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KUMASI**

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DEPARTMENT OF BUILDING TECHNOLOGY

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**THE IMPACT OF THE PUBLIC PROCUREMENT ACT 2003, ACT 663 ON
CONTRACTS AT THE DEPARTMENT OF FEEDER ROADS, GHANA**

BY

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**A DISSERTATION PRESENTED IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR A DEGREE OF MASTER OF SCIENCE IN PROCUREMENT
MANAGEMENT**

NOVEMBER, 2014

DECLARATION

I hereby declare that this work is the result of my own original research and has neither in whole nor in part been prescribed by another degree elsewhere. References to other people's work have been duly cited.

Samuel Hans Kweku Wuaku

KNUST

Signature

Date

Certified by

Dr. B. K. Baiden

Supervisor

Signature

Date

Professor Joshua Ayarkwa

Head of Department

Signature

Date

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DEDICATION

This work is dedicated to my wife and children for their inspiration and understanding

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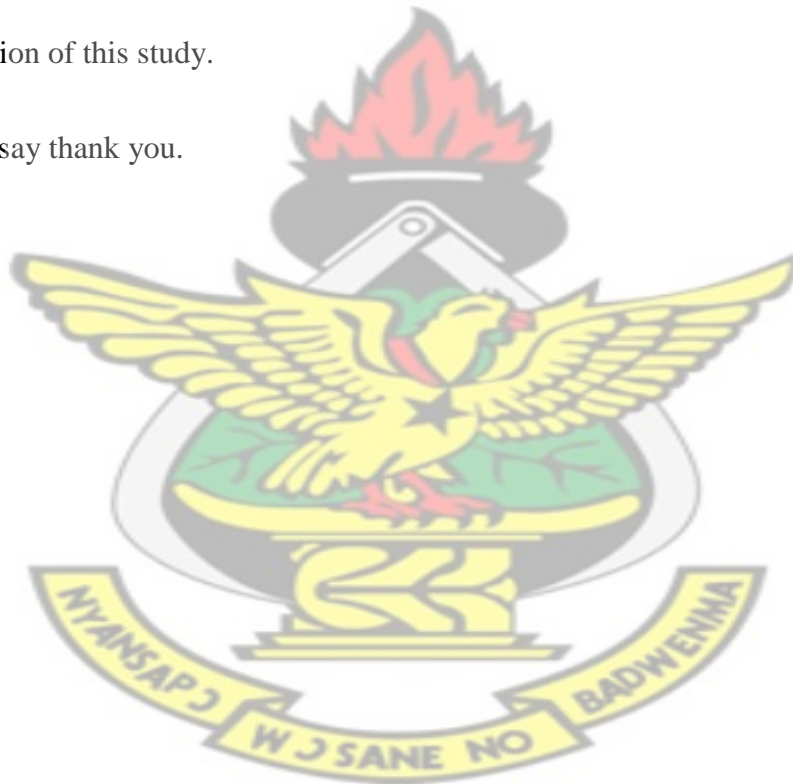
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I am really pleased by a number of people who consistently urged me successfully to complete this work.

First of all I would like to thank God Almighty for His abundant grace and mercies for me throughout this course.

Dr B. K. Baiden, my lecturer and supervisor of the KNUST College of Architecture and Planning also deserves my profound gratitude for supervising this research work. I greatly appreciate his time, effort, constructive criticisms and guidance to the completion of this study.

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ABSTRACT

The Public Procurement Act, 2003, Act 663 was enacted to ensure sanity in the procurement process after several years of foul play. Procurement represents huge part of government budget and this underscores the importance of procurement. As a result several studies have explored the implementation challenges leading to reforms in the public procurement. However, there is paucity of information regarding the impact of the Act on procurement processes, especially in certain key areas. Against this backdrop, the study aimed at assessing the impact of the Procurement Act on contracts at the Department of Feeder Roads. Hence, the specific objectives included: to identify the challenges in the procurement of works, services and goods in the Department of Feeder Roads; to examine the benefits of the implementation of the Public Procurement Act (663) in the Department of Feeder Roads; and to identify the impacts of the implementation of the Public Procurement Act (663). Adopting both qualitative and quantitative approach to enquiry, the study reviewed various literatures in the discipline. Subsequently, questionnaire survey was used to elicit information from the people involved in public procurement. The study focused on three Feeder Roads Department within three different regions. Data gathered were thus analysed using descriptive statistics, one sample t-test and ANOVA. The findings from the survey point out to the fact that the following were the impact of the Act on contracts in the Department: Delayed payment, Enhances competition, Cumbersome and expensive procedures or requirements, and Communication enhancement. Major challenges identified were Provides too many requirements for a tender document, Delays the Award of contract and Poor Record management. In addition, the research revealed that cost savings, value for money, increase in accountability among others were the benefits of the Act. The study recommended

that Training avenues and Institutions be provided, Setting up a Professional Procurement Body, Good Record Keeping and Management of procurement information.

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Keywords: Procurement, Public Procurement Act, Department of Feeder Roads, Contracts

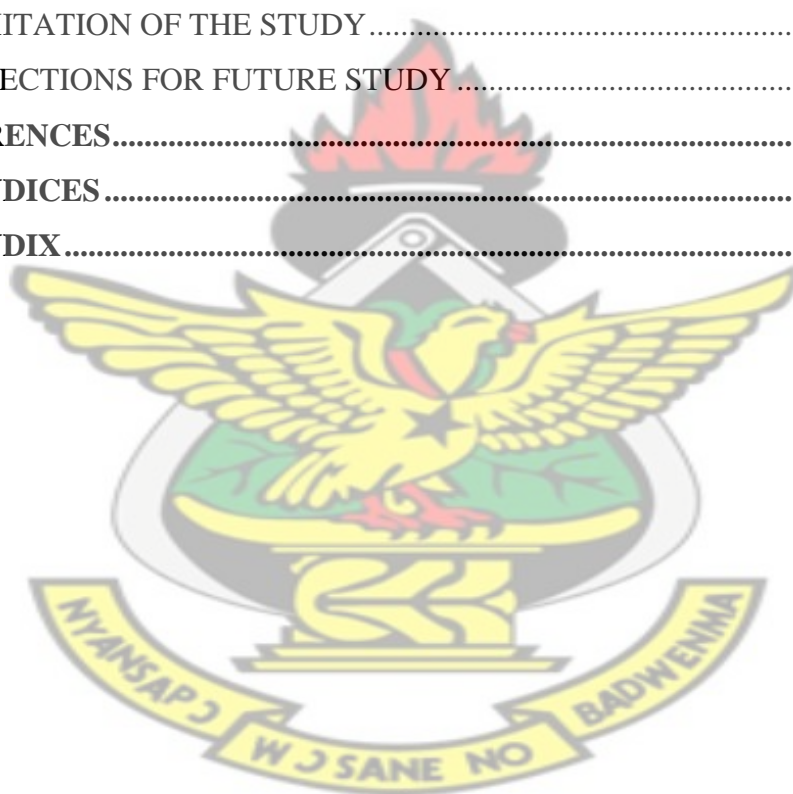
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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND OF THE STUDY

The human endeavour has been characterized somewhat by the act of buying and selling, after the Stone Age man, who only practiced subsistent living. From that point, buying and selling has thus become innate. Now, the act of buying and selling has become more complex and cumbersome involving many actors and several contractual arrangements. Hitherto, buying and selling was simple involving the exchange of goods for goods, and services for services usually referred to as barter.

Buying and selling continues to form part of human lives and has now attracted other dimension referred to as procurement. The history of procurement has long been understood (Thai, 2001; Callender, 2003). Procurement, whenever used, simply refers to all the actions that lead to the successful acquisition of goods and services. However, a rather short but concise definition was provided by CIPS Australia as ‘the science of buying and selling’.

Although procurement dates back to the Stone Age man, the evolution of emergence of procurement when referred to in scientific publications, is recorded to have begun with the first trade 5000 years ago (Callender, 2003). Strong Evidence does exist between China and Greece to have engaged in active trade (see Callender, 2007). The progressive involvement of nations in wars, especially the world wars, was instrumental in the fueling of procurement practices. Throughout history attempts have been made to shape and nurture the traditional practices of procurement. A typical example documented is the evolution of contract under Greek among others.

Globally, governments are responsible for the purchasing of goods, services and capital assets (Thai, 2001). Such action by the government involving the use of state resources has been termed as government procurement or public procurement. Public officials in charge of the state resources are required to demonstrate sense of accountability, to ensure judicious utilisation of such state resources. A report by the World Bank (2003a) noted that as high as 70% of the budget is spent on procurement and its related activities (Osei-Tutu et al., 2011; Ameyaw et al., 2012), further underscoring the importance of procurement. Consequently, several laws and regulations have been passed and enacted to ensure that public procurement achieve the desired results. In Ghana, the Public Procurement Act, 2003 (Act 663) was enacted. The Act provides the legal framework for procurement, in respect of goods, works and services, obtained with public funds. According to Ministry of Finance (2001) as seen in Osei-Tutu et al. (2011), the Act was enacted to harmonize public procurement processes, ensure that public procurement is transparent and fair, among other things.

The objective of the Public Procurement Act (PPA), 2003 (Act 663) is to provide the legal framework by which public procurement should be conducted, establish the public procurement Board; make administrative and institutional arrangements for procurement, stipulate tendering procedures, and provide for purposes connected with these activities in Ghana (PPA,2003). The Public Procurement Act (PPA), 2003 (Act 663) of Ghana became effective in August, 2004 to enable the procuring bodies have the legal powers to undertake transactions, obtain any relevant approval within the government hierarchy, and arrange the necessary funding for procurement of goods, works and services in Ghana.

From the effective date of the Act, Department of Feeder Roads like other procurement entities in Ghana is endeavoring to undertake procurement of goods, works and services, in accordance with the law to meet the requirements. Department of Feeder Roads is one of the major organisations under the Ministry of Roads and Highways engaged in procuring goods, works and services to ensure all year round road access at optimum cost to rural areas in Ghana. However, there have been a number of contract failures arising from poor procurement practice due to ignorance of the requisite procurement procedures to ensure effectiveness and efficiencies. In this vein, the staffs entrusted with procurement responsibilities in the department are often given training in the forms of seminars and workshops in procurement procedures whilst others are sponsored to pursue further courses in procurement and management.

Against this backdrop, the study sought to establish the impact the Act has had on procurement practices in the Department of Feeder Roads.

1.2 STATEMENT OF THE PROBLEM

Many organisations both public and private are involved in procurement practices daily. However, staffs are often given little or no formal training in procurement procedures, yet they are entrusted with procurement responsibility (Acquaye, 2011). Consequently, several allegations relating to irregularities in procurement processes were levelled against Public Entities (PE) and other stakeholders involved directly or indirectly in procurement. These allegations include inefficiency, delay in procurement due to long procurement processes, high cost of projects, lack of fairness, transparency, and non-discrimination in the selection and award of government contracts, as well as inflating contract figures. Despite the attempts to

eradicate foul play in procurement, thus the enactment of the Act, it appears procurement practices in Ghana are still confronted with proliferation of challenges.

