emerging from environmental sustainability have now assumed prominence currently. There is no doubt that, issues of environmental sustainability is

now a world initiative and hence this has prompted the country to also amend its laws and regulations governing sustainability in procurement. For instance, the country has now had to relook into its public procurement system as a socio-economic problem which needs to be looked at with a three views; the environment, the society and the economy. The Ghana Public Procurement Authority in a bid to update its activities with the current issues and to create an efficient and effective public-sector procurement model that will benefit the entire public and all individuals at large, introduced a new concept which dealt with the concept of sustainability in the country. This concept termed the Sustainable Public Procurement (SPP) seeks to address the environment, social and economic consequences of public procurement activities and this is embedded in the Public Procurement Amendment (Act 914). This is in congruent to the Government of Ghana's interest and drive towards sustainable development. The current pattern of development in Ghana is therefore putting a lot of pressure on the environment. The pressures and burdens due to these activities emanating from development on the ecosystem in the country are very great and if care is not taken and measures develop to curtailed them, it will generate into a stage where the country will experience a long-term effect which would be irreversible and catastrophic to future generations.

2.1.4 Awareness Level of Sustainable Procurement Practices

Within the Ghanaian law books or the Public Procurement Act 663 and the amended Procurement Act 2016 (Act 914), there is no where the title, "sustainable procurement practices" could be seen or exist, even though there are laws, policies and regulations which relates to the concepts of sustainability in procurement which include green procurement since it is very important in the development of the country. This concept



has been incorporated into the recent document on the amendment of the public procurement act (Act 663) into the public procurement act (Act 914). The Public Procurement Authority in the country have been embarking on various programmes to create awareness on the various new policies such as the framework agreement and initiatives towards sustainability issues in the public procurement process with an establishment of two zonal offices; one situated at Kumasi and the other at Takoradi. These zonal offices are mandated to provide advisory services to entities which are farther away from the National Office. With the society in general, there is a deterioration of the environment in recent times and this generated a lot of attention and public awareness on the need to ensure and maintain the environment. With over twenty years of implementation of the public procurement act (Act 663), a lot have been revealed and many successes have been observed including the creation of a hundred and seventy local offices, the effective transfer of authority, resources and various responsibilities from the national level to the local level. This decentralization has helped in awareness creation among the individuals, development of better infrastructure with support received from the District Assemblies Common Fund and increased collaboration between citizens and developmental partners.

With global awareness and the prioritization of its concepts, countries are under pressure to be able to adopt a more efficient and value added production and delivery of goods and services which will benefit the society as a whole (Brammer & Walker, 2011; Meehan & Bryde, 2011) . From the national level through to the regional and district level, all stakeholders are and government institutions are looking forward for quality and efficient procurement processes which includes preservation of the environment or adoption of



concepts which could be said to incorporate the concepts of sustainability (Kalubanga, 2012). Besides, for Ghana to be able to deliver an effective awareness programme, there is the need for all public organizations, procurement officers and procurement boards from the national level to the district level, there is the need to redesign all the standard tender documents, training practitioners and political support on sustainability measures on public procurement. All governance are moving a step forward to the adoption of sound programs and policies of sustainability that will achieve greater efforts in the achievement of sustainability in procurement(Alliance For Development, 2014). (Blome et al., 2014)posited that both top management support and the firm's performance in the market which lead to the adoption of the concepts of green procurement. From the local level, the awareness of the concepts of sustainability in procurement or green procurement is very low. This is however, devoid of all efforts by institutions and the public sectors to create public awareness of sustainability measures. Practices involving sustainability procurement is very relevant when minimizing risks of possible exploits from the society within the supply chain process.

From a study by UNDP Practice Series (2008) cited in (Asare, 2016)sustainability in procurement seeks to integrate many checks and balances within the procurement process which will assist in guarding against labour rights, preventing adverse environmental effects, helping to revive local entrepreneurs, maintain and ensure gender equality and women empowerment, eradication of poverty. The purpose of sustainable procurement is the reduction of the negative effects of activities on health, society and the environment. This will help save cost for most firms, the community and the government as a whole.



The challenge however, is how to integrate these concepts of sustainability into the procurement process. In this country, the first stage has not even been met which is awareness creation or recognition of principles underlining sustainability. Sustainability in procurement practices forms very important key to an overall push for sustainable development.

2.1.5 Challenges of Awareness Creation of Green Procurement Practices

Generally, the creation of awareness for green procurement has posed a lot of challenge to many countries including developed countries and many institutions. With a knowledge on the determinants of green procurement, looking down the possibilities to create awareness within any level of the developmental stage will pose great challenge. These factors influence the implementation and acceptance level of the process. It dictates the extent to which the society will accept and look out for these concepts in the procurement process. To the enforcement authorities, it helps in the better integration of the practices into the procurement process. This is especially true when the government authorities want to pursue the excellence in environment through different tools that are in alignment of green procurement practices. Usually, the supply-side of the procurement practices plays a critical role during the production and supply of sustainable goods and services. With the concept where some of the goods and services procured by the public and individuals are highly specialized, it is apparent that the identification of sustainable supply sources may pose a challenge in some areas (Lysons & Farrington, 2012). The challenges affecting the implementation of green procurement include the lack of readily availability of environmentally friendly products and services, the assertion that



environmental sustainable procurement is expensive, there are inconsistencies in studies concerning green procurement, the lack of support from the organization and unsupported environmental claims by product designs, manufacturers and suppliers. Additionally, there is the concept of legislation, policies on organizations, effective management systems for green procurement and the concepts that there is the need for a multi-lateral agreement for the implementation of sustainability in the procurement process(Yip & Bocken, 2018).

Various literatures give the suggestions that, financial resource of firms could increase the exposure of the organization to its external stakeholders. In addition, financial resource is also taken into consideration as a means of limitation in the organization which is in the form of excess in resource(Sharma, 2000a). Besides, high financial resource could result into exposure and hence lead to the exertion of more pressure from external stakeholders. The external stakeholders sometimes also have the perception of that firms with financial resources could be in a position to use the excess discretionary resources to do away with the challenges and the unpredicted nature to the adoption of proper supply-side during the environmental practices (Menguc, Auh, & Ozanne, 2010). The identification of the resistance or acceptance of a supplier may be required to give a confirmation of the commitment to the protection of the environment. This could be in the form of statements listing the steps through which they are adopting to decrease its impact and effect on the environment or alternatively to show that they are not in a position to breach any statutory requirements that relate to the environment (Bocken & Short, 2016).



The studies of Walker and Brammer (2009) also gives the notion that the prime challenge which limits the adoption and implementation of environmental sustainability is very difficult to be engaged by suppliers. Some environmental sustainability practices are found to be a problem given the reluctance of suppliers to cooperate (Lysons & Farrington, 2012). The reluctance could emanate from the various number of objectives including the concerns over sensitive information, poor practices in the supplier and the constraints to resource. Bjorklund (2011) cited in (Bocken & Short, 2016)also commented that the degree to which there exist a support for environmental sustainability at the managerial level in a firm and the level to which organizational practices and processes and structures give support to the retardation of the development of sustainable procurement. The highest management supports the immense role to the success of either a successful green procurement policy or failure of the organization. Bjorklund (2011) cited in (Bocken & Short, 2016)indicated that priorities among the highest or middle management are very relevant to ensuring sustainability in the environment. Without high level of support to the employees, they are often reluctant to pursue the sustainability in the environment (Ashenbaum, 2008). Ashenbaum (2008) mentioned that in various instances, sustainability in procurement is not a legal or mandatory initiative for top management in the organization.

Other factors and challenges bedeviling the creation of awareness level of environmental sustainability practices could be realized from limited trained staffs for the design and implementation of programmes relating to sustainability procurement. In addition, the laws and regulations governing procurement is not explicitly clear and most staff are not





clear on these laws with most of the interpretations of these laws being subjective. Therefore, familiarity with the rules and regulations as well as laws governing the implementation of sustainability practices for both purchasers and suppliers and the society or community could influence the chance that these public agents will take the laws and their implementations very seriously. This unveils the assertion that there is a positive and direct relationship between the familiarity of the laws and the implementation and compliance of these laws. Researcher like Bouwer et al.(2006) after their research work found that the availability of information is very key to the establishment and compliance criteria in the sustainability of public procurement while Walker & Brammer (2009) indicated that the lack of and availability of information concerning the policies and regulations governing sustainable public procurement and the impact of the products and services, the difficulty that is involved during the call of tenders and purchasing and the lack of guidelines affects the implementation level of sustainable procurement Gattiker et al. (2008) also established that when there is lack of clear definition and evaluation criteria for environmental sustainability n procurement, then a barrier exists. The lack of understanding and the knowledge to properly integrate environmental issues into the procurement process presents a major challenge .Bocken and Short (2016) gave the assertion that most procurement officers are unaware of better integrative measures to be adopted in ensuring green procurement. In terms of the social benefits of the procurement, many procurement officers, the study indicated, do not know to correctly and effectively include social and environmental issues into purchasing even when they have recognized the need for corporate social responsibility and sustainable

environmental issues during the procurement process. Witjes and Lozano (2016) stated that mostly management and top officials have little experience with such demands.

Besides, various research works have also added their voice and given various recommendations as to how to properly overcome these challenges by creating the awareness of the environmental sustainability process. Among some the works are the work of Bouwer et al. (2006) who indicated that effective training and competence in environmental matters and policies plays a major role to the successful creation of the awareness process to the public and everyone in the public sector. Another study by Sharma (2002) who took the side of the institutional view on legitimacy of green procurement proposed that availability of finance promotes or enhances the fundamental supply side on the green procurement. However, investments to develop environmental initiatives are very uncertain. Effective training is also a means through which other researchers such as Carter and Dresner (2001) cited in (Ashenbaum, 2008) recommend as a very efficient tool to deal with environmental sustainability illiteracy. However, from the study of Bouwer et al. (2006), the increased nature of products and services meant for green procurement as compared to products and services that are not environmentally friendly is another barrier to the effective implementation of green procurement. In total, there a bunch of factors affecting the smooth implementation of environmental sustainability in procurement emanating from the lack and limited number of expertise in the sector, the lack of government-supported reason. Among all these challenges, Ayarkwa, Dansoh and Amoah (2010) added that little is support in the area of financing projects and proving the legal structure to incorporate green procurement issues also



exist. The current amendment of the public procurement act (Act 663) to the procurement act (Act 194) looked at the challenges that emanates from the procurement practices as a result of lack of awareness creation on integrating environmental sustainability. These challenges are very necessary, looking at the extent to which the environmental degradation is affecting the country and they are very critical on this project and a motivation to embarking on this project using the regional Coordinating Council and specifically, dealing with the Northern sector of the country where the issue of environmental degradation is a major challenge.

2.1.6 The Public Procurement Act 914 (2016)

The Public Procurement Act (PPA, 2016) provides the legal framework for the redesign and implementation of various sustainability issues through the procurement boards, the structures in place, the rules and policies governing the procurement process, the methods and means of executing procurement standards, various reviews, effective disposal of waste products and other important issues relating to the environment (Asare, 2016). Before the country decided to amend this act, the concepts of sustainability in procurement was guided by several rules from different sections and it was very difficult to know which one to adopt and implement. The reformation undertaken by the country was part of the major reform programme which was targeted financial management in the public sector. The main aim barking the reform was to promote national development, promote the relationship between the international statutory law and the local people or local policies and to foster and encourage competitiveness in the procurement sector. It was also meant to ensure effectiveness in public sector procurement, ensure fair and



transparency and accountability in the public sector and promote easiness in the procurement processes not eliminating the addition of value to the products or services to be rendered to the community.

The institutional and legal structures

The PPA (2016) provides the Procurement the needed bodies such as the Procurement Board, the functional administrators in the sector, the Tender Committees, the Tender Evaluating Panels as well as the Tender Review Board .Each of these bodies has an assigned role to play to ensure and the smooth integration and implementation of sustainability in the delivery of services in the public sector. For example, the objective of the Procurement Board is to streamline the procurement process so that the government could achieve economical advantage and efficient utilization of resources of the state and to ensure that there is fair and equitable distribution of resources (Asare, 2016). Additional functions of the board include procurement policy formulation, providing an implementation of policies and human resource development for public procurement; developing documents to regulate public; supervision and monitoring procurement practice to ensure statutory requirement compliance.

Standardized Procurement Procedures and Standard Tender Documents

The Act spells out procurement rules and procedures for the preparations of procurement plan, sizing of packages, qualification of tenderers, and award of contracts by soliciting and evaluation of tenders. Others are pre-qualification proceedings, evidence of documentation in procurement proceedings, procurement proceedings records, criteria for



rejection of bids, quotations and proposals and, inducement from suppliers, contractors and consultants, and language.

Method of procurement

According to the Act, the default method is competitive tendering. This can be either National Competitive Tendering or International Competitive Tendering. Other ways like tendering via two-stage, restricted bidding, request for quotation, procurement via single sourcing and request for proposals are available for adoption depending on such condition like the need for prequalification and shortlisting, unclear specifications, proprietary rights, emergency and the demand for consultancy services respectively. The choice of the method also depends on the threshold.

Independent control system

This means that the board of directors of the Public Procurement Authority has no mandate to engage in Public Procurement Practice under the Act but have the powers to control all other procurement entities independently. The Act, through training and professional development of persons involved in the procurement practice, empowers the Public Procurement Authority to ensure adherence to ethical standards.

Anti-Corruption Measures

The Act also empowers the Authority to investigate and exclude contractors, suppliers, and consultants who have violated their obligations as provided by the public procurement contract, those that have falsified qualification information. Also, they are to communicate and maintain the list of debarred firms involved in public procurement to



procurement entities on a regular basis. These are measures against corruption under the Act. Within the level of compliance in the Ghana public procurement act (Act 914), that the Act was instituted to leverage public procurement practices in the public service, ensure reliable, economical and practical use of state resources. Additionally, the Act provides that public procurement is open and fair, transparent and devoid of discrimination (Manyenze, 2013). This new Act was established after several years of offensive action and abuse with the procurement practices in Ghana. This necessitated an independent review of the procurements policies and regulations. The institution of the law in 2003 moreover ensured that current trends and developments in procurement were utilized to effect the needed sanity to the local procurement system which was flawed by poor procurement processes (Nyaporo & Atambo, 2017).

From the time that the procurement act was introduced in the country, there have been various minor amendments and improvement within the procurement process both in the public sector and the private sector. This was demonstrated by McDonald (2008) in the research he titled *Buying Power Aid, Governance and Public Procurement*. His study indicated that the Ghana government after the award of school uniform contract to a Chinese company came out to explain to the public the reason behind the decision made. One of the critics of the government at that time was that there were not able to find a local company who could produce the volume of cloth needed at the time required. This statement, the report stated need to be fully investigated to ascertain the truthfulness in the Ghanaian sector; more especially the tertiary level as they are known to deal with suppliers.



To build a robust and efficient public procurement system, there is the need to deliberately adopt a strategy that could effectively monitor and properly evaluate the progress of the reformation of the procurement act. The ensuring of active monitoring system and good evaluation systems will provide a timely, accurate and very reliable outcome through which decisions could be taken and conclusions drawn. In most African countries, the challenge to effectively monitor and properly evaluate the progress of the procurement process is a major setback and it limits the possibility to know whether reforms that have been undertaken worked or not. This is a major challenge in the African context and many of the countries even lack the systems to monitor. Sewoanu (2012) wrote from a Ugandan perspective and they indicated that in Uganda, the reform that have been undertaken on the public procurement systems were heavily affected with inadequate monitoring and evaluation systems. They study further indicated the lack of statistics on transactions undertaken in procurements. There is no doubt that, the absence of these vital data affects the redesigning and performance of most procurement processes and hence rendering most of the reforms unnecessary



Competitive Tendering (Section 35 and Part V of PPA 2016, ACT 914)

Tendering is the concept of issuing an official proposal to provide materials or sourced for specific materials at an agreed value. From viewpoint of purchasing, competitive tendering is a method procurement of which firms are required to present a clear proposal regarding the amount and conditions attached to a work on which the firm and the



sourced company determines resource stated goods and services, which when succeeded, will constitute the basics for starting a contractual agreement (Lysons and Frington 2006). A tender is grounded on the provision of specifics which are provided by the purchaser of which there is a substitute giving room for each firm who is sourcing for the project to defend his conditions and of which the organization doing the sourcing has the flexibility to determine the right person or firm to execute the work based on standard procedures. Therefore, the concepts surrounding tendering is borne on competitiveness, probity, fairness and accountability. Transparency and openness is also a characteristics marking the principle of tendering. In response to this, Dimitri et al (2006) stated that even though the principle of tendering is anchored on open bidding which fosters competitiveness, it is unbolted solitary to contractors to make sure that the terms stated in the contract are accurate and portrays the exact means the project will be executed. From then Public Procurement Act (Act 914), section 35 – 38 deals with competitive tendering. It enumerates various procedures and ways of ensuring effective tendering. Competitive tendering is therefore classified under international, national, limited tendering and two-stage tendering. With national or domestic tendering, section 44 of the act stipulates it to be the tendering that requires that there should be locally acquiring state modest measures. With global or international tendering, bidding is active for huge amount indenture which involves the invitation of external suppliers due to unobtainable close by or state where resources, products or services cannot be provided on justification of methodological and extra abilities due to monetary limitations (Section 45).

Limited bidding is an approved of the details of a budget and competence of a firm to undertake a contract and involves the endorsement by a panel involves in the procurement process with a standard set which might include various factors including value for money, affordability and environmental sustainability of the work (Section 38) Choosing a competitive technique of tendering a project based on the guarantee for value for money, a research conducted by Dimitri et al. (2006) indicated that experts within the procurement sector are faced with two fundamental choices; either to engage in competitive tendering or accept any quantity of dealer lots. the fundamental principle is devising a plan for competitive tendering. This competitive tendering is classified into two main categories; sealed bid-tendering and dynamic reverse actions. when dealing with the sealed-bid tendering, firms interested will submit their proposals deprived of detecting the offer finished by the ally's. However, in dynamic reverse auctions, the amount is revealed in the process of the tendering so that firms within the bidding process so that the firms could use it to outperform their competitors in the industry before ending the auction. The main critic attached to this principle is that it could be a long process (Dimitri et al. (2006). If the process is handled properly however, the entity involved in the procurement make profits and hence they attain the best value for all the money spent

2.1.7 Level of awareness of Green Sustainable Procurement in PPA (2016).

The recent Public Procurement Act (Act 914) is relatively new and foreign to many people and hence the possibility for its implementation and enforcement as at now will be weak when it comes into environment sustainability in the procurement process(Ashenbaum, 2008). This was reiterated by earlier study by ORPF (2014), who found that the concepts of green computing among low income countries have very



minimum conditions with regard to awareness creation on sustainability measures relating to the economy, the society and the environment. In this way, there is a sense of urgency and a requirement of political will from the country to strive hard to achieving green procurement. For example, policies covering environmental sustainability requires that all necessary and legal frameworks be effectively implemented with its capacity fully appreciated and the demand and supply side having the understanding of new requirements and knowledge of the application of the techniques. Besides, environmental sustainability in the procurement process has been well integrated by the District Assemblies or local systems in the implementation and execution of their various activities in a bid to protect the environment.

To add to this, Adetunji et al. (2008) made it known that the concepts underlining public procurement system is mainly geared towards price whereas the commitment to ensure green procurement has been neglected and even forgotten about. Additionally, Jaillon, Poon, and Chiang (2009) discovered in their research that companies in the various district assemblies nationwide pay less if not zero attempt to the implementation of environmental sustainability as compare with other issues like economic benefit and social benefit. Within the Ghanaian law books or the Public Procurement Act 663 and the amended Procurement Act 2016 (Act 914), there is nowhere the title, “sustainable procurement practices” could be seen or exist, even though there are laws, policies and regulations which relates to the concepts of sustainability in procurement which include green procurement since it is very important in the development of the country. This concept has been incorporated into the recent document on the amendment of the public



procurement act (Act 663) into the public procurement act (Act 914). The Public Procurement Authority in the country have been embarking on various programmes to create awareness on the various new policies such as the framework agreement and initiatives towards sustainability issues in the public procurement process with an establishment of two zonal offices; one situated at Kumasi and the other at Takoradi. These zonal offices are mandated to provide advisory services to entities which are farther away from the National Office. With the society in general, there is a deterioration of the environment in recent times and this generated a lot of attention and public awareness on the need to ensure and maintain the environment. With over twenty years of implementation of the public procurement act (Act 663), a lot have been revealed and many successes have been observed including the creation of a hundred and seventy local offices, the effective transfer of authority, resources and various responsibilities from the national level to the local level. This decentralization has helped in awareness creation among the individuals, development of better infrastructure with support received from the District Assemblies Common Fund and increased collaboration between citizens and developmental partners.



With global awareness and the prioritization of its concepts, countries are under pressure to be able to adopt a more efficient and value added production and delivery of goods and services which will benefit the society as a whole (Walker & Brammer, 2011; Bryde & Meehan, 2010). From the national level through to the regional and district level, all stakeholders are and government institutions are looking forward for quality and efficient procurement processes which includes preservation of the environment or adoption of

concepts which could be said to incorporate the concepts of sustainability (Kalubanga, 2012). Besides, for Ghana to be able to deliver an effective awareness programme, there is the need for all public organizations, procurement officers and procurement boards from the national level to the district level, there is the need to redesign all the standard tender documents, training practitioners and political support on sustainability measures on public procurement. All governance are moving a step forward to the adoption of sound programs and policies of sustainability that will achieve greater efforts in the achievement of sustainability in procurement (Alliance for Development, 2014). Blome et al. (2013) posited that both top management support and the firm's performance in the market which lead to the adoption of the concepts of green procurement. From the local level, the awareness of the concepts of sustainability in procurement or green procurement is very low. This is however, devoid of all efforts by institutions and the public sectors to create public awareness of sustainability measures. Practices involving sustainability procurement is very relevant when minimizing risks of possible exploits from the society within the supply chain process. From a study by UNDP Practice Series (2008) sustainability in procurement seeks to integrate many checks and balances within the procurement process which will assist in guarding against labour rights, preventing adverse environmental effects, helping to revive local entrepreneurs, maintain and ensure gender equality and women empowerment, eradication of poverty. The purpose of sustainable procurement is the reduction of the negative effects of activities on the health, society and the environment. This will help save cost for most firms, the community and the government as a whole. The challenge however, is how to integrate these concepts of sustainability into the procurement process. In this country, the first stage has not even



been met which is awareness creation or recognition of principles underlining sustainability. Sustainability in procurement practices forms very important key to an overall push for sustainable development.

2.1.8 Sustainable Procurement Practices

Within this country, there exist various policies, regulations and laws that relates to environmental sustainability. However, the nation does not have any clear policy or law, which specifies environmental sustainability within the public procurement law or act. However, several rules and regulations exists to cover various environmental issues such as conservation of wildlife, soil erosion, afforestation, preservation of water bodies, and other important environmental factors which relates to the environmental sustainability.

During the 1930's the country registered concerns concerning land and environmental degradations, hence, legislations too were necessary, and various laws and regulations were therefore enacted within this time to deal with this issue. For example, during the year 1901, there was the enactment and implementation of the Wild Animals Preservation Ordinance, followed by the enactment and implementation of the Rivers Ordinance Act in 1903. In 1907, the country saw the implementation of another law, which was concerned on forest reservation, and by a year time the country established the forest department in the country. In 1925, the Mining Rights Regulations Ordinance was enacted and implemented. Thereafter, there was severe degradations in the Northern sector of the country ad this led to the enactment of an institution of land planning and soil erosion measures in those areas. The rules and policies that were introduced at that





time led to the conservational practices in the agricultural sector dealing with the better use of land, water and grazing resources. The planning of these policies as well as the execution of these policies were the mandate of the Department of Agriculture and Forestry and the local people in the community. Then, came the land planning and Soil Erosion Ordinance was passed and implemented in 1953. This law saw an amendment in 1957 and the amendments dealt with the creation of permanent committees of the areas designated for planning. The country was however, the first to create an environmental performance rating and disclosure initiative dealing with pollution by the Environmental Protection Agency (EPA). This initiative was dubbed the AKOBEN and it provided access to information relating to the area of mining and other waste into the environment (Darko-Mensah & Okereke, 2013). The agency that was required to see to the smooth observation and implementations of these issues to protect the environment is the Environmental Protection Agency which was formerly called the Environmental Protection Council. The EPC was established and inaugurated as a public institution which was mandated with the oversight rights to devise measures in protecting the environment. The EPC was established in the year 1974 through the National Redemption Council Decree, number 239 also termed the NRCD 239 in Ghana. The section 2 of this NRCD 239 mandated the Environmental Protection Council among other things to ensure the observance of proper safeguards in the planning and implementations of policies and rules and the observance of other rules and regulations that have been in operation and are likely to positively impact the quality of the environment (Peprah et al., 2018). The enactment and implementation of the EPA Act, 1994 otherwise called Act 490 was meant to create a corporate body referred to as the Environmental Protection

Agency to replace the Environmental Protection Council. Currently, this is the institution which have been in operation and ensure compliance and adherence to all rules, regulations and laid down environmental assessment procedures and policies meant to ensure the effective planning and implementation of all developmental projects including the adherence of existing projects. From the Environmental Protection Agency is embedded the Environmental Policy, Sustainable Development Policy and General Legislative Framework. In the early, 1980's there was the Structural Adjustment Programme (SAP) and the Economic Recovery Plan (also ERP). The impacts of these two agencies led to the development and implementation of the Environmental Protection Agency (EPA) which entails sets of policy regulations, related investments and strengthening the activities of institutions towards the implementation of environmental sustainability measures and activities.

Currently, the issues emerging from environmental sustainability have now assumed prominence currently. There is no doubt that, issues of environmental sustainability is now a world initiative and hence this has prompted the country to also amend its laws and regulations governing sustainability in procurement. For instance, the country has now had to relook into its public procurement system as a socio-economic problem, which needs to be looked at with three views; the environment, the society and the economy. The Ghana Public Procurement Authority in a bid to update its activities with the current issues and to create an efficient and effective public-sector procurement model that will benefit the entire public and all individuals at large, introduced a new concept which dealt with the concept of sustainability in the country. The pressures and burdens due to



these activities emanating from development on the ecosystem in the country are very great and if care is not taken and measures develop to curtailed them, it will generate into a stage where the country will experience a long-term effect which would be irreversible and catastrophic to future generations.

Sound procurement practices do take into consideration environmental factors, economic factors and the social factors to ensure the sustainability of such practices. The Northern Regional Coordinating Council (NRCC) with the purpose of sustaining the region's public procurement processes should consider these three perspectives; economic, social and environmental sustainability to create a more abiding procedure to procure goods and services that will contribute positively to the region and beyond. The NRCC must ensure purchasing and investment process that takes into account the economic, environmental and social impacts of the region's spending. Sustainable procurement will ensure that the NRCC meets its needs for products, construction works and services such that it achieves value for money regarding generating benefits not only to the region but also to the economy while remaining within the carrying capacity of the environment. There should be clear and accepted sustainability objectives and procedures embedded within the procurement and the regional policies, strategies, systems and process. Among the goals are enumerated below:

Procurement Principles and Ethics

The Public Procurement Act 663 (2003) outlines the principles and ethics of procurement expected to be exhibited by all procurement entities involved in one way or the other in



public procurement activities. On time delivery of procurement of goods at the requested place of delivery and at the right price; all aimed at maximizing quality at the lowest possible cost are what is required of procurement persons working on procuring items on behalf of the country or organization. It must be pointed out that this should be and must be done in fairness in an ethical way of achieving procurement goals. Procurement processes are also expected to be transparent yet employing a competitive bidding process professionally in attaining all the dimensions, be it social, economic and environmental.

Professionalism and Transparency

As indicated by Odei (2015), professionalism in procurement alludes to the business whereby experienced, educated and responsible officers settle on informed choices regarding the acquisition of products and services with the contention that the activities of professionals engaged in the process of procurement are vital to the economic improvement of the nation. In acknowledgement, the Board of Public Procurement functions to develop professionalism in procurement and give the professional development, support for officers as well as institutions occupied within Public Procurement. The Board is to guarantee adherence to good gauges via trained personnel in the process of procurement. In the process of procurement, transparency then again means ensuring that procurement procedure is open to all suppliers and that the procurement procedure is fair to all partners and individuals willing to partake.

Adjei (ibid) cited in Asare (2016) specifies that transparency requires the formation of a fair and open technique to procure an item. Clarity prompts development in the country



especially in the area of investments. It brings about healthy competitions, and the general public becomes satisfied with decision taking by institutions which public funds have been entrusted to their care.

Ensuring Value for Money (VFM)

The recent Procurement Act, Act 914 enacted in 2016 gives very important issues concerning public procurement. The main purpose to ensure that the procurement system ensures the efficient acquisition of goods and resources, the efficient delivery of goods and services from a reliable supplier and at the right quantity with the better quality with affordable cost sent within the right time, and to the right place with the right amount needed while maintaining value with affordable cost. In the achievement of the purposes of a conventional procurement scheme, the following dynamics are of very important:

- All the activities concerning procurement should be focused on the achievement of Value for Money (VFM) and it should be a check on unplanned procurement practices
- Management within the procurement sector should be professions with the relevant knowledge and skills as well as experience in the field of practice. Top management has the responsibility to always appraise its procurement practices to ensure that VFM is achieved
- There is the need for all the procurement practices to actively link its budget to the procurement plan so as to achieve the best VFM and the institution should have a policy direction and a strategic plan on VFM for effective delivery of sustainability measures



- The institution should ensure that it plans all its spending on procurement against its budgeted income and expenditure. This is very critical to maintaining and achieving effective VFM in the procurement process.
- All the processes within the procurement should be carried out with priorities on economic benefits such that corruption is minimized or eliminated and improves the delivery of services to realize VFM
- All procurement entities should liaise with the Public Procurement Authority for a timely and require procurement information, and the all the procurement activities should be monitored and evaluated annually by the standard set by the Public Procurement Authority

An aim of the public procurement process should include the means to incorporate and deliver the best and quality products, works and services to meet the targeted amount set for the activity. This does not however mean that the process should not look for various ways of achieving quality works, services and products at affordable prices which meet the required and set standard. It is the outcome of a service delivered or a product to be delivered compared with the money used in the acquisition or provision of the service or product and it should meet the standard of the purchaser. As stated by Asare (2016), there is also the perception that value for money is a means of ensuring the exact payment of money for a specific product or service and properly monitoring the project to ensure that its lifespan justifies the means for its acquisition. It is a mandate for the Board in the Public Procurement to ensure that all the procurement processes are such that it ensures value for money. The Northern Regional Coordinating Council (NRCC) aims at providing that environmental goals can be met through the efficient, accurate and



economic use of resources. This measures, and therefore a strategic and integrated approach is needed in achieving. Thus, the easiest way to make it would be strictly following the Procurement Act and Regulations in all procurement activities.

Ethical Approach to Public Procurement

The ethical approach means an exemplary method of all procurement processes that cannot be questioned or criticized. The ethics of the NRCC needs to do with maintaining proper moral standards and qualities which impact the region and choices of the people.

Institutional Empowerment

Procurement Unit as defined by the Public Procurement Act, 663 (2003) is an outfit with the responsibility of superintending procurement in a Procurement Entity. The Procurement Units head of the procurement entity functions to assure and coordinate every activity of procurement. The manual further outlines responsibilities for those in this unit with the aim of presenting them with a guide to carrying out their duties as a unit; these responsibilities, however, are hardly what one witness on the ground due to obvious reasons in the procurement system. A study by Perlo-Freeman and Catalina (2008) indicated as their reason behind weak institution is the fact that institutions are caught by the most influential and become buried in a society of crime, corruption, discrimination and exclusion, such that investments are not promoted, or poverty reduced even though there are ethical principles, policies and projects.