Interestingly, the procurement discipline in Ghana is replete with a plethora of literature. However, the literature has been generic, with only a few addressing procurement related issues in specific organisations. Poor procurement practices have led to accumulated interest on the late payment and the frequent price changes due to extensive renegotiations which further exacerbate the funding of the problem have increased government expenditure and reduced savings (World Bank 2003). There is also the issue that the passage of the procurement Act has increased government domestic investments and hence the need to conduct this research to assess the impact of the Public Procurement Act, 2003 (Act 663) in the department of feeder Roads. The consequences of poor procurement of goods and services are very grave. It is therefore necessary that procurement entities and organisations are informed and made aware of the consequences of poor procurement practices, in good time to save such entities from collapse, or avoidable losses (Acquaye, 2011).

1.3 AIM AND OBJECTIVES OF THE RESEARCH

1.3.1 Aim

The aim of the study was to assess the impact of the Public Procurement Act (663) on contracts in the Department of Feeder Roads

1.3.2 Objectives

The objectives of the research were to:

- To identify the challenges in the procurement of works, services and goods in the Department of Feeder Roads;

- To examine the benefits of the implementation of the Public Procurement Act (663) in the Department of Feeder Roads; and
- To identify the impacts of the implementation of the Public Procurement Act (663).

1.4 JUSTIFICATION OF THE RESEARCH

There have been a number of contract failures arising from poor procurement practices based on ignorance of the requisite procurement procedures to be followed to ensure effectiveness and efficiencies in procurement (Acquaye, 2011). Department of feeder Roads, a major procuring agency in Ghana involved in variety of procurement transactions ranging from purchase of stationery, office equipment, vehicles, technical and consulting services as well as construction of Roads, is required to implement the legal powers to undertake the transaction, obtain any relevant approval within the government hierarchy and arrange the necessary funding must ensure the implementation of the legal framework of the public procurement Act to minimize or avoid the occurrence of the consequences of poor procurement practices.

The impact of poor procurement practices or the impact of PPA, 2003 (Act 663) on the procurement of works cannot be overstated. For instance, the bureaucratic nature of the award of contracts under the procurement Act may result in the prolonged completion in the execution of works against the background of the health and economic related issues associated with such delays.

Essentially, this study would not only contribute to knowledge and theory, but unraveled weaknesses in the legal framework and challenges faced by professionals entrusted with procurement operations

1.5 SCOPE OF THE RESEARCH

Geographically, the scope of the research was the Department of Feeder Roads in three selected regions namely, Brong Ahafo, Ashanti and Greater Accra. These regions were selected because of the relatively proximity to the researcher and also the fact that data was readily available to the researcher. Contextually, the respondents in these regions were Procurement authorities – procurement officers and officials in the procurement office – Road Contractors, Regional Feeder Roads Contracts Managers and Regional Feeder Roads Engineers. These personnel were selected because their activities are affected by the procurement Act, thus their contributions would be essential in the assessment of the impact.

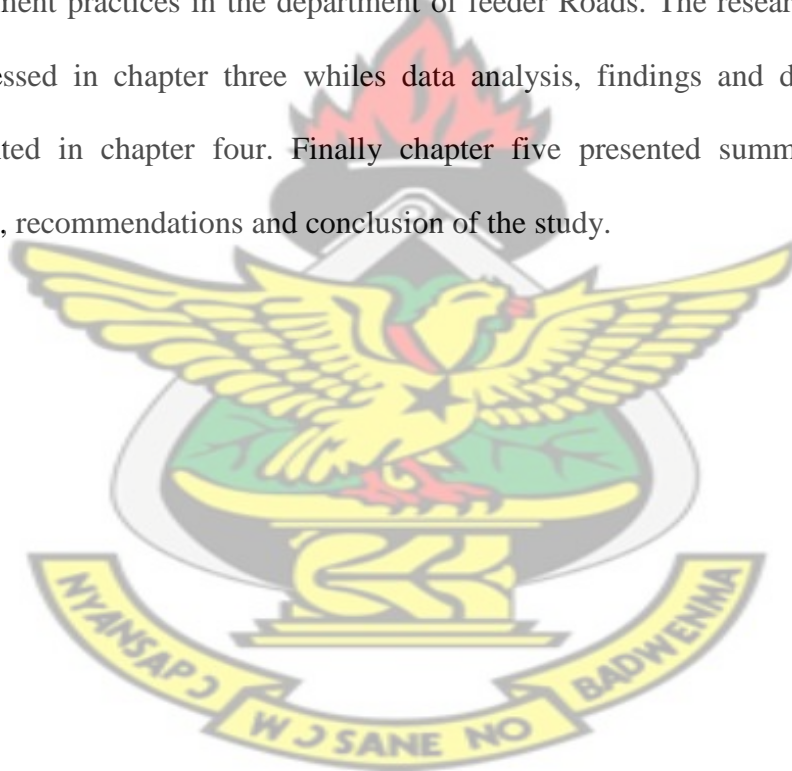
1.6 RESEARCH METHODOLOGY

The study employed a mixed methodology approach of enquiry, utilising both qualitative and quantitative. Qualitative data sourced literature on the discipline from extant sources such as journals, conference proceedings, books, and the internet among others. Hereafter called the secondary source. This research relied on the procurement procedures outlined in the Act issued by the Public Procurement Authority of Ghana to achieve value for money since bringing into effect the PPA, 2003 (Act 663), manuals on PPA, issued by the Public Procurement Authority of Ghana and World Bank Guidelines on procurement of works, the World Bank Standard Procurement Documents, online media and other literature and data between 2009-2012 from department of feeder Roads. The quantitative approach utilised a questionnaire survey in eliciting views on the subject from the sample. Such information is referred to as the primary data. The data was further analysed using

descriptive statistics (percentages and cross tabulation) one sample t-test and one-way ANOVA via Statistical Package for Social Scientists (SPSS version 16.0).

1.7 ORGANIZATION OF THE RESEARCH.

This research was grouped into five (5) chapters. The first chapter provided the background information of the study which included introduction, problem statement, justification, research questions, objectives, significance and scope of the study. Chapter two is titled 'Literature Review' and it discussed at length issues on procurement practices in the department of feeder Roads. The research methodology is addressed in chapter three while data analysis, findings and discussions were highlighted in chapter four. Finally chapter five presented summary of the key findings, recommendations and conclusion of the study.



CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

After several years of foul play in the public procurement process, the Public Procurement Act, 2003 (Act 663) was enacted and subsequently implemented to harmonize the entire public procurement processes (Osei-Tutu et al., 2011). According to Ameyaw et al. (2012), the Act is a comprehensive legislation designed to eliminate the shortcomings and organizational weaknesses which were inherent in public procurement in Ghana. A chunk of the national budget has been noted to involve procurement related activities (World Bank, 2003a cited from Ameyaw et al., 2012). Accordingly, efficient procurement process can help alleviate the huge budget deficits whilst ensuring value for money.

However, the implementation of the Act has been met with unparalleled challenges militating against its implementation (Ameyaw et al., 2012; Avotri, 2012; Osei-Tutu et al., 2011). Consequently, the implementation challenges of the Act have been explored by many authors. But, evidence of its significance impact on procurement process still remains an area yet to be explored. This is seen in Ameyaw et al. (2012) study which opine that no empirical evidence of that manner exists. This fueled the conduct of this study.

This chapter, hence seeks to provide an in-depth understanding on the various aspects of the procurement process. The chapter looks at the key challenges and issues of public procurement process and the Act in Ghana. The research examines other research works with the view of identifying the benefits and assessing the impacts of the Procurement Act on procurement practices in Ghana.

2.2 THEORETICAL FRAMEWORK

2.2.1 Innovation-Oriented in Public Procurement

In principle, conventional economic as well as legal thinking associates public procurement side-policies with discriminatory practices, which generally lead to inefficient allocation of resources, limit access to foreign markets, hamper the liberalization of domestic markets, increase budgetary costs and consequently diminish the competitiveness of national economy. The role of public procurement lacks a clear understanding of ideological and conceptual ideas surrounding its operations in creating an innovative environment for economic well-being of a country (Edquist and Hommen, 1998). The conventional understanding dominating in public procurement related thinking and policy-making is actually quite different from the basic ideas of innovation-oriented procurement. Public procurement should be held with utmost transparency as that brings competition among bidders which is devoid of discrimination.

2.3 EVOLUTION OF PROCUREMENT

Procurement is an old profession, yet it has attracted little attention from historians. Until the technological developments of the past 20 years, conventional ideology regarded procurement as the practice-based administrative process of buying goods and services required to satisfy the functional needs of managers (Callender, 2007). Rules, regulations, procedures and protocols were typical of the process. Callender (2007) agrees with available literature that procurement staff stood as financial and operating sentinels between the managers' requirements, centralising the supply task and creating management control over expenditure.

Globally, in the public finance literature, government is involved in four major economic activities: (a) providing the legal framework for all economic activities, (b) redistributing income through taxation and spending; (b) providing public goods and services freely available to the public such as national defence, public safety, education, and infrastructure (bridges and Roads); and (c) purchasing goods, services and capital assets (Thai, 2001). Thai (2001) further opines that, in the 14's, the Rockefeller Foundation funded a series of intensive studies regarding problems of public administration. Government procurement, as one of four major economic activities of government, was also included in the study. As a result, a 275-page book, *Principles of Government Purchasing*, was published in 1919. Although public procurement is perceived as a major function of government, and although governmental entities, policy makers and public procurement professionals have paid a great deal of attention to procurement improvements or reforms, public procurement has been a neglected area of academic education and research. Indeed, no member of the National Association of Schools of Public Affairs and Administration offers a public procurement program even though over 103 colleges and universities offer courses, certificate programs, bachelor, master and Ph.D. in business programs with emphasis in purchasing, materials management, logistics, supply management, or related areas.

Public procurement has not been viewed as having strategic impact in the management of public resources, and this can be seen especially in developing countries (Hunja, 2003).

In the Ghana, the Public Procurement Act (Act 663) 2003, was enacted to harmonize public procurement processes in the public service, secure judicious, economic and efficient use of state resources, and also, ensure that public procurement is fair,

transparent and non-discriminatory (Ministry of Finance, 2001). Ameyaw *et al.* (2011) agrees that, this new Act was constituted after years of foul play and abuse as far as procurement was concerned in the country. The government of Ghana, in consultation with its development partners had identified the public procurement system as an area that required urgent attention in view of the widespread perception of corrupt practices and inefficiencies, and to build trust in the procurement system (Mensah, 2012). A study by the World Bank (2003a) reported that about 50-70% of the national budget (after personal emoluments) is procurement related. Therefore an efficient public procurement system could ensure value for money in government expenditure, which is essential to a country facing enormous developmental challenges (Mensah, 2012).

2.4 THE PUBLIC PROCUREMENT SYSTEM

According to Van Gigch (1974) as seen in Thai (2001), a system refers to a set of or an assembly of related elements or institutions. That is a group of institutions make up a system. In the political and governance terrain a number of systems do exist, a typical example is the public procurement system. The human life involves understanding how the organisations and the systems work (Van Gigch, 1974 as seen in Thai, 2001). However, the systems, especially the public procurement system are so dynamic that they cannot be understood by only considering the parts or elements that make up the system (Thai, 2001). The procurement system is mostly likened to the bicycle system that consists of a series of parts assembled together. This vehicular potential of the bicycle has been termed as *emergent property* (Checkland and Scholes, 1990 cited from Thai, 2001). Thus the public procurement system is considered as emergent property or a system in action (Thai, 2001). According to

Thai, this systems view shape the thoughts and practical philosophy of change in the business environment, not only in the public but also the private.

This section is dedicated to the understanding of the knowledge of the public procurement. And the work by Thai (2001) shall form the basis of the discussion. According to him, public procurement is dynamic and involves several parts joint together. The five core public procurement elements are: policy making and management, procurement regulations, procurement authorization and appropriations, public procurement function in operations, and feedback (see Figure 2.1). The interaction between them is represented visually by Figure 2.2.

2.4.1 Policy making and management

Procurement authorities vary among democratic countries (Thai, 2001). However, in many countries procurement is regulated by formal rules. For instance, in the United States, the legislative arm of government, be it Congress, state legislature, etc. primarily influences public procurement systems through laws and authorization or approvals of programmes leading to procurement (Thai, 2001). The situation is similar across most African countries with Ghana being no exception. In Ghana, the institution responsible for the enactment and appropriations of such programmes leading to procurement is Parliament. However, because of separation of powers and checks and balances, the executive branch has an oversight responsibility in the implementation of the laws or policies of procurement. The judiciary, on the other hand, handles all legal cases pertaining to procurement. That is to say they do not have direct influence in the setting of procurement policies and regulations. However, the decided cases now becomes sources of procurement regulations (see for instance Thai, 2001).

2.4.2 Procurement regulations

Considering the likely impact of procurement outlays on the economy, public procurement is nonetheless an important function for government (Thai, 2001). Procurement and its related activities usually take a larger portion of most budgets (See Ameyaw et al., 2012; Osei-Tutu et al., 2011; Thai, 2001) indicating that it has a great consequence on the economy (World bank, 2003a cited from Osei-Tutu et al., 2011; Thai 2001) and hence needs to be managed well (Ameyaw et al., 2012; Thai, 2001). In Ghana, 50-70% (after personal emoluments) of the budget is spent on procurement activities. Furthermore, procurement represents 14% and 24% of GDP and imports. Against this background, it is imperative to establish a system that stipulates clearly goals and policies. According to Thai, the procurement goals and policies are different from country to country.

2.4.3 Procurement authorization and appropriations

This element, for whatever reasons, has been neglected in many literature on public procurement (Thai, 2001). They assumed that procurement process starts as soon after a procurement budget is approved, he further added. However, Thai (2001) contends that procurement authorization and appropriations was and still remains an integral part of the procurement process.

2.4.4 Public procurement function in operations

Unsurprisingly, this element of the public procurement system has attracted the attention of many researchers and accordingly has been the focus of many research works in the procurement discipline (Thai, 2001). Even in practice, the main focus has been on this element. According to Thai (2001), this encompasses managers and

procurement personnel, organizational structure, procurement process, techniques and methods.

2.4.5 Feedback

Feedback represents an important element, just like any other system, for a sound procurement system (Thai, 2001). As a result of continuous evaluations, policy makers and management can make adjustments or reforms to meet current needs (Thai, 2001). Unfortunately, in the procurement system in Ghana, this element has been neglected. This is seen in poor record management and poor handling of suppliers' complaints as identified by the Public Procurement Authority (PPA) in 2007.

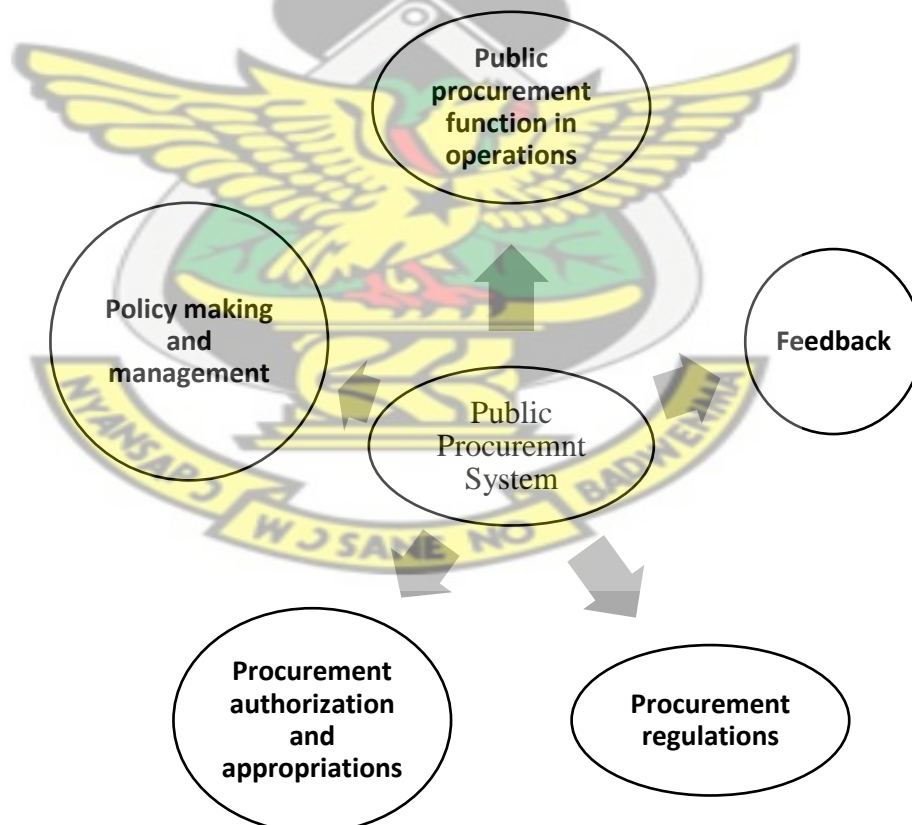


Figure 2.1. The Public Procurement System

Public Procurement System

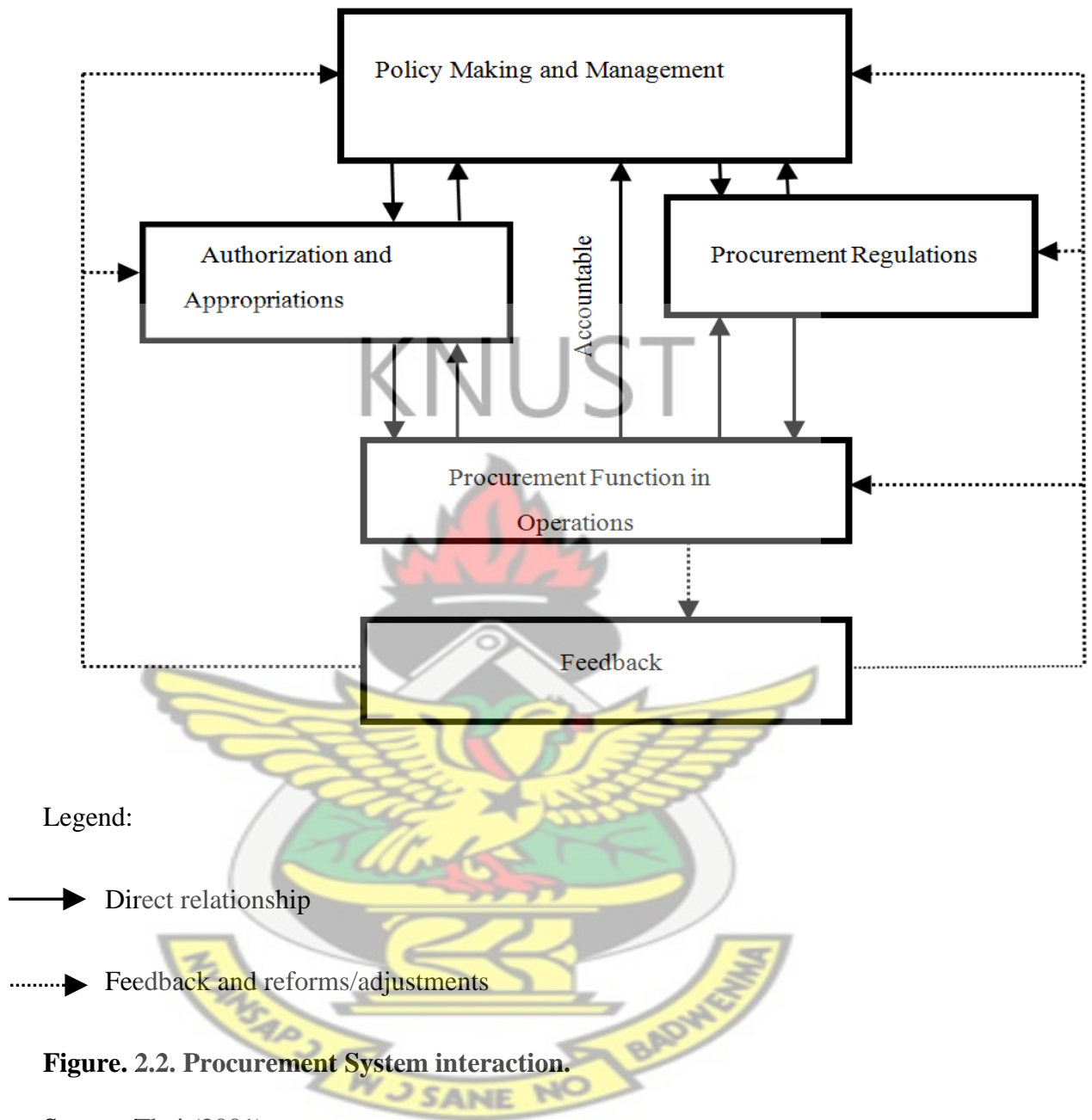


Figure. 2.2. Procurement System interaction.

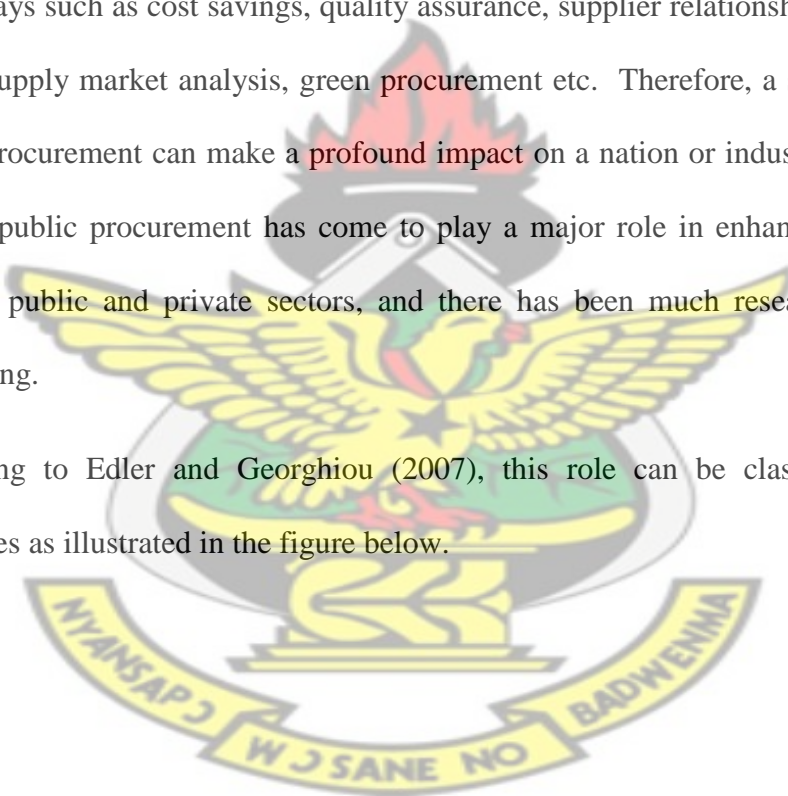
Source: Thai (2001)

2.5 THE ROLE OF PUBLIC PROCUREMENT

Thai (2008), Monczka et al. (2008) and Burt et al. (2009) stressed that in every economic dispensation there is an act of acquiring goods and services which is an act of procurement. In view of that, procurement activities is deemed very necessary to all organizational units being it private and public (i.e. ranging from households to

firms, organizations, and the government). From the functional viewpoint, procurement is an indispensable activity and its successful achievement is essential to any organization. In the private sector, procurement is a tool which will enable an organization to reap greater market share, thus, reducing the cost in the area of purchasing of materials. However, there is a major distinction in public procurement and private procurement as public procurement draws its funds from tax revenue. Hence, unlike procurement in the private sector, governmental procurement should reflect public concerns as well as efficiency. Nevertheless, both are quite similar in many ways such as cost savings, quality assurance, supplier relationship, procurement ethics, supply market analysis, green procurement etc. Therefore, a simple policy of public procurement can make a profound impact on a nation or industry. As a matter of fact, public procurement has come to play a major role in enhancing the quality level of public and private sectors, and there has been much research into public purchasing.