From the outcome of the General Financial Rules, 2017 (Rule 144) which is laid down by the Fundamental Principles of Public Procurement in India, the principles, regulations



and other policies underlining procurement authorities in the public procurement sector could be classified into five main fundamental principles (MOF, 2017). These principles are standards by which all procuring authorities must conform to and be accountable for.

- i) There is the principle of transparency. This principle stipulates that all procuring authorities have the mandate to ensure that the procurement process ensures transparency, fairness, accountability, probity, equality, competition and the right to appeal. This means that there should be a move to effectively disseminate all information to all key bidders, sufficient for their identification and knowledge relating to the bidding process and actual means, processes and time required for each process and completion of each bidding, the method and process of evaluation, addressing grievances resolutions of conflicts award and management of contracts. This means that, the officers of the public procurement unit need to ensure that there is consistency in their delivery of services; meaning there should be absence of subjectivity. There should also be the concept of predictability; meaning the absence of arbitrariness, clarity, openness, equal opportunity for all.
- ii) There is also the concept of professionalism. This means that authorities have the mandate to ensure effectiveness and integrity within the procurement process. They should also ascertain that the adoption and implementation of the methodologies adopted for the procurement process do not only become reasonable and affordable but should also effectively achieve the planned aim of the process.
- iii) Additionally, there is the principle of broader obligations. The procuring authorities also help to conduct public procurement in a manner to facilitate



achievement of the broader objectives of the Government. Similarly, procuring authorities have even the responsibility and liability to comply with the laws relating to governance issues.

- iv) Last but not the least, there is the principle of public accountability. Procuring authorities are accountable for all the above principles to several statutory and official bodies in every country. As a result, each public procurement transaction is liable to be scrutinized independently, in isolation, besides judging the overall outcomes of the procurement process over a period.



2.1.9 Maintaining Successful Procurement

Organizational Policy

Organizations must set up policies to strategically ensure that sustainability is implemented in their procurement process (Mihaiu, Opreana, & Cristescu, 2010). This may be realized when the organization incorporates sustainability as criteria in the evaluation of potential suppliers or contractors. Therefore, there should be a high level of commitment to the policy set by the NRCC in assuring sustainability. The plan needs to be flexible such that, it can be easily manipulated to fulfil any further improvement in the future or to adapt to the changing needs of the region quickly. This is an essential instrument in achieving success in the Northern Region. The NRCC has a significant influence on every decision of the region, and there is the need for a clear understanding of sustainability in procurement by the leaders or higher authority to support the act. The most critical strategy in ensuring sustainability in procurement is by managerial concern (Qi. et al., 2010) cited in (Olatunji, 2016). The NRCC needs to embrace the policy of sustainability and monitor its application to ensure that the procurement achieves value for money in whole.

Training and Guidance

There is the need for the NRCC and government to organize training for people to understand and appreciate the incorporation of sustainability into the procurement. There is the need for guidance to be provided which serves as a basis for the procedure for implementation of sustainability in the procurement. The NRCC must offer a single unified, sustainable procurement framework which takes care of environmental, social



and economic factors of the sustainable procurement which inclines with the requirements of the country's Procurement Act. There is the need for a short guide which will be readily available to all procurement entities (Waruguru, 2015). The NRCC must ensure that the guidance is followed by any procurement entities through proper monitoring to ensure compliance with the guide and impose a penalty on any procurement entity that fails to comply with the guides.

Regular Monitoring and Audit

The NRCC and the government should put in place the system or procedures for auditing and monitoring the procurement process to ensure that sustainability is considered throughout the procurement process, and to study the obstacles that might have arisen in the process in order to eliminate or reduce the effect and ensure complete sustainable assurance in the procurement process.

Supplier Involvement

There is the need to educate the suppliers in order to broaden their imaginations on sustainability and its importance and benefits. The suppliers can be involved in the specification of the product in order for them to appreciate and understand the customer's requirements.

2.1.10 The Regional Coordinating Council and Sustainable Public Procurement

It is estimated that Public Procurement in the country uses almost 80% of revenue that is generated from national tax. This represents almost 24% of the total imports which constitutes 50 – 70% of the non-personnel budget in the country. This means that the





country utilizes more than one-tenth of its Gross Domestic Products (GDP) on the procurement of products and services by the government of Ghana. It is on this notion that the decentralization in the country and the planning laws gave the mandate to every region to design and implement the coordinating councils to play specific functions in the monitoring then various activities that would result into effective development of the region and help the coordination of investments that could foster the growth at the regional level. Within the decentralization process, District Assemblies are also mandated to be the planning authorities in charge of the welfare of the district with the Regional Coordinating Council (RCC) exerting and exercising the role of monitoring, evaluations and coordinating the various roles at the regional level. The RCC also coordinates the sector agencies in the region, the also mediates between the Ministry of Finance, the National Planning Commission at the national level and the region to take up effective policy interventions that could bring developments to the region. The Northern Regional Coordinating Council (NRCC) therefore coordinates the affairs of the Northern region and they are responsible for the formulation of policies and regulations of the Northern region of the country. Notwithstanding, all the role for effective integration of sustainability cannot be underplayed since all procurement in the region is under their jurisdiction. Mostly the District Assemblies have a limit within which they can exercise their procurement powers. Above that, the procurement practices need to be referred to the RCC for further action to be taken.

2.1.11 The composition of the RCC

The Regional Co-ordinating Council comprises of the Minister in charge of the Region (the Regional Minister) together with the deputy or deputies the presiding members at each MMDAs, the District or Municipal or Metropolitan Chief Executive within each district or municipal or metropolitan in the region. Other individuals who forms part of the RCC are the two representatives from the Regional House of Chiefs and all the Regional Heads of the decentralized ministries as members with no right to vote. The Regional Minister chairs the Regional Coordinating Council and the Regional Coordinating Director becomes the secretary to the council.

Functions of the Regional Co-ordinating Council (RCC)

Act 914 of the Public Procurement Act mandates all the RCC to perform the following.

- To provide to the various metropolitan, municipal and district assemblies, the needed information and support which would assist them in the formulation of the development plan for the area
- To coordinate all the plans, policies and regulations of the MMDAs and streamline these plans and policies with the priorities of the nation and also liaise with the NDPC to consider and approve these policies.
- To deliver effective monitoring, evaluation and implementation of the various policies and projects in the MMDAs within the region.
- To act as intermediary link between the NDPC and the local planning authorities concerning national programmes and projects in the region



The Regional Co-ordinating council derives its existence and functions from two essential documents; the 1992 Republican Constitution and the Local Government Act 462 of 1993.

The Regional Coordinating Council serves as the link between the Central Government and the local level. The local level consists of Metropolitan/Municipal/District Assemblies, Government Departments and Agencies, Non-Governmental Organizations (NGOs) and other Civil Society Organizations in the Region. The Regional Co-ordinating Council has a Monitoring Team which goes around the Metropolitan/Municipal/District Assemblies twice every year to monitor their performances regarding the execution of development projects and programmes, compliance with financial regulations of the Government and its development partners.

2.1.7 Factors affecting the implementation of Sustainable Procurement Practices

Financial

The consequence of buying the cheapest goods and services has resulted from the perception that SPP is costlier. Additional financial burdens are also due to sustainable products having higher initial investments, accounting practices, inflexible budget systems. Also, there is information paucity on the relative product costs and services that are environmentally friendly and whole life cost of products(Dorasamy, 2012).

According to Walker and Brammer (2009)the issue of environmental sustainability is costly and this can be affected by budget constraints. The perception of financial implication on implementing sustainable procurement play a crucial role on which the policies are acted upon since environmental sustainability is perceived to be more



expensive (Stephen and Walker, 2007). According to Blair and Wright (2012), as cited by (Chari & Chiriseri, 2014), sustainable product or service is perceived to be costly and require a massive amount of money for its investment. This goes contrary to the procurement objective which focuses on the lowest possible price by Chari and Chiriseri (2014).

Additionally, the need and demand for the inclusion of environmental sustainability in the procurement process has not been extensively researched on especially within the developing countries to create more awareness. With this, Menguc et al (2010) stated that the costly or expensive nature of environmental sustainability or green procurement and building is the most factor that limits its adoption and implementation. The next challenge, the study stated was the limitation of design implementation and integration and technology. Their study concluded that the level within which the concepts of green procurement have been hyped requires the participation and corporation of all stakeholders and interest groups involved starting from the decision taking level to the product consumption and disposal stage. Various researchers have given the suggestion that financial resource of companies could increase their exposure in the external market and external stakeholders. The financial resource is also considered as critical to organizational ineffectiveness (Sharma, 2000). It is anticipated that, higher financial resource could lead to exposure and hence result in more pressure from external stakeholders.



Information

Information is needed about the implementation of sustainable procurement. The report must be in line with government policies. For any organization to successfully implement sustainable procurement activities, the organization must understand the concept of sustainable procurement and government policies concerning procurement and ensure the organization has the tools and the skills necessary for effective operation of such implementation (Walker & Brammer, 2009). Francesco, Iraldo, Frey and Daddi (2012) reported from their study that, based on a survey carried out in Italy, some of the factors affecting the implementation of sustainable procurement are the lack of information about the environmental impact of the product to be procured. There is little or no knowledge about some of the products to be procured and it leads to procurement with an environmental problem. Another survey carried out by OECD about the sustainability in procurement reported that a significant factor affecting the implementation of sustainable procurement is the lack of training of procurement staff, lack of information about the financial aspect of the procurement and finally, lack of information about the environmental benefit of sustainable procurement.

Usually, from the external stakeholders such as the demand and request for quality in the sustainability process could demonstrate the lack of corporate social responsibility in the larger perspective. The pressure from NGOs, CBOs and the media in particular, results into problems to the attention of the public for the country to be sustainable in both social and environmental has not been enough. Mensah and Ameyaw (2012) identified from their research that private firms have not fully involved themselves in the NGOs policy development nor do they also exert much control in the monitoring and evaluation of the



systems in place. Such lack of concern from private individuals and firms do not auger well in terms of ensuring effective institutions to ensure sustainability in the procurement of the construction works which will in turn lead to the fulfilment of CSR.

Organizational Attitudes and Incentive

Support from top management and incentive toward the sustainable procurement is also recognized as a factor affecting the implementation of environmental sustainability during procurement. The implementation of sustainable procurement will depend on organizational culture and support (Olatunji, 2016). Corporate culture presents some level of barrier to the implementation of sustainable procurement. Some organizational cultures do not support easy change; others are not supportive of sustainability or any change in general. The idea or support from the top management or at senior level and the structural support of the organization and the process may lower the speed of the implementation of sustainable procurement (Francesco et al., 2012).

The study from Boomsma (2008) revealed that enforcing effective sustainability requires that all stakeholders be involved. Mostly third party stakeholders such as researchers, support agencies is very crucial and their role should not be neglected in the process.

Additionally, the role of government and the RCC, the contractors and firms who directly influence the procurement process is also very important. All these actors in the sustainability of the procurement process have a critical role to play and only if all act accordingly, that sustainability would be realized. Also all these actors have different knowledge and understandings of what value means in the supply chain process, have differing expectations, and differing approaches or methods. It is therefore necessary to



create the link and foster the relationship among all these interested groups so that conflicts that arise could be mitigated easily and amicably. This is supported by earlier studies from (Ayoti, 2012). His study revealed that there is massive corporate failures and malfeasance which results in the instance where stakeholders trust in various businesses have dwindled. He stated that this trust needs to be rebuilt and regained since it is very important not only to achieve sustainability among the various transactions but also to acquire and retain the very critical talents which are needed to win new contracts and cement the relationship that exist between the firm and its partners not eliminating the NGOs, CBOs, regulators and other civic bodies which play a major role in the development of the firm. The studies of Chari and Chiriseri (2012) also stated in their findings that the involvement of all stakeholders such as the purchasers, suppliers and end users of the products within the procurement process results in the production of goods and services which satisfies the customer and places the customer in the centre of the decision making of the product. In as much as this is very important for firms to develop and improve their corporate social behaviour, the problem that forms part of the challenges affecting sustainable procurement process in the Ghanaian sector is about how to identify the stakeholders and involve them in the production process as early as possible. It is envisaged that the stakeholders in the public sector responsible for the delivery of public services and products should be well defined and known in advance so that they could know what role to play to aid the process and who is responsible as far as the concepts of sustainability is required.

Within the public procurement practice, one of the major challenges for the government sector is effective monitoring and evaluation of the various contracts given to contractors



and subcontractors especially, to ensure that the concept of sustainability is strictly adhered to and adopted to benefit the masses (OECD, 2007). It is the prime objective and mandate of the government agencies to ensure the setting of the standard for sustainability practices, the enforcement process and what is expected of firms, and appropriately defining the roles that each stakeholder in the contractual agreement need to play to maintain the standard set and enforced. This is one of the prime objective of this study; to look at the role that the NRCC plays in terms of monitoring, evaluation and enforcement of laws and policies governing the concepts of sustainability and to ascertain what degree the NRCC integrate sustainability concepts during the sourcing of contracts. This would give room for a comprehensive deliberations of the procurement standards and policies such as the achievement and maintenance of sustainable practices in the public procurement process in developing countries like Ghana. Such an approach and standard is expected to raise the level of involvement in stakeholders perception about the important conditions of sustainability in environmental, social and economic issues of the SP.

Low Technical and Management Capacity

In most developing countries like Ghana, there are challenges to integration of SP concepts in the procurement process and hence the integration within the chain, technical and management practices need to be much developed. Mostly there is lack of appropriate and defined roles, regulations and policies governing the observance of SP in the procurement process. This makes it extremely difficult and costly to maintain international standards in the procurement practices (OECD, 2007). These situations are



attributed to outmoded practices in the conduct of public duties where standard are limited to promotions which could improve quality of service and goods delivery and decrease in cost of production. In the development arena, it has also been posited that the stakeholders within the supply chain management process in developing countries need to intensify their role. Mostly there are inadequate knowledge of management who can both exercise management control and also understand the technical aspects of sustainability. Therefore familiarity with the rules and regulations as well as laws governing the implementation of sustainability practices for both purchasers and suppliers and the society or community could influence the chance that these public agents will take the laws and their implementations very seriously. This unveils the assertion that there is a positive and direct relationship between the familiarity of the laws and the implementation and compliance of these laws.

Other factors and challenges bedeviling the creation of awareness level of environmental sustainability practices could be realized from limited trained staffs for the design and implementation of programmes relating to sustainability procurement. In addition, the laws and regulations governing procurement is not explicitly clear and most staff are not clear on these laws with most of the interpretations of these laws being subjective.

Researcher like Bouwer et al. (2006) after their research work found that the availability of information is very key to the establishment and compliance criteria in the sustainability of public procurement while Walker & Brammer (2009)

Indicated that the lack of and availability of information concerning the policies and regulations governing sustainable public procurement and the impact of the products and services, the difficulty that is involved during the call of tenders and purchasing and the



lack of guidelines affects the implementation level of sustainable procurement Gattiker et al. (2008) also established that when there is lack of clear definition and evaluation criteria for environmental sustainability in procurement, then a barrier exists. The lack of understanding and the knowledge to properly integrate environmental issues into the procurement process presents a major challenge. Cooper et al. (2000) gave the assertion that most procurement officers are unaware of better integrative measures to be adopted in ensuring green procurement. In terms of the social benefits of the procurement, many procurement officers, the study indicated, do not know to correctly and effectively include social and environmental issues into purchasing even when they have recognize the need for corporate social responsibility and sustainable environmental issues during the procurement process. Maignan et al. (2002) stated that mostly management and top officials have little experience with such demands.

Availability of Sustainable Goods and Services

Some of the goods and services required by public sectors are specialist and very challenging in identifying and procuring. NAO, (2005) as cited by Preuss (2009) also identified some factors to sustainable procurement as the trade-off between sustainability and cost, leadership commitment and integration of sustainability into the standard procurement process. Francesco et al., (2012) reported that access to service providers or suppliers is a significant factor in achieving sustainability. Some of the products or services to be procured can be of specialized nature and few suppliers or service providers are available. You are sometimes forced to forgo certain things in order to get your procurement fulfilled.



Moreover, it is noted that the lack of a clear path to job advancement and the low wages attached to the procurement industry also challenge the implementation of procurement reforms (World Bank, 2003a). Inadequate reports concerning sustainability practices (World Bank, 2003a), and lags in the settlement of awarded contracts and the smooth suppliers to the goods and services need in the SP process also forms part of the challenges militating against the smooth implementation of procurement reforms (Azeem, 2007). Many contract bidders are also experiencing limitations in various capacity challenges which include the lack of basic and technical knowledge in procurement laws and standards, lack of capacity to appreciate and appraise the standard set by the procurement documents, no access to information on tendering process as well, as the lack of technical and managerial capacity to develop innovative ideas and hence presents a competitive advantage in the procurement sector (ODPP, 2007). In the Ghanaian public procurement sector, there is no doubt that, these challenges forms a major challenge to the effective implementation of SP practices.

Political Interference

In addition, the problem of political interference also plays a detrimental role in the procurement process. It presents a significant challenge to the implementation and enforcement of sustainability issues within the public procurement sector. A report from the world bank (World Bank, 2004b) stipulated that majority of politicians do think and have the perception that they have the mandate to intervene in the procurement procedures and standards which mostly leads to dangerous decisions that go to affect the



delivery of quality services. Mostly these politicians meddle with the procurement processes and this leads to an increase in the in the cost of the procurement process.

Insufficient measures for controlling and assessment

For every organization, there are times the operations of the firm need to be assessed and evaluated and this will determine whether the organization is growing or achieving its set targets. In a similar manner, the public sector needs to be assessed and evaluated and there is the need for data to be made available for an adequate assessment. Effective monitoring and assessment systems are therefore needed, and these are ways through which data could be collected and assimilated to get an informed decision (Acevedo et al., 2010). Lack of effective checking, monitoring and evaluations correlates with the lack of skilled staffs and controlled environment in which the staffs are not having knowledge on the procedures and methods of assessments as well as the prioritization of the evaluation and assessment process. In the end, there is the attainment of value for money which results as the interactions between resources and the human factor for development. The processes of the procurement process is such that there is always the need for the involvement of management at all times to assess and monitor its state at any particular point in time. There is no doubt that misappropriations will arise during the procurement process and it takes management to direct and exert controls which will correct staff and put them on their toes so that they can deliver. When management effectively plays the role of checking and monitoring, it eliminates laziness, corruption and maintains all checks and balances that prevent the attainment of value for money. Government might not have adequate capital to discharge and provide all the



requirements of the citizens and hence if the little that is provided is not adequately monitored, it will pose a challenge or give rise to situations where goods and services which are provided lack the value for money. It is hence necessary that that government encourage competition such that private firms could come in to support it in the developmental stage. In this stage, transparency and accountability during the procurement and tendering stage is very important since it ensures that value for money is generated in services rendered.

2.1.12 Research Gaps and Theoretical Framework for the Study

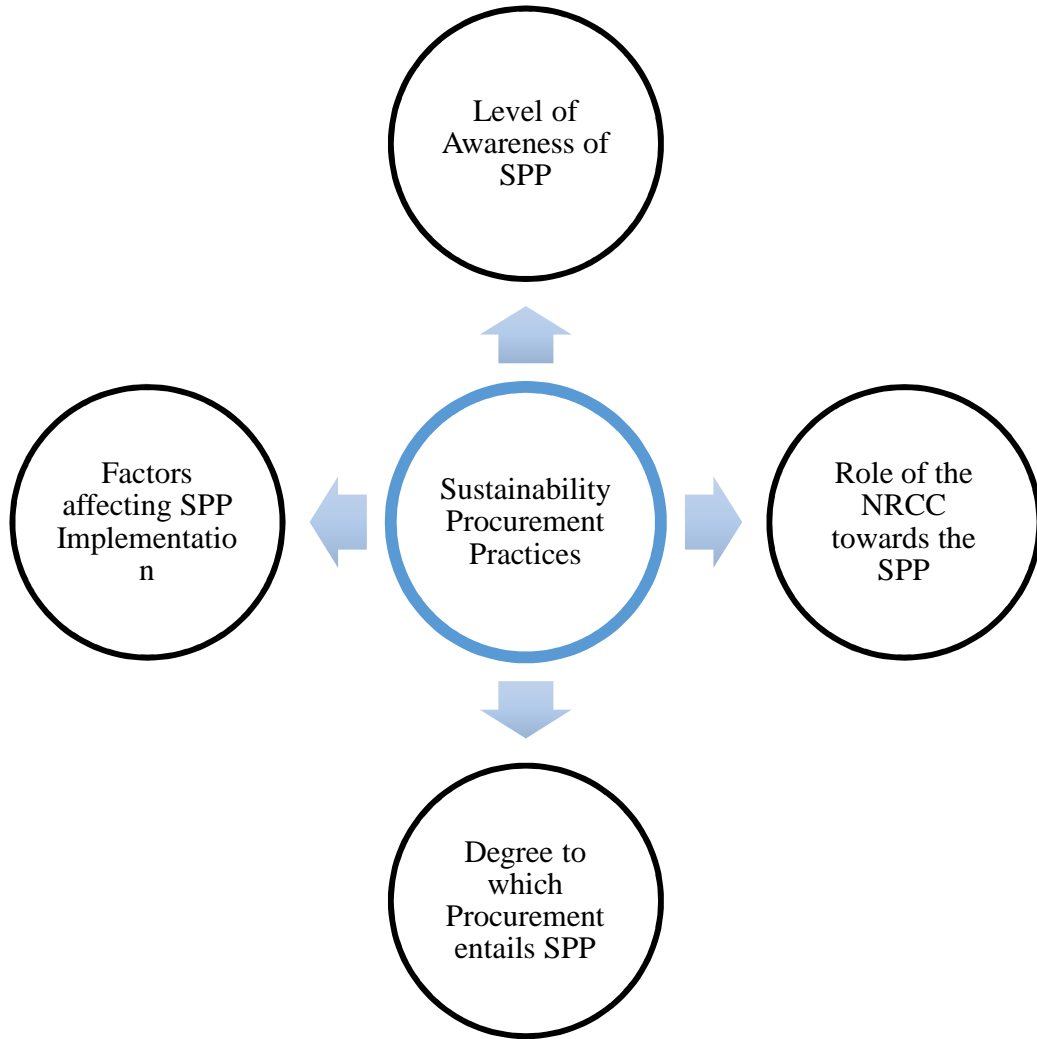
Despite the critical role that sustainability plays in the public sector procurement, there are limited studies investigated the part of the RCC in ensuring useful SP in the procurement process. Investigations by Doh (2015), DEFRA (2006) and Asare (2016) drew our attention on the effectiveness in developed countries finding various ways and devising measures to properly adopt and implement effective sustainability in the procurement process but failed to address these issues and the factors that could possibly impede the implementation of effective public procurement process in developing countries. Studies by Patrick (2008) and Edward (2009) attempted to discuss the effectiveness of procurement in the Kenyan economy but did not give us a practical situation on what government agencies and institutions could do to ensure sustainability in the procurement industry. A study by (Olatunji, 2016) indicated that many public institutions in the country lack sound procurement policies and procedures which supports effective policies in the procurement sector. These studies, however, have not specifically addressed the most issues relating to the degree of adoption of sustainability issues. Most of the research done is not also Ghanaian based, and hence the findings



might present biases due to the environment. Also, the few studies that have been conducted did not address the issues in relation to the RCC and their roles in the enforcement and implementation of sustainability standards. This study aims to fill the missing gaps by determining the significant factors affecting the implementation of effective procurement practices in the NRCC, examine the role of the NRCC in ensuring sustainable procurement and offering recommendations on implementation of effective procurement practices in the region. The study is therefore guided by the theoretical framework indicated in Figure 2.1



Figure 1: Conceptual Framework for the Study



Source: Author, (2018)



2.2 Theoretical Review

Principal Agency Theory

The principal agency theory which is also referred to as Agency Theory describes the relationship between principal who has contracted another (agent) to embark on a work on his or her behalf explicitly or impliedly (Manyenze, 2013). Hill and Jones (1992) highlight in their study which combines agency theory with stakeholder theory, the main assumption of the theory as the divergence interest of the principal and his or her agent. They therefore inform that to promote the welfare of the principal, there is the need to institute appropriate monitoring and incentive tools to redirect the agent from opportunistic actions (Hill and Jones, 1992). The theory has other assumptions which have been explained by Keil (2005) below:

- a) Both the agent and principal rationally behave towards their expectations under the principles of freedom of contract and private property;
- b) The actions of the agent have external effects on the welfare of the principal;
- c) The asymmetric information gives the agent discretionary freedom which leads to the agency problem when the agency takes undue advantage of the superior information. Hence, the need for the principal to incur monitoring cost in the form of incentives or supervision if there is minimal control over the activities of the agent;
- d) There is divergence of interests. Thus, while both have their own interest, the agent is likely to undertake opportunistic acts to increase his/her own interest rather than that of the principal. Keil (2005) categorizes these three types of opportunistic behavior of the agent into hidden intention (goals and interests),



hidden characteristics (unknown abilities and skills), and hidden actions (limited control over his/her actions).

The theory has mainly been used in the business and profit oriented circles to explain the relationship between managers and stockholders, managers and employees, among others (Jensen and Meckling, 1976). However, this extends beyond business to public governance (Kivisto and Zalyevska, 2015). For example, Leruth and Paul (2006) illustrate that there are a number of activities that can be assimilated to principal agent relationship in government: Minister (principal) and Civil Servants (agent) to implement promised programmes; Parliament (principal) and Executive (agent) to implement national programmes at all levels of government; central government (principal) and local government (agent) to implement national programmes at the local areas. In all these instances, there is an observable element which is noteworthy in any principal-agent relationship (Leruth and Paul, 2006). This could be an output, outcome or impact which serves as an indicator for the responsibility or action for which the agent was engaged.

Applying the Principal Agency Theory (PAT), this study defines government (the executive arm) as the agent who has been contracted through elections to seek the welfare of its citizens (the principal), over a period of time. Welfare, in this case includes all national development programmes, projects and infrastructure that the government provides through acquisition or in partnership with the private sector (third party and agent to the government). However, since this study focuses on assessing the role e-government could play in the implementation of sustainable public procurement, the Principal Agency Theory alone will be inadequate to use as a theoretical framework for the procurement practice and its sustainability focus. It requires several other groups or



parties with their own competing interests and responsibilities along the supply chain which must be managed to successfully realize the policy. Hence, the need for a fusion with the stakeholder theory as was done by Hill and Jones (1992).

Stakeholder Theory

The stakeholder theory is centered on the premise that an organization's actions or policies may have either positive or negative effects on certain actors and parties interested in its affairs. These actors or parties interested in the affairs of the organization are referred to as stakeholders. Freeman (1984) who is the main proponent of this theory suggests in his book (strategic management: a stakeholder approach), a collaboration among these stakeholders interest towards their benefits over time. Freeman (1984, p.46) cited in (Perlo-Freeman & Catalina, 2008) traditionally defined a stakeholder as "any group of individuals who can affect or is affected by the achievements of the organization's objectives". Upon subsequent recognition of the significant input stakeholders may make towards an organization's success, Freeman (2004) redefined stakeholders as individuals or groups whose efforts are necessary to the success or survival of an organization. Even though the concept was derived from shareholders of a corporation, stakeholders look beyond the economic interest associated with shareholders to a broader interest which needs to be managed by management of the said organizations towards its success.





Figure 2: Stakeholder Model of the Corporation

Source: Freeman (2001)

From Figure 2.2, whilst management is responsible to work on behalf of the corporation in responding to and balancing the multiple claims of all the conflicting stakeholders, employees are the individuals management employs to carry out a variety of specific tasks towards achieving general organizational objectives and aims. The local community in Figure 2.2 above also refers to the social settings where the organization is located. While the organizations rely on the local community for raw material and social acceptance to smoothly operate, the local community also has its peculiar needs, which corporations are required, through their management, to respond to. Some of these needs may be adherence to social norms and infrastructural developments. In instances where ownership is separate from management as in the case of limited liability companies, owners also have a strong interest in the growth and profitability of their organizations that in turns maximizes their wealth. The organization also procures raw materials, items and other services from suppliers who are expected to be reliable at all times to meet the



organization's needs even in times of emergencies. These raw materials are then refined or manufactured into goods or used for services to meet the needs of its customers whom the organization exists to serve. Successfully responding to the competing interest of all these groups presents the organization a competitive edge from the good relationships created in the long run (Wanyonyi & Muturi, 2015).

The stakeholder theory seems to be popular in recent times due to concerns for sustainability of achieving objectives or outcomes of an organization, be it public or private. It must therefore, be acknowledged that government regulators, non-governmental organizations (NGOs), business, media, and policymakers in general have used the concept and tried to implement its principles in one way or the other. For instance, Ahenkan et al. (2013) use the theory to assess the various means through which the participation of local people could be enhanced in financial management and planning of local government agencies in Ghana. Upon categorizing stakeholders into mandatory and permissive (interest advocates and interest wielders), they however discovered among other things that most community members lack knowledge of the process and that they are not invited to community hearing meant to solicit their inputs. Hence, they recommend adequate time for local consultation, with evidence given before approving district budgets by the Finance Ministry of Ghana.

Donaldson and Preston (1995) cited in Lengwiler and Wolfstetter (2006) further categorizes the literature of stakeholder theory into descriptive, normative and instrumental approaches to explain their argument that most studies on stakeholder theory



are corporate social responsibility (CSR) oriented. With respect to descriptive approach, they claim that the stakeholder theory concentrate on describing how organizations acknowledge and manage the cooperation of their competing stakeholders (Wilson, 2004). This helps them to determine appropriate management styles or strategies to be adopted. Also, according to them, while the instrumental thesis associates economic profitability and growth maximization with stakeholder management style, the normative thesis concentrates on the ethical responsibilities of an organization. The question is, is the organization obliged to be fair or ethically responsible towards a stakeholder aside increasing their wealth or value? The study considers Ghana as an organization which seeks to implement a policy to improve a very significant function (public procurement) towards the provision of public goods and services albeit in a sustainable manner. The stakeholder theory, even though has largely been used to analyze the strategic management approaches of private and profit oriented organization (Friedman and Miles, 2006) cited (Jones, 2007), it is chosen to address first and third objectives of this study as it will help establish which groups are relevant to be considered in implementing sustainable public procurement in Ghana while the agency theory defines their implied or explicit responsibilities.



Transaction Cost Economics Theory and Resource Based View

The transactional cost economics (TCE) focuses on how a firm could minimize the total of its associated cost with the production and the transactional process (Williamson 1979) cited in (Borland, 2009). The transactional cost affects the decisions of the firm to organize its activities either in within the vertical integration procedure or the preference

market exchange procedure. Therefore, based on the TCE, the firm decision on whether to collaborate with another firm or not is determined and the decision is based on the effectiveness of the governance as well as the role of the other firm towards the achievement of its goals. The theory identifies and explains the conditions that are required and are of necessity to the firm to manage its affairs and achieve maximum internal economics exchange (Williamson 2005) cited in (Basheka, 2009). The studies of Borland (2009) gave the conclusion that transactional cost analysis is very important within the study of relationship and this provides insights into the conditions surrounding the cause of the developmental relationship that would exist between the buyer and the supplier. Osei-Tutu et al (2010) conducted a study in which they based their theoretical argument on the findings of Fitzgerald and Shepherd (2018) studies who stated that the maintenance of a close relationship that exists, corresponds to the movement away from the market-based exchange theory to the exchange that is bestowed on bilateral governance.