According to Edler and Georgiou (2007), this role can be classified into five categories as illustrated in the figure below.



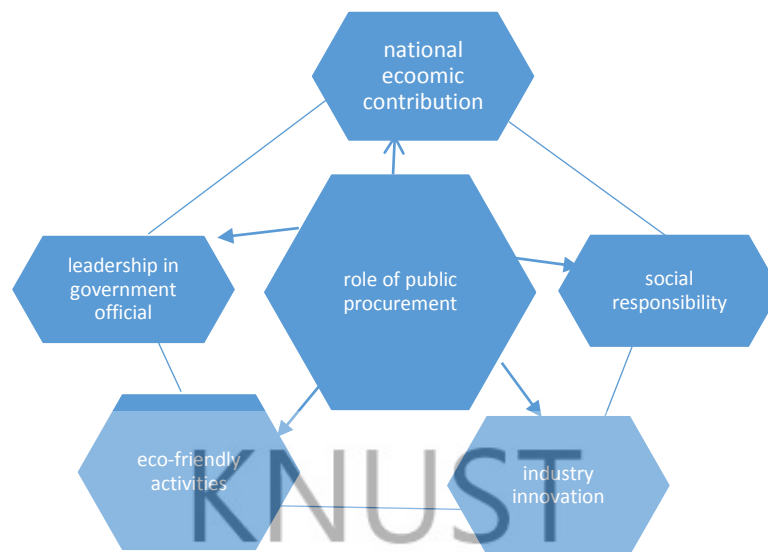


Figure 2.3 Role of Procurement; Source: Edler and Georghiou (2007),

2.5.1 National economic contribution

Public procurement can make a major impact on national economy by looking at consumption and investment expenditures. In addition, in some sectors, government procurement tends to be one of the most important source of sales (e.g. defense industry, health industry or research-related industries, construction, energy, transport equipment among others). Thus, if we can save a small portion of the public procurement expenditure, the government can relocate their resource to other valuable areas. Even in private industry, cost savings and reductions of procurement materials and services have been considered to be one of the most important procurement activities to make a company successful and this can apply to public procurement as well. There are many ways and methods of affecting this, but first of all, public procurement officials have to understand cost structure, cost behavior and the supply market to maximize this opportunity.

2.5.2 Leadership in government officials

The governmental system is very complicated and not easy to innovate for many reasons. In this context, Public procurement institutions are trying to show the excellence of operating the whole system in more innovative ways. These institution identifies how to maximize the efficiencies of government's budget execution, how to develop electronic and transparent work process system and how to find more innovative ways to operate the organizations. This is called leadership in government organization for maximum efficiency and innovation.

A budget is a financial plan that covers a specified period. It identifies the financial resources allocated to products, services, departments or divisions of an organization. Budgets are also tools for allocating funds to accomplish the objectives of the organization. Every public organization has its own budget systems and efficient budget management is a very important issue for organization.

2.5.3 Social responsibilities

As part of managing their supply chain and public operations, organizations should not only comply with applicable environmental and safety standards, but also develop and follow code of conduct that address legal and ethical standards in relation to suppliers, communities and government entities. As the firms go further, they are willing to take the leadership to make the society better.

2.5.4 Eco-friendly activities

Eco-friendly supply chain can be segmented into three steps such as

- (i) Pre-production,
- (ii) Production, and

- (iii) Post-production stage.

Ideally, all eco-friendly activities should be done as early as possible to prevent further problems. Thus, in the pre-production stage, procurement can play a major role to handle environmental issues. As we know in quality control, preventive activities before quality problem occurs are the best way to manage the quality, which makes a good sense to control materials to buy before it can relate to the environmental problems. Therefore, effective eco-friendly procurement can contribute to an organization's overall environmental goals and undertakings in a number of ways.

2.5.5 Industry innovation

Generally speaking, public procurement can be divided into two types,

- (i) First case - the purchase of standard and already existing products like commodities as paper, clothes, appliances and
- (ii) Second case - technology procurement like new or developing skills and technologies. The second category is referred to if a government announces to foster public procurement as an innovation policy instrument. Since public procurement is a big customer of industry, industry should pay attention to this customer – public procurement sector. If the government wants to develop a certain technology or skill, they ask industry to do it.

2.6 THE PUBLIC PROCUREMENT ACT, 2003, ACT 663 - OVERVIEW

The public procurement act was enacted to provide for public procurement, establish the Public Procurement Board; make administrative and institutional arrangements for procurement; stipulate tendering procedures and provide for purposes connected with

these (PPA, 2003). In short, it was to ensure sanity in the public procurement process (Osei-Tutu et al., 2011). The sections as contained in the Act is outlined as follows

PART I—ESTABLISHMENT OF THE BOARD

1. Public Procurement Board
2. Object of the Board
3. Functions of the Board
4. Membership of the Board
5. Term of office
6. Meetings of the Board
7. Committees of the Board
8. Secretariat of the Board
9. Chief Executive of the Board
10. Expenses of the Board
11. Accounts and audit
12. Financial year of the Board
13. Annual report

PART II—PROCUREMENT STRUCTURES

14. Scope of application
15. Procurement entity
16. Declaration of procurement entity
17. Tender Committee
18. Meetings of Tender Committees
19. Tender evaluation panel
20. Tender Review Boards

PART III—PROCUREMENT RULES

- 21. Procurement plan
- 22. Qualification of tenderers
- 23. Prequalification proceedings
- 24. Decision on prequalification
- 25. Participation by suppliers, contractors or consultants on nationality basis
- 26. Form of communication
- 27. Documentary evidence in procurement proceedings
- 28. Record of procurement proceedings
- 29. Rejection of tenders, proposals and quotations

Section

- 30. Entry into force of the procurement contract
- 31. Public notice of procurement contract awards
- 32. Inducements from suppliers, contractors and consultants
- 33. Description of goods, works or services
- 34. Language

PART IV—METHODS OF PROCUREMENT

- 35. Competitive tendering
- 36. Two-stage tendering
- 37. Procedures for two-stage tendering
- 38. Restricted tendering
- 39. Procedure for restricted tendering
- 40. Single-source procurement
- 41. Procedure for single-source procurement
- 42. Request for quotations

43. Procedure for request for quotation

PART V—TENDERING PROCEDURES

Sub-Part I – Invitation of tenders and applications to prequalify

44. National competitive tendering

45. International competitive tendering

46. Other international procedures

47. Procedures for inviting tenders or applications to prequalify

48. Contents of invitation to tender and invitation to prequalify

49. Provision of tender documents

50. Contents of tender documents and use of standard tender documents

51. Clarifications and modifications of tender documents

Sub-Part II—Submission of Tenders

52. Language of tenders

53. Submission of tenders

54. Period of validity of tenders; modification and withdrawal of tenders

55. Tender securities

Sub-Part III—Evaluation and Comparison of Tenders

56. Opening of tenders

57. Examination of tenders

Section

58. Responsiveness of tenders

59. Evaluation of tenders

60. Margin of preference

61. Multiple currency tender prices

62. Repeat tender qualifications

- 63. Non-disclosure of tender evaluation details
- 64. Prohibition of negotiations with suppliers or contractors
- 65. Acceptance of tender and entry into force of procurement contract

PART VI—METHODS AND PROCEDURES TO ENGAGE THE SERVICES OF CONSULTANTS

- 66. Notice of invitation of expressions of interest and preparation of shortlists
- 67. Shortlisted candidates
- 68. Content of requests for proposals for consultancy services
- 69. Criteria for the evaluation of proposals
- 70. Clarification and modification of requests for proposals
- 71. Choice of selection procedure
- 72. Conditions for use of other methods of selection of consultants
- 73. Receipt of proposals
- 74. Evaluation of proposals
- 75. Selection procedure where price is a factor
- 76. Selection procedure where price is not a factor
- 77. Confidentiality

PART VII—REVIEW

- 78. Right to review
- 79. Review by procurement entity
- 80. Administrative review
- 81. Certain rules applicable to review proceedings
- 82. Suspension of procurement proceedings

PART VIII—DISPOSAL OF STORES, PLANT AND EQUIPMENT

83. Authority to dispose

84. Disposal procedures

PART IX—MISCELLANEOUS PROVISIONS

85. Instructions and guidelines for disposal of unserviceable stores

86. Code of conduct

Section

87. Modifications

88. Request for information by the Board

89. Investigation by the Board

90. Procedures on completion of investigation

91. Statutory audits

92. Offences relating to procurement

93. Corrupt practices

94. Review of threshold levels

95. Public access to legal texts

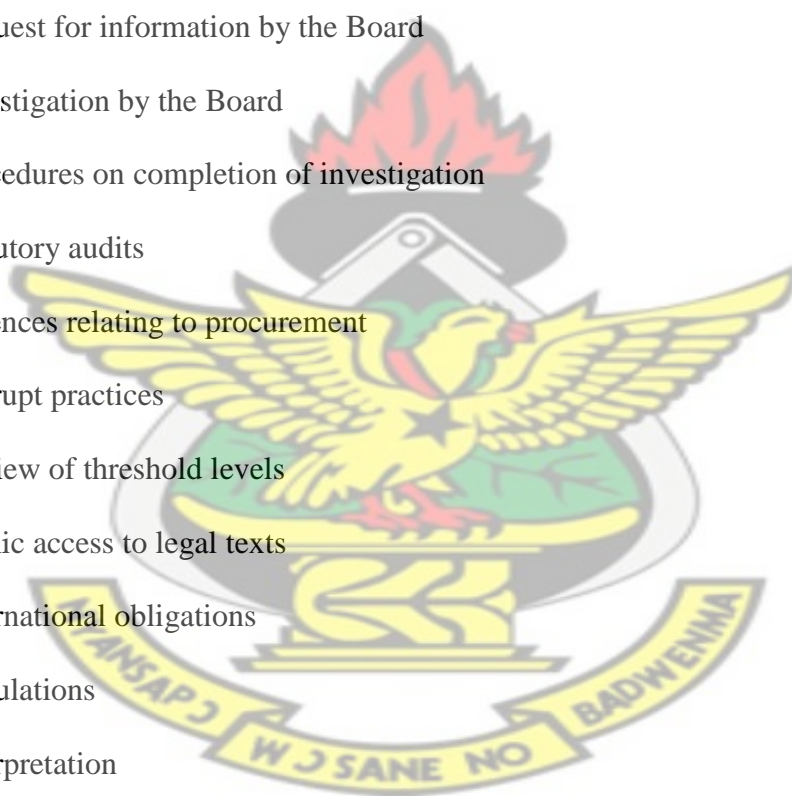
96. International obligations

97. Regulations

98. Interpretation

99. Repeal and Savings

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2.7 BENEFITS OF PUBLIC PROCUREMENT ACT ON PROCUREMENT ACTIVITIES

Despite the huge challenges that have militated against the successful implementation of the Public Procurement Act, the implementation of the Act somewhat offered some benefits; and if the implementation challenges are addressed the benefits of the Act would be mouthwatering. A lot of authors have discussed the benefits of the implementation of the procurement Act in other parts of Africa and such benefits are common to many regions that have implemented the Act. This section looks at through the lens of literature, the benefits of the implementation of the Procurement Act in Ghana.

2.7.1 Reduces Fraud and Over/Under-Invoicing

In 2005, KPMG reported high incidence of fraud in many enterprises in South Africa (Ventor, 2007) and unfortunately, it was as high as 76% and 32% of management believes employees engage in the act and employees opine manage also are engaged in fraud respectively (KPMG, 2005 cited from Ventor, 2007). This situation is similar across many other African Countries, with Ghana being no exception. According to Ventor, it appears fraud continues to be on the increase in many organisations despite the attempt to prevent it. Procurement process presents avenues for many potential; fraud actions including kickbacks, and commercial bribery among other frauds. Accordingly, Kramer (2003) examined the occurrence of fraud in the procurement process and the research indicates high incidence including some forms of risk aforementioned. Such high incidence of fraud over the past years in procurement fueled the enactment of the Public Procurement Act in Ghana. As encapsulated by the

Ministry of Finance (2001) and the Procurement Act Manuals, the Act is to harmonize procurement processes and thus prevent or minimize high incidence of fraud.

2.7.2 Fairness and Equality

The main prime aim underpinning the enactment of the Act was to promote fairness and transparency in the procurement process (Ministry of Finance, 2001; Osei-Tutu et al., 2011). Hitherto, procurement process was shady and clandestine involving foul play (Osei-Tutu et al., 2011); and contracts only awarded to some preferred suppliers and contractors usually those with links with the incumbent government. Consequently, there was the need to review the existing procurement regulations and thorough review as thus observed through the enactment of the Act (Osei-Tutu et al., 2011). Under the Act, the contractors and suppliers are evaluated based on the criteria ensuring fairness and equality.

2.7.3 Increases Accountability

Procurement using Public funds should have the interest of the general public at heart. Indeed, the Act was enacted in order to increase accountability in the public procurement process. Accountability involves government having high regards for the law and conducting businesses subjected to critical scrutiny (Smith-Deighton, 2004). The situation of procurement in Ghana before the enactment of the procurement Act was exigent and as a result, the government in consultation with its development partners had identified public procurement to be breeding grounds for widespread corruption and inefficiencies (Ameyaw et al., 2012). Undoubtedly, the eradication of these inefficiencies and corruption would inevitably improve accountability in the utilisation of public resources and fund in the procurement of works.

2.7.4 Promotes Competition

Competition has been one of the long standing key principles of public procurement. Competition arises when more than one tenderers are engaged in the procurement process and essentially, Raymond (2008) observed that this is the mode through which many works, goods and services are procured. The fundamental basis of every award in the procurement process is that the most competitive bidder after all considerations is awarded the contract (Raymond 2008). Essentially, Erridge et al. (1999) argued that procurement using competitive tendering has the tendency of eradicating or minimizing the widespread problems of fraud and its facets associated with public procurements.

2.7.5 Provides Value for Money

Several attempts have been made by government to ensure value for Money in the public procurement terrain (Ameyaw et al., 2012) long before the establishment of the Act guiding public procurement processes. This is manifested in the numerous implementation of programmes. For instance, in 1996, the government launched Public Financial Management Reform Programme (PUFMARP) and the purpose of the programme, as noted by Ameyaw et al. (2012) was to improve financial management in Ghana. The programme identified several weaknesses in the procurement processes including lack of comprehensive public procurement policy and lack of rules and regulations to guide the procurement process (Ameyaw et al., 2012). Thus, these obstacles militated against value for money in the procurement process (see Osei-Tutu et al., 2011). The introduction of the Act was supposed to offer a breakthrough in providing value for money in public procurement.

2.7.6 Cost Savings

Competition is inextricably linked with cost savings, in that, the lowest evaluated bidder is awarded the contract in every competitive tendering. Indeed, Ameyaw et al. (2012) observed that high cost of procurement to the state is encountered when there is a compromise in the use of competitive procurement methods

2.7.7 Effective Procurement Ethics

Hitherto to the enactment of the Public Procurement Act, procurement officials were not guided by any set of rules and regulations. Their mode of conducts were haphazard. Indeed, some of these conducts and practices of the procurement entities were instrumental in fueling the high levels of corruption and judgment debts we experience today. The procurement Act streamlines the duties of the procurement entities, provides a comprehensive ethical standards procurement entities are supposed to meet or demonstrate, etc. Atkinson (2003) noted that procurement entities are held to higher standard of ethics than most other professions.

2.8 CHALLENGES OF PROCUREMENT AS A RESULT OF THE ACT 663 IN GHANA

Just like any other system, the enactment of the Public Procurement Act, 2003, (Act 663) also presented its own challenges to the procurement process. In this section, the various challenges are discussed.

2.8.1 Delays Payment

“We do not need to measure everything that matters; we only need to measure the things that matter” (Saadet al., 2005, pp. 383-397).

It is of no doubt that public sector procurement is more regulated than private sector procurement, and there are more rules to comply with, more policy considerations to take into account (Chamberland, 2005). Besides, even those public bodies that genuinely wish to change are restricted by standing orders, public accountability, and probity constraints. However, this consequently affects the procurement process, government agencies are very bureaucratic in nature and more extremely reluctant to change their current habits and practices (Raymond, 2008). For such reasons payment of to-be procured goods and services are delayed. To benchmark procurement to improve payment procedures, Palaneeswaran and Kumaraswamy (2000) argue that public sector agencies need to incorporate most of the modern management tools and technologies to cope with the procurement industry, to remain competitive and make maximum use of scarce resources.

2.8.2 Delays the award of contract

The most important principle in procurement is value for money (VFM) (Raymond, 2008). VFM in the public sector entails consideration of the contribution to be made to advancing government policies and priorities while achieving the best return and performance for the money being spent (Bauld and McGuinness, 2006). Nevertheless, Cummings and Qiao (2003) opine that, in certain cases the government is at liberty to consider other criteria than the lowest price; for example technical capabilities, qualifications of key personnel and past performance records in awarding contracts to potential suppliers. Consequently, the route of procurement per Act 663 in Ghana flaws in achieving VFM due to delays in award of contract. This is because the liberty in certain cases as proposed by Cummings and Qiao broods barriers like politics in business. Moreover, procurement related corruption tends to be a serious problem in

developing countries rather than in developed countries. Unsurprisingly, World Bank studies put bribery at over \$1 million per year accounting for up to 12 percent of the Gross Domestic Product (GDP) of nations like Nigeria, Ghana, Kenya and many more. And corruption is very strongly linked to the award of government contracts (Rothery, 2003).

More so, transparency can be achieved through such practices as clear and consistent regulation, and public tendering (Rothery, 2003).

2.8.3 Provides too many requirements for a tender document

Mostly, goods and services are procured on competition basis. Before delving deeper, it is perhaps best to understand, how competitions occurs in procurement? For example, in Ghana, if the Ghana Highway authority is interested in the purchase of rollers, the Highway Authority will advertise and call for bids from potential suppliers. In this process there will be bids from major suppliers and a technical evaluation committee would be involved in the decision-making process while a tender board and technical committee would evaluate whether bids are in accordance with the technical requirements they have stipulated in the tender conditions. The supplier's credibility in carrying out previous contracts of this nature, the price and the most competitive bidder will be awarded the tender. Some procuring firms would like to skip such a lengthy process, which consequently causes a rippling effect such as 'under-mining transparency'. Transparency requires governments to adhere to higher standards of conduct by ensuring that conduct will be open to scrutiny (Smith-Deighton, 2004):

But the obligation to invite tenders, the transparency of the procedures used in awarding contracts and the right which the agreement would give to aggrieved

suppliers to challenge the decisions would restrain both domestic and foreign suppliers from making under-the table payments and deter public officials and political parties from receiving such payments

(Rege, 2001, pp. 485-515).

But such is not the case in a developing country like Ghana.

2.8.4 Lack of qualified procurement personnel

The procurement function is labour intensive, which also manages all purchasing (Parry and James-Moore, 2006). Research conducted earlier in the 21st century reveals that, most companies are unable to finance full time purchasing experts in niche areas (John, 2003b). Parry and James-Moore (2006) further argues that the purchasing function is in a grey area when it comes to competency. Supplier relationships are frequently described as strategic (Araujo et al. 1999; Bensaou, 1999; Dyer et al., 1998; Gadde and Snehota, 2000; Kraljic, 1983; Olsen and Ellram, 1997; etc.) and the nature of supplier relationships may be directly related to the buyers' core competence (Cox, 1996) but outsourcing decisions are frequently taken without a thorough strategic review (Lonsdale and Cox, 1997), and this is as a result of qualified procurement personnel in shortage. A branch effect of such shortage is corruption, which occurs since public sector officials are not paid sufficiently. A high degree of professionalism of the workforce also does not exist (Raymond, 2008). In fact the ADB, (2004) reports that:

Whilst corruption exists in all areas of government activity it is in the area of procurement activity that it is most rampant. Whilst tender boards are constituted at different levels – Department Ministerial and Cabinet – for the administration of tenders, the common perception amongst citizens is that high levels of corruption

prevail in this area. The institutional arrangement for countering corruption in the form of the Commission to investigate allegations of Bribery or Corruption has not been successful. The pervasiveness of corruption affects public confidence in governance, adversely affects the effective delivery of services, impedes project implementation and escalates costs of program/project delivery.

2.8.5 Lack of training avenues or institutions

Available literature argues that, to propel procurement to achieve a level such as value for money is often very difficult (Raymond, 2008). Moreover, to understand the implications procurement has for the public sector is technically complex, requires sophisticated understanding and there is no universally accepted methodology to follow (Bauld and McGuinness, 2006). Paramountly, this is as a result of lack of education and training facilities (Palmer and Butt, 1985). More so, purchasing professionals are held to higher standards of ethical conduct than people in other professions, yet some do not even know what is expected of them (Atkinson, 2003). In agreement with Raymond (2008), if the workforce is not adequately educated in such matters, this may lead to serious consequences; including breaches of codes of conduct. Surprisingly, there are approximately 500,000 professional purchasing people in the United States and only 10 per cent of these have been members of a professional Supply Chain Management Association which trains members in purchasing ethics, and the rest are not even aware that there are ethical and legal standards involved in procurement.

2.8.6 Poor record management

Recently, information technology has changed how goods and services are purchased in the public sector. Improvements such as E-procurement which is an online system that can streamline the procurement process is already in motion in developed countries. And such improvements is used to deliver services and to communicate with citizens and organizations in the digital era using internet (Rotchanakitumnuai, 2013).

Good governance refers to the process and structure that insures good management of resources (ADB, 2004). In Ghana, record management bleeds. And this makes procurement governance less efficient and deflated resulting in increased corruption.