The concepts of RBV and TCE are very relevant to effective supply management since effective performance is achieved through the activities within the supply chain that relates to the firm's competitors. These concepts usually give the explanations of the actions and inactions of the firm that are supported by suppliers and how these selection of suppliers could contribute to the effectiveness of the supply chain core competences (Oluka & Basheka, 2013). With the application of the principles underlining TCE which sought to identify the aspect of the effectiveness which is economically viable. The concepts of RBV apply the perspectives of both the internal and external social relationship that exist with a firm, including its distribution of power and the



dependency level on the external stakeholders. It deals with the optimization model that seeks to reveal the continuity of the firm as well as the autonomy of the firm. As a summary, these theories give support to management of suppliers, the inclusion of information from the supplier between the minimization of business units with cost in transaction, creation of value to the products or services through effective utilization of resources and technology and the reduction of risks of supply dependence and availability (Ellram 2008).

2.3 Empirical Review

Level of awareness of Sustainability Practices

Peprah et al (2018) examined the level of environmental sustainability awareness in Ghana by sampling 18 District Assemblies in the Western Region. The study was also geared towards creating the consciousness and the need to effectively implement and enforce green procurement within the various sampled District Assemblies. The study made use of the non-standard interview guide as the data collection instrument and technique. The outcome of the findings indicated the existence of the various regulations, standards and legislations governing the various District Assemblies on environmental sustainability in order to ensure green procurement. However, there was no specific document which was titled as green procurement even though the regulations assisted in creating the awareness of green procurement in the Districts within the Western Region. From the results, it was also found that the level of awareness of the green procurement and its significant impact as a policy document was low in the various Assemblies.

Offei (2014) assessed the awareness level of environmental and social sustainability and how these factors could be integrated into the public procurement system in Ghana. The



study adopted the survey research design through the use of the purposive sampling technique. The study used twenty-three procurement officers sampled from eight (8) different Ministries in Ghana. The study found that the level of awareness of environmental and social factors in the public procurement was low. It was found that there was no clear cut policies or documents detailing factors of procurement that were connected with environmental and social indices. This assertion, the study found, makes the implementation of the sustainability practices very challenging.

Key Sustainable Procurement Practices

Kwadzo (2014) also conducted a research to ascertain the various practices that constitute sustainability in procurement in Ghana Health Service. The study adopted the survey research type and the sample selected for the study were thirteen procurement officers, stores and administrative staff at the Ghana Health Service headquarters based in Accra. The study adopted the use of questionnaires and interview guide as the research instruments. The study found out that SPP were not being practiced at the Ghana Health Headquarters in Accra. Purchase orders, tender bidding and awarding of contracts were based on economic feasibility and lacked the concepts of social and environmental sustainability. The study also found that the lack of legislative instrument and policy document to guide the sustainability in procurement limited the adoption and implementation of the SPP issues. This study was however conducted in the Ghana Health service and there could be difference when conducted in the RCC.

Seyram (2016) also investigated the means through which the concepts of value for money could be incorporated into the procurement process in the country, Ghana. The



study was set to identify the important elements and the various approaches under the public procurement act and to recommend a better means through which sustainability issues could be better integrated into the public procurement process. The study adopted the questionnaires as the research instrument and respondents for the study were selected from 76 procurement professionals. Findings from the research indicated that the extend of literacy in the knowledge of the procurement practices and standards to ensure value for money was lacking.

Olatunji (2016) reviewed from previous works to identify some of the key environmental sustainability practices and challenges faced by the procurement officers. Questionnaires was established on a scales for which the respondents are to use in administering the questionnaires. The research was carried out in Upper East Region of Ghana were all the 13 Districts were considered during the study. Maximum of 26 questionnaires were sent out to be administered by the procurement officers with in the Districts. Only 20 of the questionnaires were retrieved and the analysis of the findings is based on the 20 questionnaires retrieved. The analysis of the quantitative survey data reveals that, some of the environmental sustainability issues were not considered during procurement. Environmental issues such as; water pollution, air pollution, noise pollution, deforestation and energy wastage were only considered often while issues like protection of endanger species and greenhouse effect were mostly ignored. Cost, budget constraint and top management support were identified as some of the barrier or challenges to the sustainable procurement. Therefore, there is a need to review public procurement Act, Act 663 in order to include sustainability during procurement activities. Sustainability manual can be produce as a guide for the attainment of sustainability during procurement.



Role of the Entity Tender Committee

Asare (2016) conducted a study on the role of the entity tender committee in sustainable procurement practices in public hospitals in Ghana. This descriptive study was used. The research data was collected from the entity tender committees in the various general hospitals located in Greater Accra. Quantitative and qualitative combinations of data collection instruments were used with 62 respondents. Indications from this study reveal that although the procurement unit and tender committee is made up of the person with a high educational background, the level of knowledge demonstrated by the respondents on issues of sustainable procurement practice was weak. The lack of policy documents on sustainable procurement practice has resulted in corrupt practices of sustainable procurement in most public hospitals, and this has negatively affected healthcare delivery. Also, the role of entity tender committees in sustainable procurement had not significantly influenced the organizational goals of the health facilities and also the compliance of interested parties. In the light of the findings, it is recommended that members of the procurement units be educated on the issues of sustainable procurement to improve knowledge levels and understanding of the objectives of the sustainable procurement practice so as not to lose focus on what sustainable procurement is all about.

Extent to which Procurement Practices promotes Sustainability

A study by Mensah and Ameyaw (2012) also looked at the degree to which public procurement practices in Ghana integrates sustainability issues. The study also looked at the challenges that faces the implementation of the SPP. The study targeted the construction industry and interviews were adopted as the research instrument for the



study. The study found that sustainable procurement was perceived to be adequately addressed by the procurement law in Ghana which is the Public Procurement Act, Act 663 (2003). However, among the respondents interviewed, the study revealed a low level of awareness and understanding of the concepts of environmental, economical and social concerns. There was lack of understanding of the concepts of sustainable procurement and this was determined to be the major challenge on the implementation of SP functions. Koranchie (2015) assessed the extent to which Ghana Grid Company Limited integrate the concepts of SPP during the implementation of the procurement process. The study adopted the descriptive research design with a qualitative research approach. Data collection was done through the administration of questionnaire and the purposive sampling technique was used for the selection of respondents for the study. Population for the study comprised of all staffs of GRIDCo who were involved in the procurement process of the company. Outcome of the study revealed that the employees of GRIDCo embeds sustainability practices in their procurement process with most of the SPP being embedded within the implementation of contract and the evaluation of tender and contract award stage. The study revealed that during the preparation and the requirement definition stages of the procurement process or cycle, GRIDCo does very little in the adopting SPP.

Factors affecting the implementation of SPP

Njeru (2015) examined the various factors that affects the smooth implementation of procurement activities in tertiary public training institutions in the Kenyan business sector. The study adopted the correlational research and the targeted population



comprised of 40 tertiary public training institutions. The stratified random sampling technique was adopted to select the respondents for the study and questionnaires were adopted as the research instrument for the study. The study also utilized the primary source of data collection which was pretested using a pilot study. Both descriptive and inferential statistics were adopted for the study. The results revealed that procurement policies adopted, the management strategies adopted to select suppliers, management of inventory, professional training and the utilization of IT resources affected effective implementation of the procurement practices. The study concluded that management of the supplier followed by training and then procurement policies constitute the major policies that affect effective implementation of the procurement process.

Sewoanu (2012) assessed the benefits and challenges of PP in Ghana using VRA as a case study. The case study approach was adopted for the study and interview and questionnaires were used as the research instrument. The study targeted the Entity Tender Committee, the employees in the supplies department, and some registered suppliers of VRA. The study indicated that the PP Act, Act 663 exist and the stakeholders are very familiar with the Act. It was realized that seminars and workshops and on-the-job training programmes are usually organized for stakeholders on the procurement reforms. However, these workshops were not as frequent as possible. Also the PP reforms gave room for a uniform and structures framework for PP in the public sector. Some of the challenges were identified as excessive bureaucracy and burdensome procedures as well as very low threshold.

Adjei-Bamfo (2017)purposively sampled and interviewed 18 participants from four Procurement Entities from Ghana's Public Sector. From a thematic content analysis of



both primary and secondary data, the study found that the absence of a composite legal framework, limited capacity of relevant stakeholders, and lack of political will and budget constraint inter alia, impedes SPP implementation in Ghana's public sector. A Two-Way Principal Agency relationship is thus established among stakeholders in their quest to promote SPP. However, e-government tools akin to government portals, social media handles and an integrated e-procurement software provide an informative avenue for assessing market readiness and sensitizing stakeholders on the SPP practice.

Offei (2014) assessed the environmental and social factors that can be incorporated into the procurement practices in Ghana. This was because various literatures have concluded that the country lacks the integration of social and environmental factors within the Procurement practices and even in the Public Procurement Act, Act 663. Mostly it has been revealed that there are no standard policies and plans that detail how social and environmental factors could be better incorporated into the procurement process. There is therefore the absence of a broader sustainability development regarding social and environmental factor integration into the procurement process and hence affects the processes that link these factors to the SPP very difficult and challenging. This study surveyed twenty-three respondents selected from eight ministries in the country using the purposive sampling technique. The study found that during tender bidding, specification championing, the prioritization of both social and environmental factors is least considered even though there is a strong agreement by all the procurement practitioners and the stakeholders within the procurement sector to greatly prioritize environmental and social factors during the decision-making stage, the selection stage and the implementation stage within the procurement process. The study also identified



the challenges facing the smooth implementation of sustainable procurement activities include reverse logistics activities, lack of extension of producer responsibility or refurbishing and re-manufacturing processes.



CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter covers the methodology that underpins this study and explains the methods used in gathering, collating and analyzing data. The justification for all adopted methodological choices is given in each section. The issues covered in this section are the research design, study population, sample size and sampling techniques, data types, analysis and techniques as well as company profile for the study. Each of these sections is presented below.

3.2 Research Approach

Basically, there are two main categories of research approaches. These are the quantitative research approach and the qualitative research approach. The qualitative research method or research approach deals with a number of methodological approaches which are based on various theories and principles underlining research work (Elo & Kyngäs, 2008). The approach also employs various methods of data collection and the analysis of the data is non-quantitative (Schreier, 2014). The approach also aims at exploring social relations and describing reality as may be experienced by respondents for the study (Geben, 2007). The qualitative approach is also described as a research approach that presents emphasis on word descriptions rather than quantifying the respondents in the collection and analysis of data. This means that the qualitative approach does not usually adopt and employ measurements or numerical representations (Cresswell, 2009). Again, Yin (2003) indicated that a qualitative research approach



concerns various ideas, feelings and attitudes as portrayed by the respondents. The prime goal of qualitative research work goes very deep within the research area with the introduction and adoption of interviews and documentations. The qualitative approach is also concerned with the concept of inductiveness. From the study of Saunders, Lewis and Thornhill (2009), they stated that in a qualitative approach which involves the inductive approach, the researcher usually collects data from the respondents or from the study and develops a theory from the analysis of the data.

Potter (2004) in their study suggested that various advantages of qualitative research approach exist. The merits include its explorative characteristics, which helps to analyse research objects. It also helps in the promotion of relationship between variables and enables the researcher to compare findings to make a conclusion. However, the quantitative researcher sometimes criticises qualitative research as being too impressionistic, subjective, and difficult to replicate. The scope of investigations is restricted and difficult in establishing sometimes what the researcher actually did and how he arrived at the study conclusion (Saunders, Lewis, & Thornhill, 2008).

In essence, quantitative research approach refers to the type of research that is based on the methodological principles of positivism and neo-positivism. “The quantitative approach can be described as a research strategy that emphasizes on quantification in the collection and analysis of data (Kumar, 2014). There is however, a third research approach which combine both the quantitative and the qualitative approach and is termed the mixed approach.



This study adopted the quantitative approach. This was because the study involved the use of questionnaires which were quantified into quantities in the analysis process and used to explain the data.

3.3 Research Design

Research designs are considered as the blueprint of any research dealing with at least four problems: which questions to study, relevant data, what data to collect, and how to analyse the results(Hertzog, 2008). The research design that would be employed for this study is the descriptive survey. Bell and Bryman (2007) indicated that descriptive research is concerned with the condition or relationship that exist, such as determining the nature of prevailing conditions, practices and attitudes, opinions that are held, processes that are going on, or trends that are developed.

According to Cohen, Manion and Morrison (2011), descriptive survey deals with various ways to scan a variety of issues, populations of study and programmes in order to properly measure, select and describe any generalizations that emanates from the findings. It gives the opportunity to analyse data in a relatively easy, simple and straightforward approach and could be adopted in the study of attitudes, values, beliefs and motives.

Descriptive survey approach is the concept where the descriptive research design is adopted alongside the adoption of survey instrument in the form of either questionnaires, interviews, observations or test. It is mostly used to provide solutions to answers, questions which begins with how, where, what, and when. The approach is associated



with the deductive approach (Saunders et al., 2009). In this study, the descriptive survey was adopted. The descriptive survey was used because it permits the collection of responses in large amount from a defined population and the method of data collection is affordable. Usually, data from this design is attained through the distribution of research instrument in the form of questionnaire or interview to a sample selected from a population identified for the study.

In addition, Leedy, Ormrod and Johnson (2010) indicated that descriptive research examines a situation as it is. Thus, descriptive-social survey is involved with relationships, which deals with variables that have not been manipulated. It also involves the collection of data from the study so that the research questions that are guiding the study could be effectively answered (Apuke, 2017). Besides, the design has the merits of producing valid responses which could be generalized when dealing with wide range of respondents and it also involves accurate measurements that deals with numerical representations to describe the analysis of a data (Apuke, 2017).

3.4 Study Population

In describing the population in research, Kumekpor (2002) defines it as the entire element in the investigative context. Anaman and Yin (2000) as cited by Saunders et al., (2009) also described population as the whole elements, objects and events in a particular setting that the researcher intends to investigate to generalize. The study targeted personnel who constitute the Entity Tender Board Committee. The Committee comprised representatives from the Ghana Highway Authority, the Urban Roads, Architectural and Engineering Services Limited, the Economic Planner, the Attorney General Department, Public



Works Department, the Finance Officer, Procurement Officer, a Legal Practitioner and the Regional Budget Officer. The numeral strength of the Entity Tender Committee is 10. Also, contractors who had executed projects within the region from the period 2010 – 2018 were considered in the study. The population for the contractors was 69. This was sourced from the record book at the NRCC. The record book contained the names of contractors, their addresses and the contact numbers.

3.5 Sample Size and Sampling Technique

A sample is used to describe a subset or a portion of the total population (Badham & Zanko, 2014). Bell and Bryman (2007) noted that sample is a subject or collection of some units of the universe or population selected for observation or analysis. Lovie (1993) also asserts that a sample is a smaller unit or subsets bearing the same characteristics of the population of interest. The rationale is to make generalization or inference based on the study of the sample about parameters of the population from which the sample was drawn (Yin, 2003). Agreeing to (Park & Park, 2016), a sample of a studied population offers the following advantages;

- (i) It saves time and resources.
- (ii) It minimises the problem of record keeping since the researcher is handling a relatively smaller number of respondents as compared to the target population.
- (iii) If well done, the results will reflect the character of the total population.

Best and Khan (2006) stated that the sample size depends on the nature of the population, the kind of data to be elicited, the quality of the analysis to be carried out and the availability of funds for the study. The study employed the census sampling methods to select respondents from the Entity Tender Board Committee. Additionally, 40



contractors were also selected using the convenience sampling technique. In all, a total sample size of 50 was selected for the study.