2.8.7 Poor contract management and high cost of advertisement

The most important information source for suppliers is the tender advertisement and, for the contracting authorities, the bids submitted and provision of inaccurate data will result in misunderstandings and increased costs (Erridge *et al.*, 1999). The better the quality of information provided, the less likely that it will result in an unsatisfactory purchase

2.9 IMPACT OF PROCUREMENT ACT ON PROCUREMENT PRACTICES

According to Ameyaw et al. (2012), the Public Procurement Act, 2003 (Act 663) was designed to resolve the challenges and weaknesses that existed in the public procurement in Ghana. However, they also contend that no empirical evidence exists on the significant impacts of the passage of the Procurement Act on procurement practices in Ghana. To this end, it is therefore imperative to explore through an array of literature – albeit small – the impact of the Act on procurement practices in Ghana.

This section, therefore, provides a cursory look at the impacts of the Procurement Act on procurement practices.

2.9.1 Delays in Payment

The procurement Act in itself not supportive and hence needs to be complemented by other documents. One of such documents is the Standard Tender documents that details out the conditions governing the contracts. The conditions stipulate among other things including the payment methods and dates. Unfortunately, the persistence finding is that payments are always unnecessarily delayed, especially where the funding agency is Government of Ghana, because certificates for works done would have to be approved by recognised authorities as indicated in the Procurement Act and conditions of contract.

2.9.2 Cumbersome and expensive procedures or requirements

Strict adherence to Public Procurement Act requires satisfying the requirements stipulated in the Act to the letter and the spirit. For instance, depending on the threshold of the Contract, the Act stipulates advertisement in national dailies (see PPA, 2003). Such procedures could be expensive and as a result it has been observed to constitute high cost. Also, a number of requirements will also have to satisfy in the procurement process, leading to back and forth of the process. The cumbersome nature of such procedures and requirements may delay the entire procurement process.

2.9.3 Enhancing competition

Section 49 (1) of the Public Procurement Act, 2003 (Act 663) provides for tender documents to be supplied to all prospective bidders who may want to submit a bid on

any contract. The object of this section is to enhance competition in the public procurement which hitherto had not been given the necessary attention. Surprisingly, even after the enactment and enforcement of the Act, there still seems to be deliberate effort by procurement officials to hamper this provision. Ameyaw et al. (2012) observed that procurement entities deliberately limit competition by refusing to provide more opportunities for bidders in any given bid. In certain instances the documents are purchased by a single contractor and processed under different contracting proposals. In short the Act has somewhat not been successful in the enhancement of competition.

2.9.4 Communication enhancement

At every stage in the procurement processes there is correspondence amongst the parties involved. Successful and unsuccessful bidders are equally privy to what transpires throughout the whole process. Unsuccessful bidders are always informed about the reasons for their unsuccessfulness. Detailed Evaluated reports are expected to be document according to the Act. Communication between procurement entities and the Public Procurement Authorities is imperative towards the implementation of the Law in Ghana. Unfortunately, there has been low interaction between these two agencies. The poor handling of suppliers' complaints as observed by PPA (2007) as seen in Osei-Tutu et al. (2011) suggests laxity in communication in the procurement process. Partly, the Act has impacted on communication in the procurement process and has also failed in certain regards.

2.10 RISK AND RISK MANAGEMENT IN PUBLIC PROCUREMENT

There is a range of risk definitions, Cambridge Advanced Learner's Dictionary (2008) defined risk as the possibility of something bad happening. Knight (1921) as seen in Kogan and Tapiero (2007), realized that risk is an essential factor which needs to be assessed in contract and public procurement hence he gave the definition of risk to be measureable uncertainty of outcome, whether positive opportunity or negative impact, whereby the measureable uncertainty is expressed in terms of likelihood. The definition of risk is often used in the neutral sense, i.e. having negative or positive effects on the outcome of an activity.

2.10.1 Risk and risk management

Risk results “from the direct and indirect adverse consequences of outcomes and events that were not accounted for or that were ill prepared for, and concerns their effects on individuals, firms or society at large. It can result from many reasons both internally induced and occurring externally with their effects felt internally” (Kogan and Tapiero, 2007). Based on European Commission Expert Group report five major types of risks in the case of public procurement for innovation were identified.

2.10.2 Technological risk

Technological risks are all those risks that lead to non-completion, under-performance or false performance of the procured service or product for reasons that lie in the technical operation. Technological risks could arise from suppliers not being able to find the solutions as promised, choosing the wrong or a suboptimal technology (it does not work as expected or is not fit for purpose, does not match standards, etc.), choosing a technology prematurely, failing to acknowledge technological

compatibilities or failing to develop the solution in-house or buy components and knowledge as claimed in the tender process.

2.10.3 Market risk

Market risks refer to a situation where the private demand does not respond to the extent necessary or expected, public markets remain fragmented or there is a lack of companies delivering innovations. The reasons could lie in too radical requirements of the specifications, etc.

2.10.4 Organisational risks

Organisational risks are all those risks for the procurement to fail or under-deliver for reasons situated within the organisation that procures. Indeed, there tend to be too many goals to follow in modern public procurement for the public administrators – cost savings, transparency, sectorial policies (e.g. environmental, energy, industrial etc.) – which often contradict each other (Cave and Frinking, 2007; Cabral et al., 2006). Public Procurement for the Promotion of R and D and Innovation in ICT. This may lead to misallocation of resources, where agency goals conflict with wider policy goals. There is a dilemma between the micro cost effectiveness of a contract and the higher costs of R & D based product/services in order to boost innovation (Cabral et al., 2006). The process itself is procurement for innovation for a costly and time-consuming effort. Procurement for innovation demands strong coordination between stakeholders and constant evaluation and learning. But coordination and evaluation always involves transaction costs, which have to be taken into account when implementing the process. Cave and Frinking (2007) have pointed to the fact that there exists the potential for expensive coordination failure. When the payoff is unclear, the innovative solution can be perceived as the more expensive solution

(Bramme and Walker, 2007). Therefore, at the end of the day, under the current culture of public procurement, cost savings may still be perceived as the most important goal. Relatedly, societal risks are those related to a lack of acceptance and uptake by the users of the new or changed service delivered within society.

2.10.5 Financial risks

The financial risks in public procurement are mainly twofold, one related to the uncertainty in meeting target costs, the other to the ability to secure the funds needed in the first place.

2.10.6 Turbulence risks

Finally, turbulence risks are those that are mainly associated with large-scale projects. Risks emerge from a range of unforeseen events that lead various actors in the whole process to re-assess their priorities, to change their expectations, which may lead to further dysfunctional reactions by other actors in the process, and so forth. These risks may occur within organisations, but often are a result of the interplay of various actions and actors within the whole project.

2.11 RISK ASSESSMENT

“Prior to the engagement of any contracting staff, a personnel security risk assessment should be undertaken to determine the level of insider risk posed to the organisation due to the access to information/assets the contractor(s) role will afford. The risk assessment process should mirror that used for permanent employees and consider the sufficiency of the personnel security countermeasures in place. In particular, the risk assessment should ensure that the level of pre-engagement screening associated with the contractor(s) reflects the level of access/responsibility associated with the role and that of an employee undertaking a

similar role. In the event that this is not possible or workable in the timeframe, then a suite of other personnel security countermeasures should be deployed to manage the risk, such as restricted or monitored access”(www.cpni.gov.uk).

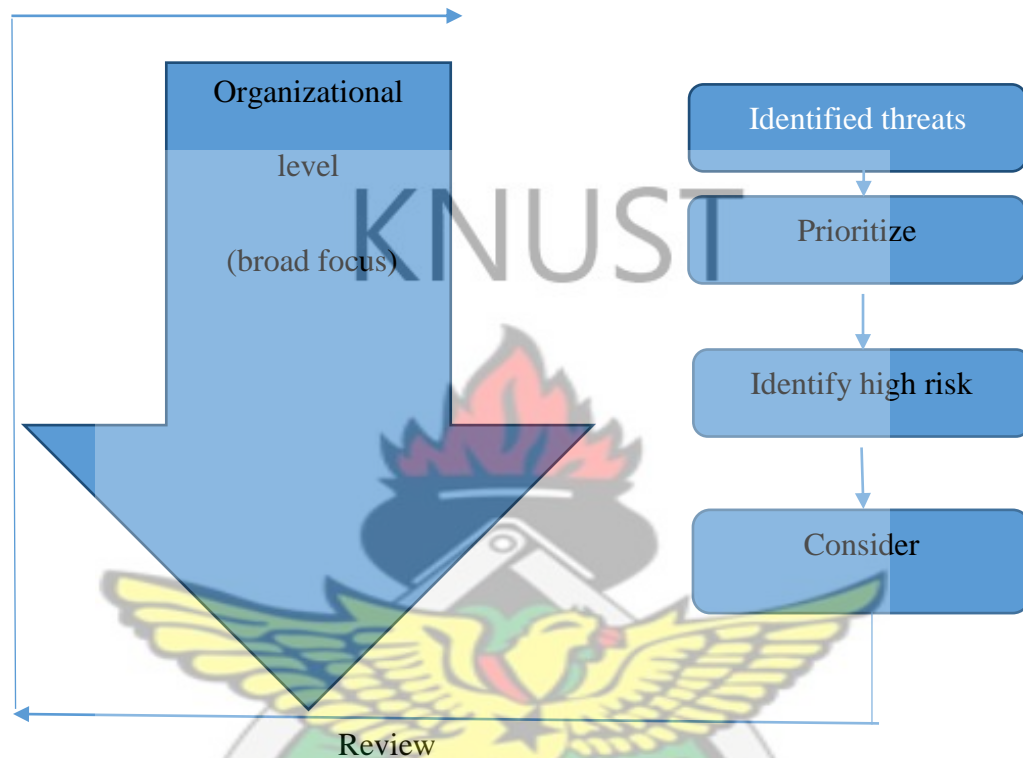
From the perspective stated above it is deemed necessary to review the actions and inactions of the personnel who will be directly or indirectly involve in the contracting process. A subject of review of the contractors should correspond to the objective requirement of the organization. The comparative analysis among other contractors prior to the award of a contract is a means to finding the best contractor among the lot. Contract screening is part of the contracting process.

A model was developed by Centre for the Protection of National Infrastructure (CPNI) which is a means of assessing risk thus, personnel security risk assessment.

- **Identify Threats:** Identify all the potential threats an insider could pose within the organisation (this may be broken down into individual business areas/sites).
- **Prioritise:** These according to the impact these acts could have on the organisation and the likelihood of them taking place. Prioritisation will ensure you develop a personnel regime that is proportionate to the risk.
- **Identify high-risk groups:** Understand which groups of employees /workers/ and contractors have the necessary access and permissions to make these threats a reality.
- **Consider counter measures:** Consider what countermeasures are in place and should be in place to reduce the vulnerability of the organisation to these threats. This should form the basis for pre-employment/engagement screening

requirements and ongoing personnel security regime for employees, workers and contractors.

The assessment process is as shown in the figure 3 below



Source: Risk assessment process - personnel security risk assessment

(www.cpni.gov.uk)

EMPIRICAL EVIDENCE

2.12 TRANSPARENCY IN PROCUREMENT

In the works of Greuning (2005) the word transparency was defined as an information that is accessible and readily available to individuals that need them for the purpose of serving their needs stringent conditions(s). In procurement, the act of favouritism through document manipulation to just select individuals desired is deemed selective injustice which actually contravene the procurement act in Ghana. Information should

be accessed freely. According to Adu (2011) access to Procurement Information in any economy or a country is one of the indicators of transparency. It is revealed from the field study that 94 percent of procurement entities contacted published information on procurement whereas 6 percent did not publish information on procurement. On the part of contractors and consultants, 86 percent confirmed that they had access to procurement information while 14 percent of the respondents did not have access to summarized information on procurement.

2.13 ACCESS TO PROCUREMENT INFORMATION

Adu (2011) established the fact that individual having access to procurement information was being carried out every quarterly. This means in a year they receive information about procurement four times while 14 percent received summarized information annually. The data indicate that information on procurement gets to people on time. Timely dissemination of information to contractors helped them to abreast themselves of procurement activities and was an indication of transparency; therefore, if people receive procurement information timely, it can be said that procurement activities are transparent.

2.14 ADVERTISEMENT OF CONTRACT AND MEDIUM OF ADVERTISEMENT

Adu (2011) also expressed interest in its study by probing much investigation to the means of advertising contract in the national dailies. It is factual from public procurement act that contracts that are supposed to be awarded should be advertised publicly through any medium appropriate preferably most read national dailies so that interested bidders (actual and potential) can bid for the contract. The study revealed that 87 percent of respondents (both contractors and procurement entities) who

awarded or have been awarded contracts before responded in the affirmative that they advertised or had the contracts awarded them advertised to the general public. Actual and potential contractor are not supposed to influence or induce any public procurement official in order to remain the favorite of the public procurement official, hence, transparency should be held in high esteem.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

The research is based on the observation that procurement activities in the Department of Feeder Roads have been impacted since the enactment of the Public Procurement Act, 2003, (Act 663). In order to achieve the objectives and the overall aim of the research, this chapter gives details of the methods employed in the research process. It looks at the methods that are employed in the selection of respondents and the problems encountered, explaining how the data is collected and analysed and thus providing reliable basis for actions or drawing conclusions based on interpretation of data.

3.2 RESEARCH DESIGN

A research design is a framework for conducting a research such that the variables can be manipulated to provide answers to the research questions. It gives details of the procedures necessary for obtaining information needed to solve a research problem (Malhotra and Birks, 2007). However, this research adopts a questionnaire survey in an attempt to address the objectives set out in chapter one. However, a qualitative approach involving review of relevant information on procurement including awarded contracts, public procurement manuals and extant literature is thus performed. According to Janes (1999), the only available way of getting the current picture of a group, profession, organisation, etc. is through a survey. Moreover, the survey was used because information can be gathered in a relatively short time (Kumekpor, 2002). In this regard a series of questions is asked of a number of people.

3.3 SOURCES OF DATA AND DATA COLLECTION

Both primary (field survey) and secondary (literature review) data were employed in this research. The primary and secondary data were collected to cover every aspect of the research. Argued that research should contain empirical research data. Thus primary data are indispensable in the conduct of any research endeavour. The primary data sources in this research included Professionals in the building construction industry and Professionals in the Department of Feeder Roads.

Over the years, scientific methods of data collection have come to dominate the field of evaluation (Taylor-Powell and Steele, 1996). According to them, these methods seek to establish cause-effect relationships and provide quantitative data. Data were collected through a questionnaire survey targeting professionals involved in procurement process. The response structure on the questionnaire included both open-ended and close-ended questions. Open-ended questions were included to allow respondents to incorporate more information and understanding of project management and insurance. Closed-ended questions were also included because of its simplicity and ease in analysis. The questionnaire addressed the objectives set out in chapter one. The questionnaire was divided into two main parts, with Part 1 relating to the general information and background of the respondent. Part 2 includes questions on procurement act and related procurement activities. A 5-point likert scale is used to rate these factors.

3.4 POPULATION AND SAMPLE SIZE

Population refers to a group or units of interest located in a geographic area of interest during the time of interest (Taylor-Powell, 1998). The research focused on the Departments of Feeder Roads in the Kumasi, Sunyani and Accra Metropolis in the

Ashanti, Brong Ahafo and Greater regions of Ghana respectively. The choice of the regions was due to the fact that the regions are amongst the most populated regions in Ghana and they also have the highest number of MMDAs according to the 2010 report (Ameyaw et al., 2012; Osei-Tutu et al., 2011). Moreover, because of its proximity to the researcher and for the fact that data are readily available in the metropolises as compared to other regions that is going to represent the population interest.

The population in this study were professionals and contractors involved in procurement process. In all, the professionals in the three locations involved in the study were thirty-five in the Kumasi and Accra Metropolises; and thirty in the Sunyani Metropolis. Sample refers to using a part to represent a whole. Information gained from the sample can thus be used to generalize only to the population from which the sample was taken (Taylor-Powell, 1998). Fifty professionals involved in procurement process were targeted.

3.5 SAMPLING TECHNIQUE

The sampling technique that was employed was cluster and purposive sampling. Cluster sampling was adopted to assess the impact of procurement in the regions aforementioned. A sample size of twenty was allocated to the Kumasi and Sunyani Metropolises based on the study by Ameyaw et al. (2012) that established that these two Metropolises have the highest number of MMDA. Accra was allocated a sample size of ten. Subsequently, Purposive Sampling was used to select sample within the various clusters. Purposive Sampling is a sampling technique whereby the researcher decides who to be engaged in the research (This was selected because it allows

information-rich issues that are important to the study to be added and also focus on specifics rather than general.

3.6 DATA PRESENTATION AND ANALYSIS

The retrieved questionnaires were coded and analysed using simple statistical tools such as the Statistical Package for Social Sciences (SPSS) 16.0 and Microsoft Excel. The interpretation of the data is to be consequently done by these two tools. To elucidate the discussion in this discipline, the data obtained is presented graphically and in tabular form. Information involving the background of respondents is presented in tabular forms. The outcome of the study was assessed with the research objectives and questions. The results was analysed statistically using descriptive statistics, one sample t-test and ONE-WAY ANOVA.

3.7 ETHICAL ISSUES

This research is compiled with principles which aimed at protecting the privacy of every individual who, in the course of the research work is requested to provide personal or commercially valuable information about themselves (hereinafter referred to as a subject of the research). Before an individual becomes a subject, the person is notified of, the aims, methods, anticipated benefits and potential hazards of the research. No person becomes a subject unless the person is fully abreast or cognizant of the notice referred to in the preceding paragraph.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF RESULTS

4.1 INTRODUCTION

This chapter is dedicated to the analysis of the primary data collected from the fifty personnel involved in the procurement process (professionals and contractors) operating in the Greater Accra, Ashanti and the Brong Ahafo Regions. Respondents were purposively chosen from various capitals of the aforementioned regions. This chapter deals with the analysis and discussion of the data collected in order to effectively assess the impact of procurement Act on contracts in the Department of Feeder Roads.

The analysis is pivoted around the objectives of the study, that is, to identify the challenges in the procurement of works, services and goods in the Department of Feeder Roads; to identify the impact of the implementation of the Public Procurement Act (663)

The researcher employed the use of Statistical Package for Social Sciences (SPSS) and Microsoft Excel for the organization of the data presentation, description and analysis. The statistical tools used for the analysis were the Descriptive, ONE-WAY Anova and one sample t-test. This chapter also presents the results of the analysis and discussions in the form of texts, figures and Tables. The chapter is organized as follows; Background information of Respondents and analysis of dependent variable.

4.2 DEMOGRAPHIC/ BACKGROUND INFORMATION

This section presents background information on respondents such as the location of the various respondents, profession, level of education, years in practice, position in

the organisation, knowledge of procurement practices in their respective organisations. Such analyses are imperative because the background of the respondents is to help generate confidence in the reliability of data collected; and eventually the findings of the study.

4.2.1 Location of the Respondents

The study in an attempt to assess the impact of the Procurement Act on Department of Feeder Roads contracts focused on three Regional Capitals in Ghana (i.e. Accra, Kumasi and Sunyani). The purpose of this question was to know the geographical location of the various respondents and consequently to identify the impact of the Act 663 in the succeeding sections. Fifty (50) number of questionnaires were administered in different regions in Ghana, namely, the Brong Ahafo Region (Sunyani), the Ashanti Region (Kumasi) and the Greater Accra Region (Accra). The breakdown of the distribution is shown in the table 4.1 below with twenty number (20) of questionnaires each being administered in the Ashanti and Brong Ahafo Region. The remaining ten (10) number questionnaires were administered in the Greater Accra Region.

Table 4.1. Location of respondents

Location	Frequency	Valid Percent	Cumulative Percent
Brong Ahafo Region (Sunyani)	20	40.0	40.0
Ashanti Region (Kumasi)	20	40.0	80.0
Greater Accra Region (Accra)	10	20.0	100.0
Total	50	100.0	

4.2.2 Profession of respondents and working experience

The main intent of this question was to ascertain profession of the respondents with their respective companies. This information will give relevance to the quality of answers given out by the respondents. Also if respondents have gained more experience from working with their respective companies, it is likely that they have been involved in a number of contracts and thus their involvement in procurement will correspondingly be high and this will validate their response that is needed for this study.

Table 4.2 Working experience of respondents

Years of experience	Frequency	Valid Percent	Cumulative Percent
< 5	14	28.0	28.0
5-10	21	42.0	70.0
>10	15	30.0	100.0
Total	50	100.0	

The table above shows the number of years the respondents have practiced in their various afore mentioned professions. A majority number of twenty-one (21) representing 42% have been in practice for between 5-10 years. Fifteen (15) and (14) number have been practicing for more than ten (10) and less than five (5) years respectively. Correspondingly, their percentage representations are 30 and 28 respectively.

Table 4.2 presents a cross-tabulation of the location and a summary of the various professions of respondents in the three locations. Apparently, the dominated profession in all the locations was Procurement Officers.

Table 4.3 a cross-tabulation of the location and the profession of respondents

		Profession of Respondents					
Location of Respondents		Regional Contracts Managers	Regional Quantity Surveyors	Regional Civil Engineers	Regional Procurement Officers	Contractors	Total
	of Brong Ahafo Region (Sunyani)	2	2	2	8	6	20
	Ashanti Region (Kumasi)	2	3	3	7	5	20
	Greater Accra Region (Accra)	2	2	2	2	2	10
Total		6	7	7	17	13	50

4.2.3 Level of academic qualification

A Bsc or university degree was the dominant academic qualification among the respondents with a total of seventeen (27) number and a percentage representation of 54. Fourteen (14) numbers of the respondents representing 28% had Diploma qualification. Nine (9) respondents had Master's Degree (Refer to Table 4.4).

Table 4.4 Level of academic qualification

Qualification	Frequency	Valid Percent	Cumulative Percent
First Degree	27	54.0	54.0
Masters	9	18.0	72.0
Diploma	14	28.0	100.0
Total	50	100.0	

KNOWLEDGE ON THE PROCUREMENT ACT

4.2.4 Existence of Public Procurement Act

This question sought to establish from the parties involved in the procurement process their awareness on the existence of Public Procurement Act. Respondents were thus asked to indicate by ticking, Yes, No or Neutral. All the respondents indicated that, they are fully aware of the existence of the Act. This is reflected in the response as shown in Table 4.5. However, the strict adherence to the Act in the procurement at the Department is an issue debatable.