3.6 Data Types, Analysis and Techniques

3.6.1 Data Types

The study adopted a primary source of data. An advantage of using primary data is that researchers collect information for the specific purposes of their study (Bacon-shone, 2015). In essence, the questions asked by the researcher in the data helped them with their research. The primary data has been described as the most efficient means of data source because it is direct to the respondent (Anamoah-Mensah, 2014). The primary data is achieved through fieldwork, adopted by this study, and it involves a kind of expectation where there is the need to source data from the field through questionnaires administered. The surveys were distributed to selected contractors and members of the Entity Tender Board.

The questionnaire is one of the most popular and widely used instruments in research (Everitt & Hothorn, 2010). According to Dankwah (2013) cited in (Park & Park, 2016), a questionnaire is known to be a research instrument that allows individuals to respond to the same set of questions in a predestined way. The questions were for participants to respond to them with the ultimate purpose of getting data for the researcher's use (Bacon-shone, 2015). Radhakrishna (2007) posited that the use of questionnaire helps to gather information on knowledge, attitudes, opinions, behaviours, facts, and other information.



There exist two types of questionnaire: self-administered and interviewer-administered. The respondent usually completes a self-administered questionnaire with little or no support from the researcher. The use of the internet also administers such a questionnaire, intranet, mailed to respondents, or hand delivery. As regards the interviewer-administered questionnaire, the interviewer records the respondent's answers either electronically or manually for the research use. This data collection is done by using a telephone or structured interview approach. This study adopted the self-administered questionnaire. The researcher used the self-administered questionnaire as a useful method to collect the data (Saunders et al., 2009). The use of this questionnaire type offered the following benefits;

- (i) The process provided flexibility, convenience, and quality time on the part of the researcher and the respondents.
- (ii) The approach enabled the researcher to have control over the quality of responses to the questions which helped to improve the reliability of the data.
- (iii) It reduced guess responses.
- (iv) It minimised contamination which came about as a result of discussions of items with other persons.

3.6.1.1 Data Collection Procedure

In collecting data for the study, several procedures were followed. First, the researcher contacted the Northern Regional Coordinating Council (NRCC) and sought permission to undertake the research, and also assisted in communicating the objectives to the respondents. A letter introducing the researcher as a student was taken from the



University of Development Studies was given to the NRCC and shown to individuals partaking in the study for consideration to use their data for academic purposes. The covering letter assured the participants that their anonymity would be preserved, and every effort had been made to protect the anonymity of the respondents as well as the confidentiality of their responses. Informal meetings were also held between the researcher and the respondents at different times to explain the purpose of the study to them. This, in addition to the manager's involvement, helped immensely in getting the support and co-operation of the respondents.

In this consideration, the respondents' privacy is sourced in the answering of the survey questionnaire, as valuable data is collected. The researcher also ensured that the identification of the research participants was not exposed or could be traced to any third party. This enabled the research participants to give information without fear. The study avoided any descriptive information that could lead to the possible identification of respondents. All reasonable attempts were made to counteract any potential problems that may arise as a result of the responses of the participants in the study. Also, the consent of respondents is a crucial factor, and this is spelt out in the questionnaire likewise. This shows the reasons of which data collected are further processed with coded descriptions for analysis. The study intends to use coded reports from results gathered from the sector. The questionnaire was self-administered by the researcher to ensure a high response rate. The respondents were assured of the confidentiality of any information provided. Consent was sought from respondents before completing and returning the questionnaire.



3.6.1.2 Details of the Questionnaire

This study used questionnaires to collect data from the participants. Two sets of questionnaires were developed; one for the staff of the Entity Tender Committee and one for the contractors. The questionnaire for the Entity Committee Staff was divided into five sections. Section “A” of the questionnaires is the participants’ characteristics. This included their gender, age and educational background. This part was to give an overview of the people who were participating in the survey. Section “B” of the questionnaires covered the procurement practices at NRCC. Section “C” looked at the role of the NRCC in ensuring sustainable procurement practices in the Northern Region. Respondents were to select their responses based on whether they ‘Strongly Disagree’, ‘Disagree’, ‘Slightly Agree’, ‘Agree’ or ‘Strongly Agree’. ‘Strongly Disagree’ explains your total disagreement to the statement; ‘Disagree’ explains your considerate rejection of the statement; ‘Slightly/Fairly Agree’ explains your loose acceptance of the statement; ‘Agree’ explains your considerate acceptance; ‘Strongly Agree’ explains your total acceptance of the statement. Section “D” aimed at determining the degree to which procurement practices at NRCC hold sustainability considerations. The last section, Section “E”, examined the factors affecting the implementation of sustainable procurement practices at the NRCC.

The questionnaire for the contractors was divided into three sections. Section “A” of the questionnaires evaluated participants’ gender, age, educational background and working experience. Section “B” sought to identify the level of awareness of these sustainable procurement practices. Several procurement practices were enumerated, and respondents were to indicate their level of awareness. Responses were coded in five points Likert



scale. The scales were 5 = Greater Extent (GE), 4 = Some Extent (SE), 3 = Somehow (S), 2 = Less Extent (LE) and 1 = Not At All (NA). Section “C” looked at the factors affecting the implementation of sustainable procurement practices.

3.6.2 Data Analysis Techniques

According to Rubin and Rubin (2005), data analysis entails classifying, weighing and combining questions to extract meanings and implications, to reveal patterns or to stitch together descriptions of events into coherent narratives. The study first prepared the questionnaire, looked at the various themes and concepts about the research objectives and coded the outcome to retrieve information to explain the situation. In this way, the researcher engaged himself with the data so that she could fully understand the meaning and insights that relate to the data.

The data was entered into SPSS and checked for incorrect entries and missing data. The data obtained was then used to formulate a description of the setting and interpretations done based on the themes and insights relating to the research questions. Descriptive statistics such as mean and standard deviation were used in this study to analyse some characteristics of the participants. The participants’ characteristics of the participants were represented in percentages. The Likert scale of the responses was analysed using percentages, mean and standard deviation. Other types of analysis used in the study were the Multiple Regression and the Relative Importance Index.



3.6.2.1 Data Validity and Reliability

From the study of Bashir, Afzal and Azeem (2008), validity and reliability in research work are two most important factors that cannot be underrated and they should constitute every research work during the designing stage, the analysis stage and the judgement of the quality of the study. According to the study of (Neuman, 2014), reliability is the ability or the extent to which respondents sourced in a study are consistent and constitute an accurate representation and measure of the sample frame. When the research is such that it can be replicated using a similar methodology or the same methodology, then the instrument used for the study is said to be reliable. Validity on the other hand, gives the determination of the results of the research on whether it truly measures what it is intended to measure. In summary, data validity is the how the outcome of the research approaches the true value of the outcome of the research (Neuman, 2014).

(a) Piloting to achieve Reliability

The pre-test was conducted with the five selected staff of NRCC. The pre-test was intended to examine the correctness and completeness of the questions. It was also intended to have an overview of how the participants would react to the questions. Again, the pre-test was conducted to indicate the time needed to finish the main questionnaire. Through the pre-test, the questions were improved.

(b) Validity

Validity is a quality of the interpretations and unitary concepts that are supported by different types of evidence (Bachman, 2004). External validity was achieved because



different methods for collecting data were used in this study to make the results appropriate for generalisation. Validity was achieved in this study because the responses to the questions in the questionnaire guides were used to answer the research questions. Also, the results from this study correlated or agreed with other results in the literature.

3.7 Company Profile

The Northern Region is part of the ten administrative regions in the country. It borders with the Upper East, the Upper West, the Brong Ahafo and the Volta Region and two neighbouring countries, the Republic of Togo to the east, and La Cote d'Ivoire to the west. The capital city of the region is Tamale officially referred to as the Tamale Metropolitan Area. It is Ghana's fourth largest city and in 2013 its population was projected to be 360,579. The region according to the 2010 census was the fastest growing city in West Africa. The climate of the region and the culture of the people differs significantly from the political and economic dominating regions of central and southern Ghana. The region occupies an area of about 70,383 square kilometers and it constitute the largest region in the country in terms of land area. The primary administrative structure at the regional level is the Regional Co-ordinating Council (RCC), headed by the Regional Minister. Other members of the RCC include representatives from each District Assembly, regional heads of decentralised ministries, and representatives of the Regional House of Chiefs. The Regional Coordinating Director acts as the secretary to the Council.



3.8 Summary

This chapter presented specific research methodology used in the study. It covered research design, population, sample and sampling procedure, instruments used, pre-testing, data collection procedure as well as data analysis procedure. It also provided justification for the methods and data instruments employed in the study. The next chapter (chapter four) discusses the results of the study.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

This chapter considers the analysis of data collected for this study. It involves data presentation analysis and discussion of the research findings. To facilitate understanding of the chapter, the results are displayed in tables and discussed under each of the research objectives.

4.1 Presentation of Results

4.1.1 Demographic information on respondents

This section presents data on the demographic characteristics of respondents: gender, age and highest educational attainment.

Table 4.1: Demographic Information

Variable	Category	Frequency	Percentage
Gender	Female	6	12.0
	Male	44	88.0
	Total	50	100
Age	21 – 30 years	6	12.0
	31 – 40 years	22	44.0
	41 – 50 years	22	44.0
	51 – 60 years	0	0
	61 years and above	0	0
	Total	50	100
Level of Education	Diploma/HND	10	20.0
	Undergraduate	16	32.0
	Postgraduate	20	40.0
	Doctorate/PhD	4	8.0
	Total	50	100

Source: Field Survey, (2018)



From Table 4.1, the results indicate that 44 respondents representing 88% were males while three respondents representing 12% were females. This means that majority of the respondents were males. The study had a majority of the respondents within the age range of 31 – 40 years and 41 – 50 years. These age ranges had 22 respondents each, constituting 44%. Respondents who were between the ages of 21 – 30 years were 6, representing only 12%. This implies that majority of the respondents might have had more experience in SPP and were likely to give accurate answers to the study questions. Regarding educational level, ten respondents, representing 40%, were postgraduates which was an indication of in-depth knowledge that could make a meaningful contribution to the development of this study. They were expected to be able to read and respond to the demands of the questions asked in the survey and such level of educational training was desirable. The next group of respondents were undergraduates. They were 16 in number, representing 32% of the respondents. Those who had Diploma/HND numbered 10, representing 20% of the respondents while those with Doctorate/PhD were 4, representing 8%.



4.1.2 Objective One: To determine the Sustainability Procurement Practices adopted by the NRCC

The various sustainability practices were grouped under three dimensions: social, environmental, and economic. The findings show that purchasing actions have social implications, and public procurement can be used to drive social improvements. Social activities that were considered during the procurement process in this study include the consideration of human health and safety and support to small and local businesses by

helping them to develop. Similarly, every product or service must be environmentally friendly from manufacturing, usage to its disposal. The environmental activities taken into consideration in this study are green procurement and protection of wildlife. To ensure long-term value for money, the procurement process should ensure that the product benefits the community or society economically. The economic activities that were considered were the economic benefit of the project and the importance of the project to the community.

Objective One was thus achieved Frequency and Simple Percentage judgement. While the frequencies state the number of respondents for each SPP, the percentages give the percentage of respondents who indicated the inclusion of a particular sustainability practice by the NRCC in awarding contracts, as reported in Table 4.2 below. From the results, it can be noticed that all respondents (25 each for each item from the social dimension, representing 100%) indicated inclusion of social dimensions of the procurement practices by the NRCC in awarding contracts. The study also had all the economic dimensions agreed upon by the respondents that the NRCC does not hesitate to include them during the procurement process. For the inclusion of environmental dimensions within the procurement, the study had 34 respondents (giving 50 for the two items under the classification) representing 68% of the respondents stating their agreement that the NRCC includes environmental sustainability practices in the procurement. The study, therefore, had 32% of the respondents indicating their disagreement that the NRCC contains environmental sustainability practices in the procurement process.



Table 4.2: Procurement Practices adopted by NRCC

Procurement Practice	Frequency	Percentage
Social Dimension	50	100
Environmental Dimension	34	68
Economic Dimension	50	100

(Source: Field Data, 2018)

4.1.3 Objective Two: To identify the level of awareness of Sustainable Procurement Practices at NRCC

To distinguish, the level of awareness of Sustainable Procurement Practices at NRCC, the study adopted the one sample t-test. The one sample t-test determines whether the sample mean is statistically different from a known or hypothesized population mean. The study is evaluated based on a five Likert scale. The results are presented in Table 4.3.

The decision is that a positive mean difference indicate a high awareness of an SPP practice while a negative mean difference indicate a low level of awareness. A significance (2-tailed) value less than 5% indicate a statistically significant study. From Table 4.3, it is seen that all the items in the study are statistically significant at the 95% Confidence Interval (CI) or a 5% margin of error. This is because they present a considerable value less than the p-value of 0.05. The implication is that we are 95% confident that the mean values of these sustainability practices are within the stated mean interval values given in the results presented.



Table 4.3: Level of awareness of Sustainable Procurement practices

	Sig. (2-tailed)	Mean Diff	95% C. I	
			Lower	Upper
Prevention of water pollution	0.005	0.27	-0.09	0.36
Prevention of air pollution	0.000	0.49	0.04	0.45
Preservation of trees	0.035	0.24	-0.13	0.37
Reduction of the Greenhouse effect	0.000	0.93	0.22	0.71
Protection of endangered species	0.109	0.28	-0.03	0.31
Protection of workers	0.003	0.98	0.10	0.51
Protection of the community	0.001	0.61	0.16	0.82
Employment opportunities for marginalized groups	0.000	1.08	0.19	0.89
Child labour protection	0.000	1.48	0.56	0.92
Considerations for disabilities in projects	0.001	0.50	0.13	0.37
The economic benefit of the project to the community	0.000	1.03	0.32	0.71
Maintenance of the facility or project	0.000	0.34	0.03	0.31

(Source: Field Data, 2018)

From the results in Table 4.3, the study indicates a 95% confidence mean interval of 3.81 (4-0.09) and 4.36 (4+0.36) for prevention of water pollution. This means that we are 95% confident that the mean that respondents are fully aware of the prevention of water pollution in the procurement process is between 3.81 and 4.06 with a positive mean difference. The positive mean difference (or high mean interval) indicates that respondents are fully aware of the issue of prevention of water pollution in the procurement of contracts. Similarly, the 95% CI values for prevention of air pollution is



4.04, and 4.45 indicate a high level of awareness of the prevention of air pollution in the procurement of projects.

On the preservation of trees, the 95% CI values are 3.87 and 4.37 with positive mean difference, indicating a high level of awareness. Other values are a reduction of the greenhouse effect with 95% CI values of 4.22 and 4.71 with positive mean difference, protection of endangered species with 95% CI values of 3.97 and 4.31 with positive mean difference, protection of workers with 95% CI values of 4.10 and 4.51 with positive mean difference, protection of the community with 95% values of 4.16 and 4.82 with positive mean difference. Also the protection of child labour had 95% CI values of 4.56 and 4.92 with positive mean difference, considerations for disabilities in projects had 95% CI values of 4.13 and 4.37 with positive mean difference, economic benefit of the project to the community had 95% CI values of 4.32 and 4.71 with positive mean difference, and maintenance of the facility with 95% CI values of 4.03 and 4.31 with positive mean difference. The higher 95% CI interval (or positive mean difference) achieved for the items indicates that respondents are fully aware (have a high level of awareness) of all sustainability practices within the procurement of contracts.

4.3.4 Objective Three: To examine the role of the NRCC in ensuring Sustainable Procurement Practices in the Northern Region

The questionnaires were answered based on a five-point rating scale. The researcher adopted the Simple Percentage Method and the Mean Analysis to analyse this part of the survey. A mean value higher than 3.5 indicates acceptance of an item.



Table 4.4: Roles of the NRCC

STATEMENT	SD	D	N	A	SA	Mean
Formulation of policies to ensure sustainable procurement practices	0 (0%)	0 (0%)	0 (0%)	26 (52%)	24 (48%)	4.48
Ensures the implementation of sustainable practices in the region	0 (0%)	0 (0%)	0 (0%)	18 (36%)	32 (64%)	4.64
Meting out punishment to parties who violate sustainability practices	4 (8%)	26 (52%)	0 (0%)	20 (40%)	0 (0%)	2.72
Educating the MMDAs on sustainability practices within the procurement process	0 (0%)	0 (0%)	4 (8%)	20 (40%)	26 (52%)	4.44
Ensures that public Procurement Act provisions are fully adhered to.	10 (20%)	6 (12%)	0 (0%)	14 (28%)	20 (40%)	3.56
Ensuring the infusion of SPP issues into the existing procurement processes	0 (0%)	0 (0%)	0 (0%)	34 (68%)	16 (32%)	4.32
Establishing indicators to measure SPP operations and impact	0 (0%)	0 (0%)	12 (24%)	18 (36%)	20 (40%)	4.16
Mobilising budgetary support for SPP activities.	10 (20%)	16 (32%)	4 (8%)	20 (40%)	0 (0%)	2.68
Public education and training to create awareness	0 (0%)	0 (0%)	0 (0%)	18 (36%)	32 (64%)	4.64
Carry out research and prepare background documents in SPP	0 (0%)	0 (0%)	0 (0%)	14 (28%)	36 (72%)	4.72

Key: SD = Strongly Disagree D = Disagree N = Neutral A = Agree SA = Strongly Agree

(Source: Field Data, 2018)

The results are shown in Table 4.4 below, where it can be noticed that all respondents (52% who agreed and 48% who strongly agreed) agreed that among the roles of the NRCC is to formulate policies to ensure sustainable procurement practices. A mean value of 4.48 supports the claim of this study. Concerning the role of the NRCC in ensuring the



implementation of sustainable practices in the region, all respondents (36% who agreed at 64% who strongly agreed) agreed. This is supported by the mean of 4.64 as indicated by the study. The result also accepts the fact that the NRCC exist to educate the MMDAs on sustainability practices within the procurement process. The study had 92% of the respondents supporting this role of the NRCC with only 8% staying neutral. A high mean value of 4.44 was recorded confirming this role of the NRCC. Respondents also affirmed that the NRCC exists to ensure that public Procurement Act provisions are fully adhered to. The study had 68% of the respondents affirming this role with 32% thinking otherwise and 28% staying neutral.

Furthermore, the study indicates that the NRCC ensures the infusion of SPP issues into the existing procurement processes. All the respondents affirmed this role of the NRCC with the results achieving a mean value of 4.32. A high mean value of 4.16 was also obtained with the assertion that the NRCC establish indicators to measure SPP operations and impact with 76% of the respondents agreeing. With the role of the NRCC in ensuring public education and training to create awareness of sustainability measures, all respondents agreed with a mean value of 4.64 backing the claim. Another role which was accepted by the respondents as among the functions of the NRCC is that the NRCC exist to carry out research and prepare background documents in SPP. This assertion had all respondents agreeing with the study recording a mean value of 4.72.

However, respondents disagreed that the NRCC met out punishment to parties who violate sustainability practices with 60% of the respondents expressing their disagreement. A mean value of 2.72 was also achieved. Also, respondents disagreed that



the NRCC mobilise budgetary support for SPP activities. The study had 52% of the respondents disagreeing with 40% in agreement and 8% at a neutral position.

4.1.5 Objective Four: To determine the degree to which Procurement Practices at NRCC holds Sustainability Considerations

The study made use of the mean and standard deviation to analyse this objective. The mean establishes the weight of each item to the model. From this model, a higher mean value is an indication of a high degree of inclusion of particular sustainability practice. A mean value of 3.5 is considered high based on the scale of measurements of the items from 1 to 5; corresponding to disagree to agree strongly. The standard deviation gives the dispersion of the variable from the mean. A smaller value of the standard deviation implies that the variables are clustered around the mean and gives the validity of the mean to be used in the analysis. It is also a measure of the absence of outliers in the data. The results are indicated in Table 4.5.

Concerning economic sustainability practices within the procurement process, the study reveals a mean value of 4.73 and standard deviation of 0.230 for the economic benefits of the project to the community. The high mean is an indication that the NRCC's consideration of the economic dimension of the project's relevance to the community is high and it is considered as very important in awarding projects and contracts. For the cost benefits of awarding the contract by setting out the lowest amount, a mean value of 3.64 and a standard deviation of 1.260 was achieved. This implies that the NRCC is fully aware of the cost benefits of awarding contracts and hence all measures are taken to ensure that the contract awarded is cost effective.



Table 4.5: Degree to which Procurement Practices holds Sustainability

Factors	Mean	Std. Dev.
The economic benefits of the project to the community	4.73	0.230
The cost benefits of awarding the contract by setting out the lowest amount	3.64	1.260
Consideration of the future maintenance cost of the project	3.06	1.254
Economic Sustainability	3.81	0.915
Working conditions for publicly contracted construction workers	2.97	1.474
Disabled access to public buildings.	3.65	1.105
Employment opportunities for marginalized groups	3.31	1.243
Consideration of human health and safety	3.81	0.979
Support to small and local businesses.	4.90	0.191
Social Sustainability	3.73	0.998
The use of less toxic materials	3.49	0.501
Protection of wildlife	2.73	1.021
Consideration of air, water and land pollution	3.73	0.839
Environmental Sustainability	3.32	0.787

(Source: Field Survey, 2018)

However, for the NRCC considering the future maintenance cost of the projects, a lower mean value (3.06) and standard deviation of 1.254 was achieved. Hence, the degree of inclusion for the future maintenance cost of projects is low in the NRCC. In all, the degree of integration for the economic sustainability of awarding contracts and projects achieved a mean value of 3.81 and a standard deviation of 0.915. The implication is that the level of inclusion of the economic sustainability of procurement is high in the NRCC. This means the economic dimensions of the procurement process is a requirement for contracts and projects to be awarded in the NRCC.



On the social sustainability of the procurement process, issues considered included working conditions for publicly contracted construction workers, disabled access to public buildings, employment opportunities for marginalized groups, consideration of human health and safety, and support to small and local businesses. The highest mean recorded was 'support to small and local businesses' which had a mean value of 4.90 and a standard deviation of 0.191. The next item is 'consideration of human health and safety' which achieved a mean value of 3.81 and a standard deviation of 0.979. Disabled access to public buildings achieved a mean value of 3.65 and a standard deviation of 1.105. This implies that the NRCC places priority on these factors. The study however recorded mean values for 'Employment opportunities for marginalized groups' and 'Working conditions for publicly contracted construction workers' below 3.5. Hence fewer priorities are placed on these areas. In all, a mean value of 3.73 and standard deviation of 0.998 was achieved for social sustainability meaning there is a high degree of inclusion of this dimension in the procurement process even though some variables contributed less.

For environmental sustainability, the study had respondents agreeing that the NRCC considers the inclusion of air, water and land pollution when considering the award of contracts. A mean value of 3.73 was recorded. Respondents least rated the inclusion level of wildlife protection in the procurement process. A mean value of 2.73 and a standard deviation of 1.021 was recorded. Also, the use of less toxic materials was rated low. In all, a mean value of 3.32 and a standard deviation of 0.787 was recorded implying that respondents rated environmental sustainability low. Hence the degree of inclusion of environmental sustainability is rated low.



4.1.6 Objective Five: To examine the factors affecting the implementation of Sustainability Practices

The factors affecting the implementation of sustainable procurement practices at NRCC. was analysed using a simple statistical tool called the Relative Importance Index(RII). With this method, variables are ranked in order of importance. The decision is that variables with values between 0.71 – 1.00 are highly ranked, those with values between 0.41- 0.70 are averagely ranked and those with values between 0.00 – 0.40 are least ranked.

Table 4.6: Factors affecting the implementation of Sustainability Practices

STATEMENT	Sig.	RII
SPP is influenced by Politicians	0.000	0.78
Support from management and colleague staff	0.000	0.75
Higher cost associated with sustainability in the procurement process	0.011	0.71
The standards used in procurement practices are quite foreign to us.	0.001	0.66
The Procurement Act (Act 663) causes delays in the procurement process	0.000	0.65
Difficulty in integrating sustainability into the standard procurement process	0.041	0.56
Functional weakness in the performance of staff	0.012	0.55
Lack of career development path and low salaries of procurement personnel	0.000	0.51

(Source: Field Survey, 2018)

From Table 4.6, the RII values ranged from 0.78 to 0.51. The results indicate that the number one factor affecting the implementation of sustainable procurement practices



(SPP) is the influence of politicians. This item was ranked high with an RII value of 0.78. Information is needed about the implementation of sustainable procurement, and usually, this information must be in line with government policies. This allows the SPP to be influenced by politicians and government.

Support from top management and incentive toward the sustainable procurement is also recognized as a factor affecting the implementation of environmental sustainability during procurement. This factor was ranked high with an RII value of 0.75. Higher cost associated with sustainability in the procurement process was ranked as the third most influential factor affecting the SPP. This factor was also ranked high.

Another factor affecting SPP as expressed by the respondents is that the standards used in procurement practices are entirely foreign. Respondents ranked this factor as a medium with an RII value of 0.66. The bureaucracy within the procurement act (Act 663) has also been cited as a factor affecting the smooth implementation of the SPP. This bureaucratic nature causes delays in the implementation process. Difficulty in integrating sustainability into the standard procurement process was also cited as a factor affecting the SPP implementation. This was ranked as the sixth factor affecting the implementation of SPP. This factor was ranked as medium. Other factors affecting the implementation of the SPP are the functional weakness on the performance of staff, and lack of career development path and low salaries of procurement personnel also militates against procurement reforms implementation. These items achieved RII values of 0.55 and 0.51 respectively.



4.2 Discussion of Findings

Objective One: To find out the Sustainability Procurement Practices adopted by the NRCC

From the results, it is noticed that purchasing actions have social implications, and public procurement within the NRCC are used to drive social improvements. The study revealed that sustainability procurement practices within the NRCC fully embrace the social dimension factor. To ensure long-term value for money, the procurement process should ensure that the product benefits the community or society economically and hence must be considered by the NRCC. The study indicated that sustainability procurement practices within the NRCC fully embrace the economic dimension factor. Similarly, every product or service must be environmentally friendly from the manufacturing, usage to its disposal and therefore the NRCC need to consider environmental factor. For the inclusion of environmental dimensions within the procurement, the study did not entirely agree with it. The study, therefore, had 32% of the respondents indicating their disagreement that the NRCC includes environmental sustainability practices in the procurement process. These findings are in support of earlier results from Kwadzo (2014). His study found that purchase orders, evaluation of tenders and award of contracts were based on the lowest bid, and considerations for environmental issues were not included in their purchasing decisions. This finding from Kwadzo (2014), also found the non-inclusion of the social dimensions of the SPP in the procurement process which is in contrast to this finding.

Other findings from Ameyaw, Mensah and Osei-Tutu (2012) and Sewoanu (2012) who all undertook their studies in Ghana confirmed the lack of the social dimension of the



SPP within the procurement process. These findings are not far from Offei (2014) who posited that environmental and social factors should be incorporated into the procurement practices in Ghana.. His study found that there is no standard policies and plans that detail how social and environmental factors could be better incorporated into the procurement process. There is therefore the absence of a broader sustainability development regarding social and environmental factor integration into the procurement process and hence affects the processes that links these factors to the SPP very difficult and challenging. The study found that there during tender bidding, specification championing, the prioritization of both social and environmental factors is least considered even though there is a strong agreement by all the procurement practitioners and the stakeholders within the procurement sector to greatly prioritize environmental and social factors during the decision making stage, the selection stage and the implementation stage within the procurement process. The study also identified the challenges facing the smooth implementation of sustainable procurement activities include reverse logistics activities, lack of extension of producer responsibility or refurbishing and re-manufacturing processes.



Objective Two: To identify the level of awareness of Sustainable Procurement

Practices at NRCC

The study revealed a high level of awareness of sustainable procurement practices at the NRCC. This was because all the items in the study were statistically significant at the 95% Confidence Interval (CI) or a 5% margin of error with strong values less than the p-value of 0.05 and they presented mean values higher than 3.5. The implication is that the

NRCC is aware of the tri-dimensional sustainability factor (which is the social, economic and environmental factor) within the procurement process. In his study to assess the prospects and challenges of public procurement in Ghana, Sewoanu (2012) indicated that the Public Procurement Act, Act 663, exists and stakeholders are very familiar with the Act based on the fact that seminars and workshops and on-the-job training programmes are organized for stakeholders on procurement reforms. He, therefore, concluded that the level of awareness was high but quickly added that the implementation was where the challenge was. The findings of this study are therefore in conformity with that of Sewoanu (2012). An earlier result from Njeru (2015) also found that in Africa, the awareness of the SPP is not much of a problem but the implementation. Importantly, was a statement by Mensah and Ameyaw (2012), that, sustainable procurement was perceived to be adequately addressed by the procurement law in Ghana which is the Public Procurement Act, Act 663 (2003). However, among the respondents interviewed, the study revealed a low level of awareness and understanding of the concepts of environmental, economical and social concerns. There was lack of understanding of the concepts of sustainable procurement and this was determined to be the major challenge on the implementation of SP functions. In another study at the Upper East Region of Ghana, Olatunji (2016) found that some of the environmental sustainability issues were not considered during procurement. Environmental issues such as; water pollution, air pollution, noise pollution, deforestation and energy wastage were only considered often while issues like protection of endanger species and greenhouse effect were mostly ignored. Cost, budget constraint and top management support were identified as some of the barrier or challenges to the sustainable procurement.



Objective Three: To examine the role of the NRCC in ensuring Sustainable Procurement Practices in the Northern Region

The study indicated that among the functions of the NRCC is the formulation of policies to ensure sustainable procurement practices, to ensure the implementation of sustainable practices in the region, to educate the MMDAs on sustainability practices within the procurement process and to ensure that public Procurement Act provisions are fully adhered to. Furthermore, the study indicates that the NRCC provides the infusion of SPP issues into the existing procurement processes, to establish indicators to measure SPP operations and impact, to provide public education and training to create awareness of sustainability measures and to carry out research and prepare background documents in SPP. This is confirmed in the work of the Chartered Institute of Procurement and Supply (CIPS) and National Institute of Governmental Purchasing (2012). Accordingly, the NRCC must ensure purchasing and investment process that takes into account the economic, environmental and social impacts of the region's spending. This can be achieved through the formulation of policies to ensure sustainable procurement practices, to ensure the implementation of these practices and to establish indicators to measure SPP operations and impact. In conformity with this is the Public Procurement Act 663 (2003) which includes all these roles of the NRCC.

Objective Four: To determine the degree to which Procurement Practices at NRCC holds Sustainability Considerations

The outcome of the study revealed that the NRCC consideration of the economic dimension of the project's relevance to the community is high and it is considered as very



important in awarding projects and contracts. On the social sustainability of the procurement process, there was a high degree of inclusion of this dimension in the procurement process even though some variables contributed less. For environmental sustainability, respondents rated environmental sustainability low. Hence the degree of integration of environmental sustainability is evaluated low. As stated earlier, findings such as Sewoanu (2012), Ameyaw, Mensah and Osei-Tutu (2012) and Kwadzo (2014). All these findings revealed the low degree to which the SPP integrates the environmental dimension aspects of sustainability. The results of Sewoanu (2012) further explained the low level of integration of the social dimension of sustainability into the SPP.

Objective Five: To examine the factors affecting the implementation of Sustainability Practices

It was revealed that the factors affecting the implementation of sustainable procurement practices that were ranked high were the influence of the SPP by politicians, getting the support their colleagues and other management staffs and high cost associated with sustainability in the procurement process. Other factors affecting SPP were ranked medium and these were the fact that the standards used in procurement practices are entirely foreign, the bureaucracy within the procurement act (Act 663), difficulty in integrating of sustainability into the standard procurement process, functional weakness on the performance of staff and lack of career development path and low salaries of procurement personnel also militates against procurement reforms implementation. For any organization to successfully implement sustainable procurement activities, the organization must understand the concept of sustainable procurement and government



policies concerning procurement and ensure the organization has the tools and the skills necessary for effective operation of such implementation. As stated by Stephen and Walker (2007), the policies of SPP conflict with government policies and hence rendering its implementation very difficult. Added to this is a report by world bank stipulating that a good number of politicians think that they have the right to intervene in the procurement procedures thereby leading to a capricious procurement decision (World Bank, 2004b). Usually, the implementation of sustainable procurement depends on organizational culture and support.

As stated by Olatunji (2016), this organizational culture presents some level of barrier to the implementation of sustainable procurement. Some organizational cultures do not support easy change; others are not supportive of sustainability or any change in general. The idea or support from the management or at senior level and the structural support of the organization and the process may lower the speed of the implementation of sustainable procurement (Francesco et al., 2012). In support of the high cost of SPP is an earlier finding from Dorasamy (2012). As stated by Dorasamy (2012), these practices have higher initial investments, accounting practices, inflexible budget systems. Also, as indicated by Walker and Brammer (2009), there is information paucity on the relative product costs and services that are environmentally friendly and whole life cost of products. According to Walker and Brammer (2009), the issue of environmental sustainability is very expensive, and this can be affected by budget constraints. The foreign nature of the SPP has rendered many bidders to be limited in various capacity issues including lack of basic knowledge in the law, inadequate capacity to appreciate the standard tender documents, insufficient access to tender information and inadequate



technical and managerial skills to be competitive in the tendering process. This agreed with the earlier findings from (Ameyaw et al., 2012).

Similarly, Adjei-Bamfo (2017) purposively sampled and interviewed 18 participants from four Procurement Entities from Ghana's Public Sector and came out that the absence of a composite legal framework, limited capacity of relevant stakeholders, and lack of political will and budget constraint inter alia, impedes SPP implementation in Ghana's public sector. Kwadzo (2014) also found that lack of legislative instrument and policy document was a limiting factor in the adoption of sustainable procurement. On the view of Asare (2016), the lack of policy documents on sustainable procurement practice has resulted in corrupt practices of sustainable procurement in most public hospitals, and this has negatively affected healthcare delivery. Also, the role of entity tender committees in sustainable procurement had not significantly influenced the organizational goals of the health facilities and also the compliance of interested parties. This is why Acevedo et al., (2010), suggested that robust monitoring and assessment schemes are the ways to collect and assimilate priced data into the strategy. Rare checking and assessment is allied to the lack of a controlled environs, and the state units are sited in a hard locus to offer result to procurement procedure as vital by the strategy.

4.3 Chapter Summary

This chapter presented the analysis of the data collected for the study. It used descriptive statistics, simple percentage and frequencies, means and standard deviation as well as Relative Importance Index to describe data collected. The chapter first looked at the demographic characteristics of the respondents of the study before analysing the research



questions as stated in chapter one of this study. The next chapter will look at the summary, conclusions and recommendations of the review.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter summarises the significant findings of the study. Conclusions of the study are drawn, and recommendations made based on the results.

5.1 Summary

The primary objective of the study was to examine the effectiveness of sustainable procurement in the Northern Region of Ghana. It was meant to find out the sustainable procurement practices adopted at NRCC, to identify the level of awareness of these practices and to examine the role of the NRCC in ensuring sustainable procurement practices in the Northern Region. Additionally, it seeks to determine the degree to which procurement practices at NRCC holds sustainability considerations and to examine the factors affecting the implementation of sustainable procurement practices at NRCC. The study was quantitative and the descriptive design was adopted. The sample consisted of staffs of the Entity Tender Board Committee at the NRCC and contractors who had executed projects within the region from 2010 - 2018. Total respondents of fifty (50) were selected with the aid of the census and the convenience sampling techniques. A questionnaire was the primary data collection instrument.



5.2 Major Findings

The significant findings of the study include the following:

1. The sustainability procurement practices within the NRCC fully embrace both the social dimension factor and the economic dimension factor. For the inclusion of environmental dimensions within the procurement, the study did not entirely agree that the NRCC includes environmental sustainability practices in the procurement process.
2. There was a high level of awareness of sustainable procurement practices at the NRCC. The implication is that the NRCC is aware of the tri-dimensional sustainability factor (which is the social, economic and environmental factor) within the procurement process.
3. The roles of the NRCC is to formulate policies to ensure sustainable procurement practices, to ensure the implementation of sustainable practices in the region, to educate the MMDAs on sustainability practices within the procurement process and to ensure that public Procurement Act provisions are fully adhered to. Furthermore, the NRCC provides the infusion of SPP issues into the existing procurement processes, to establish indicators to measure SPP operations and impact, to ensure public education and training to create awareness of sustainability measures and to carry out research and prepare background documents in SPP.
4. The outcome of the study revealed that the NRCC consideration of the economic dimension of the project's relevance to the community is high and it is considered as very important in awarding projects and contracts. On the social sustainability



of the procurement process, there was a high degree of inclusion of this dimension in the procurement process even though some variables contributed less. For environmental sustainability, respondents rated environmental sustainability low. Hence the degree of integration of environmental sustainability is evaluated low.

5. The factors affecting the implementation of sustainable procurement practices that were ranked high were the influence of the SPP by politicians, getting the support their colleagues and other management staffs and high cost associated with sustainability in the procurement process. Other factors were the fact that the standards used in procurement practices are entirely foreign, the bureaucracy within the procurement act (Act 663), difficulty in integrating of sustainability into the standard procurement process, functional weakness on the performance of staff and lack of career development path and low salaries of procurement personnel also militates against procurement reforms implementation.

5.3 Conclusions

Based on the findings, the study concludes that procurement has social, economic and environmental implications. The sustainability procurement practices within the NRCC fully embrace both the social and economic dimensions but does not fully embrace the environmental aspects of sustainability. However, the level of awareness of sustainable procurement practices at the NRCC is high suggesting that respondents are aware of the tri-dimensional sustainability factor (which is the social, economic and environmental factor) within the procurement process. Hence the NRCC has several roles to ensure that the procurement processes take into account the economic, environmental and social impacts of the region's spending. These roles include the formulation of policies to



provide sustainable procurement practices, to ensure the implementation of these practices and to establish indicators to measure SPP operations and impact. However, the outcome of the study revealed that even though the NRCC consideration of both the economic and social dimension within the SPP is high; there is a low degree of inclusion of environmental sustainability in the SPP. This was attributed to factors such as the influence of the SPP by politicians, getting the support of their colleagues and other management staffs and high cost associated with sustainability in the procurement process.

5.4 Recommendations

Based on the findings and conclusions drawn, the following suggestions are put forward for consideration;

The need to broaden the scope of NRCC to include environmental sustainability

The study revealed that sustainability procurement practices within the NRCC do not fully embrace the environmental aspects of the sustainability. The institution focused mainly on economic and social issues of sustainability at the expense of arrangements regarding the implementation of environmental sustainability. However, sustainability takes into account the economic, environmental and social impacts of the region's procurement process. It is therefore recommended that members of the procurement units be educated on the issues of sustainable procurement to improve knowledge levels and understanding of the objectives of the SPP so as not to lose focus on what sustainable procurement is all about.



The implementation of a comprehensive SPP policy in the Regional Levels

Even though the level of awareness of sustainable procurement practices at the NRCC is high suggesting that lack of full integration of environmental aspects is a challenge. It is therefore recommended that a comprehensive policy or law be passed to guide SPP policies in Ghana. The RCC should also incorporate SPP activities which fully includes environmental sustainability. Management should have a documented SPP policy or plan for a period of between 3-5 years with all the tri-factor sustainability policies fully integrated. The RCC can embark on a survey to collect essential data and incorporate the interests and decisions of its clients' in the plan or strategy. This will provide the blueprint for the institution to design SPP interventions which will be entirely beneficial to the society.

The procurement Authority must ensure aptness of responsibility to support the ability to demonstrate that the policies have been followed by tenderers and all and sundry. A review of the procurement laws to include protection of the environment, protection against corruption, respect for people and a zero accident tolerance in health and safety issues will aid in holistic integration of the social and environmental factors in the public procurement process. In order to promote social good through local empowering of local tenderers, bid lists should include small and micro businesses to promote local supply chains. Suppliers that perform well must be developed and remain in the supply chain. To succeed with sustainable procurement, drivers outside of the public sector who will be responsible for encouraging greater private sector and contractor/supplier driven initiatives should be created.



Education of Stakeholders

The problem of lack of understanding of sustainable procurement, coupled with poor training and accountability are significant barriers to building capacity. Since procurers have a low hindsight of benefits and merits of sustainable procurement, constant and regular workshops should be organized by the Ministries to improve the knowledge base and capacity to enable staff/procurers to be trained so as to make informed spending decisions and maintain social and environmental quality during procurement decisions.

Adhering to Procurement Rules and Responsibilities

Additionally, there is the need for government of Ghana to ensure that all procurement rules and regulations are adhered strictly and all responsibilities are carried out appropriately by assigned authorities. The problem of who is responsible with the implementation and monitoring of the procurement process should be eliminated through appropriate segregation of duties and management of the procurement sector monitor effectively. For instance, Section 35, Part V of the PPA, 2016, Act 914 stipulates that all procurement activities must go through competitive bidding where possible. In the process, the Act stipulates that the procurement institution shall reveal all measures for assortment to all the stakeholders in the bidding process as well as all the bidders and prohibits procurement officers from altering the process. Every document that is tendered in as a tender document should be prepared in a very simple and clear language for everyone to understand.



Adoption of E-Procurement

The concepts of procurement through electronic means otherwise called e-procurement must be looked at in the country. This systems involves the adoption and use of ICT tools in the procurement process. For instance the procurement of materials over the internet. As it stands now, the selected institution had no access or the facilities to do this and should be encouraged to get in electronic procurement which compared to the current mode of purchase is faster.

5.5 Suggestions for Further Research

The research objectives have been achieved using primary data from the field. There were areas this study could not address because it is outside the scope of the study. Thus, a further investigation on the effects of the absence of environmental sustainability on SPP in Ghana is required. Also, an in-depth review of the relationship between environmental sustainability and economic development in Ghana should be considered in future research. Besides, it is suggested that a similar study should be organized in other regions to either confirm or refute these findings. It is anticipated that environmental bias may influence the outcome of this finding.



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6	Protection of workers					
7	Protection of the community					
8	Employment opportunities for marginalized groups					
9	Child labour protection					
10	Considerations for disabilities in projects					
11	Economic benefit of the project to community					
12	Maintenance of the facility or project					

SECTION C: FACTORS AFFECTING THE IMPLEMENTATION OF SUSTAINABILITY PROCUREMENT PRACTICES (SPP)

- Please indicate your level of agreement or disagreement by **ticking** [√] a number from 1 to 5 with the following statements as they relate to the factors affecting the implementation of **Sustainability Procurement Practices (SPP)**. Use the scales of 5 = strongly agree (SA), 4 = agree (A), 3 = Neutral (N), 2 = Disagree (D) and 1 = strongly disagree (SD).

s/no	STATEMENT	1	2	3	4	5
1	SPP is influence by politicians					
2	The standards used in procurement practices are quite foreign to us.					
3	Lack of awareness of the procurement practices and procedures					
4	The procurement Act (Act 663) causes delays in the procurement process					
5	Functional weakness on the performance of procurement staff					
6	Insufficient information about sustainable procurement practices					
7	Higher cost associated with sustainability in the procurement process					
9	Lack of monitoring tools					
10	Any other, please specify					
					
					
					



APPENDIX B: QUESTIONNAIRE FOR STAFF

UNIVERSITY FOR DEVELOPMENT STUDIES

DEPARTMENT OF BUSINESS

**TOPIC: ASSESSING THE EFFECTIVENESS OF SUSTAINABLE
PROCUREMENT IN GHANA.**

This study is being undertaken for academic purposes and any information given will be treated with the highest degree of confidentiality. The questionnaire is divided into three sections; A, B, C, D and C. Questions may be answered by ticking [√] against the response(s) that best suits your opinion or filling the space where appropriate.

Thank you for your participation.

SECTION A: RESPONDENT’S PROFILE

1. Sex:

[]

Male

[]

Female

2. Age

21 – 30 years []

31 – 40 years []

41 – 50 years []

51 – 60 years []

51 years and above []

3. Educational Level

[]

Diploma / HND

[]

Undergraduate

[]

Postgraduate Diploma

[]

Postgraduate Degree

[]

Doctorate / PHD

Others Specify.....

SECTION B: SUSTAINABILITY PROCUREMENT PRACTICES

4. Please indicate by **ticking** [√] the sustainability procurement practices adopted by the NRCC in awarding contracts or projects. [Tick as many as your institution use]

[]

Economic benefit of the project

[]

Importance of the project to community

[]

Green Procurement

[]

Protection of wildlife

[]

Human health and Safety

[]

Support to Local Enterprises

Others [Please Specify]

.....
.....
.....
.....
.....



SECTION C: ROLES OF THE NRCC TOWARDS SUSTAINABLE PROCUREMENT PRACTICES

5. Please indicate your level of agreement or disagreement by **ticking** [√] a number from 1 to 5 with the following statements as they relate to roles of the NRCC towards sustainable procurement practices.

Use the scales of 5 = strongly agree (SA), 4 = agree (A), 3 = Neutral (N), 2 = Disagree (D) and 1= strongly disagree (SD).

s/no	STATEMENT	1	2	3	4	5
1	Formulation of policies to ensure sustainable procurement practices					
2	Ensures the implementation of sustainable practices in the region					
3	Meting out punishment to parties who violate sustainability practices					
4	Educating the MMDAs on sustainability practices within the procurement process					
5	Ensures that public Procurement Act provisions are fully adhered to.					
6	Ensuring the infusion of SPP issues into the existing procurement processes					
7	Establishing indicators to measure SPP operations and impact					
8	Mobilising budgetary support for SPP activities.					
9	Public education and training to create awareness					
10	Carry out research and prepare background documents in SPP					

SECTION D: DEGREE SUSTAINABILITY PRACTICES IN PROCUREMENT

6. Please indicate your level of agreement to the inclusion of the following sustainability practices in awarding projects within the region. Use the scales of 5 = Greater Extent (GE), 4 = Some Extent (SE), 3 = Somehow (S), 2 = Less Extent (LE) and 1 = Not at All (NA).

s/no	STATEMENT	1	2	3	4	5
1	Prevention of water pollution					
2	Prevention of air pollution					
3	Preservation of trees					
4	Reduction of Green house effect					
5	Protection of endangered species					
6	Protection of workers					



7	Protection of the community					
8	Employment opportunities for marginalized groups					
9	Child labour protection					
10	Considerations for disabilities in projects					
11	Economic benefit of the project to community					
12	Maintenance of the facility or project					

SECTION E: FACTORS AFFECTING THE IMPLEMENTATION OF SUSTAINABILITY PROCUREMENT PRACTICES (SPP)

7. Please indicate your level of agreement or disagreement by **ticking** [√] a number from 1 to 5 with the following statements as they relate to the factors affecting the implementation of **Sustainability Procurement Practices (SPP)**. Use the scales of 5 = strongly agree (SA), 4 = agree (A), 3 = Neutral (N), 2 = Disagree (D) and 1 = strongly disagree (SD).

s/no	STATEMENT	1	2	3	4	5
1	SPP is influence by politicians					
2	The standards used in procurement practices are quite foreign to us.					
3	Lack of awareness of the procurement practices and procedures					
4	The procurement Act (Act 663) causes delays in the procurement process					
5	Functional weakness on the performance of staff					
6	Insufficient information about sustainable procurement practices					
7	Higher cost associated with sustainability in the procurement process					
8	Lack of capacity and weak capital base					
9	Lack of monitoring tools					
10	Any other, please specify					
					
					
					



Thank You!!!