Table 4.5 Awareness of the Existence of PPA

Levels	Frequency	Valid Percent	Cumulative Percent
Yes	50	100.0	100.0
Total	50	100.0	

4.2.5 Involvement in Seminar or Workshop on Public Procurement Act

As part of the study it became imperative to establish from the parties if they have had any opportunity in the past or currently to have attended any seminar or workshop on the Act. As a result, the respondents were asked to indicate either by ticking Yes, No. Most of the respondents ticked 'No' representing a total of 54% whereas only 16% of the respondents have been involved in such seminars. The remaining 30% indicated, neither 'Yes' nor 'No'. The respondents with the neutral stance, although attended seminars but were not sure if the workshop was for that purpose.

The respondents who responded 'Yes' was later found out to be the beneficiaries of the maiden workshop on the procurement training by the Public Procurement Authority (see Osei-Tutu et al., 2011). It can be deduced therefore that, thereafter, there have not been any workshop aimed at training parties involved in the procurement process, especially the professionals.

Table 4.6 Involvement in Seminar or Workshop

Levels	Frequency	Valid Percent	Cumulative Percent
Yes	8	16.0	16.0
No	27	54.0	70.0
Neutral	15	30.0	100.0
Total	50	100.0	

4.2.6 Contracts and Procurement Method Adopted

The study was also interested in knowing if works awarded at the Department are procured using the procurement methods as stipulated by the Act. Accordingly, sixty-two works contracts were reviewed from the three locations altogether. The findings revealed that a chunk of the works are procured using the National Competitive Tendering (NCT), whereas a few works were procured through sole sourcing and Request For Quotation (RFQ) (Refer to Table 4.6). Apparently, International Competitive Tendering (ICT) and Restricted Tendering were observed not to be used at the Department in the procurement of Works.

Table 4.7 Contract and Procurement methods adopted

Qualification	Frequency	Valid Percent	Cumulative Percent
International Competitive Tendering	0	0.0	0.0
National Competitive Tendering	47	75.81	75.81
Sole Sourcing	2	3.23	72.0
Request For Proposals	13	21.0	100.0
Restricted Tendering	0	0.0	100.0
Total	62	100.0	100.0

4.3 ANALYSIS OF DEPENDENT VARIABLES

The statistical analyses were undertaken, namely descriptive statistics, one-sample t-test, and ONE-WAY Anova. The one-sample t-test was used to establish the relative significance of the variables i.e. challenges of Procurement at the Department of Feeder Roads whilst the ONE-WAY Anova was used to assess the difference (variance) in views of the respondents in the various locations on impact of the Act on procurement practices. The procedure, findings and relevant discussions are as follows.

4.3.1 Challenges of Procurement as a Result of the ACT 663

In an attempt to mapping out the challenges of procurement at the Department of Feeder Roads as a result of the implementation of the Act, it deemed necessary to establish the various implementation challenges at the Department. In view of this eight challenges were identified from literature and respondents were asked to rate them according to their

degree of significance on a five-point likert scale items (Not Very Significant, Not Significant, moderately Significant, Significant and Very Significant).

In analysing the results of the challenges, this research was interested in the implementation challenges in order of significance. Hence, in establishing the relative significance of the variables the one-sample t-test was used.

According to Ahadzie (2007), the one sample t-test normally is used to establish whether a sample mean is significantly deviant from a hypothesized mean. The hypothesis for a single sample –test is typically set thus:

Ho: $\mu = \mu_0$

Ha: $\mu < \mu_0$ or $\mu > \mu_0$

Where, Ho denotes the null hypothesis, Ha denotes the alternative hypothesis and μ_0 denotes the hypothesized or population mean. In a typical one-sample-test, the mean of the test group, degree of freedom for the test (which approximates the sample size), the t-value (which is an indication of the strength of the test) and the p-value (i.e. the probability value that the test is significant) are commonly reported (see for instance, Ahadzie, 2007; Field, 2005; Hair et al, 1998; Reymont & Joreskog, 1993). Field (2005) also argues that with a sample size of more than 50, the sampling distribution will almost always approach normal distribution albeit considering the size of the sampling frame or population. Subsequently, with a sample size of 50 the assumptions of the central limit theorem were invoked to support the view that the sample size is relatively adequate to draw statistical inferences (see for instance Ahadzie, 2007).

Subsequently, a statistical t-test of the mean carried out to determine whether the population considered a specific criterion to be significant or otherwise. The mean ranking of each criterion tabulated to help elucidate the consensus reached by the respondents. A summary of the test results presented in Tables 4.6 to 5.4.

The mean for each criterion including the associated standard deviation and standard error presented in Table 4.6, 4.9 and 5.2 for the locations, Tamale, Kumasi and Accra respectively. For each criterion, the null hypothesis was that the criterion was not significant ($H_0: U = U_0$) and the alternative hypothesis was that the criterion was significant ($H_a: U > U_0$), where U_0 is the population mean. Thus U_0 represented the critical rating above which the criterion considered significant. Given that the rating adopted ascribed higher ratings of 4 and 5 to important and very important criterion, U_0 fixed at an appropriate level of 3.5 (see for instance Ahadzie, 2007; Ling, 2002).

The significance level was also set at 95% in accordance with orthodox risk levels (see for instance Ahadzie, 2007 and Colen, 1992 cited in Ling, 2002). That is, based on the five-point Likert scale rating, a success criterion deemed significant if it had a mean of 3.5 or more. Where two or more criteria have the same mean, the one with the lowest standard deviation assigned the highest significance ranking (see for instance Ahadzie, 2007; Field, 2005; Shen and Liu, 2003).

According to Ahadzie (2007), the standard error is the standard deviation of sample means as well as a measure of how likely a sample represents the population. Hence, a large standard error (relative to the sample mean) suggests that there is a lot of variability between means of different samples (Ahadzie, 2007). A small standard error suggests that

most sample means are similar to the population mean, therefore the sample is likely to be an accurate reflection of the population (Ahadzie, 2007; Field, 2000; 2005). The standard error associated with all the means is relatively close to zero suggesting that the sample chosen is an accurate reflection of the population (Table 4.6, 4.9 and 5.2).

Table 4.8 Results of t-test showing one-sample statistics of Challenges (Location: Accra)

Challenges	N	Mean	Std. Deviation	Std. Error Mean
Delays Payment	10	3.8000	.78881	.24944
Delays the award of contract	10	4.6000	.51640	.16330
Provides too many requirements for a tender document	10	4.4000	1.07497	.33993
Encourages over concentration on price as the basis of the award instead of quality	10	3.7000	.67495	.21344
Lack of qualified procurement personnel	10	3.2000	1.03280	.32660
Lack of Training avenues or institutions	10	3.8000	1.13529	.35901
Poor Record management	10	3.9057	.86077	.11824
Poor Contract Management and high cost of Advertisement	10	3.6038	1.09789	.15081

Table 4.9 One-sample Test of challenges (Location: Accra)

Test Value = 3.5						
Challenges	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Delays Payment	1.203	9	.260	.30000	-.2643	.8643
Delays the award of contract	6.736	9	.000	1.10000	-1.0388	.4388
Provides too many requirements for a tender document	2.648	9	.027	.90000	.1310	1.6690
Encourages over concentration on price as the basis of the award instead of quality	.937	9	.373	.20000	-.2828	.6828
Lack of qualified procurement personnel	-.919	9	.382	-.30000	-.5121	1.1121
Lack of Training avenues or institutions	.836	9	.425	.30000	.7306	1.4694
Poor Record management	3.431	9	.001	.40566	.1684	.6429
Poor Contract Management and high cost of Advertisement	.688	9	.494	.10377	-.1988	.4064

Table 4.10 Ranking of One-sample statistics of challenges (Location: Accra)

Challenges	Ranking	Mean	Std. Deviation	Sig. (1-tailed)
Delays Payment	4	3.8000	.78881	.13
Delays the award of contract	1	4.6000	.51640	.000
Provides too many requirements for a tender document	2	4.4000	1.07497	.0135
Encourages over concentration on price as the basis of the award instead of quality	6	3.7000	.67495	.1865
Lack of qualified procurement personnel	8	3.2000	1.03280	.191
Lack of Training avenues or institutions	5	3.8000	1.13529	.2125
Poor Record management	3	3.9057	.86077	0.0005
Poor Contract Management and high cost of Advertisement	7	3.6038	1.09789	0.247

Table 4.11 Results of t-test showing one-sample statistics of challenges (Location: Kumasi)

Challenges	N	Mean	Std. Deviation	Std. Error Mean
Delays Payment	20	3.7000	.92338	.20647
Delays the award of contract	20	4.5000	.76089	.11413
Provides too many requirements for a tender document	20	4.4500	.75915	.16975
Encourages over concentration on price as the basis of the award instead of quality	20	3.0500	.82558	.18460
Lack of qualified procurement personnel	20	3.6000	.88258	.19735
Lack of Training avenues or institutions	20	3.9500	.51042	.17014
Poor Record management	20	4.1321	.80950	.11119
Poor Contract Management and high cost of Advertisement	20	3.9057	.86077	.11824

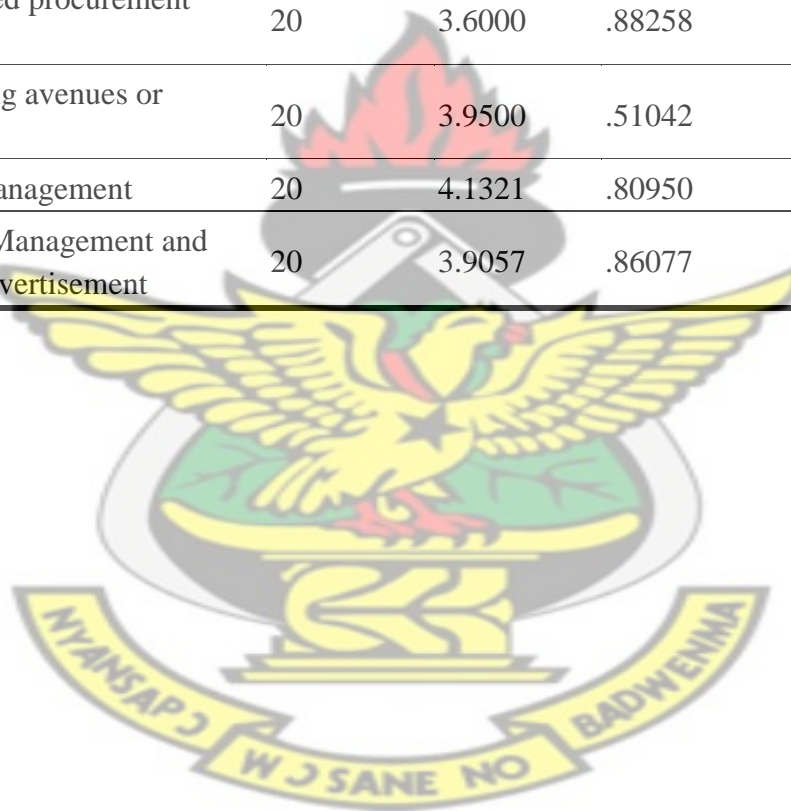


Table 4.12 One-sample statistics of Challenges (Location: Kumasi)

Test Value = 3.5						
Challenges	t	df	Sig. tailed)	(2- Mean Difference	95% Interval Difference	Confidence of the
					Lower	Upper
Delays Payment	.969	19	.345	.20000	-.2322	.6322
Delays the award of contract	5.878	19	.000	.45000	.2111	.6889
Provides too many requirements for a tender document	5.596	19	.000	.95000	.5947	1.3053
Encourages over concentration on price as the basis of the award instead of quality	-2.438	19	.025	-.45000	-.8364	-.0636
Lack of qualified procurement personnel	.507	19	.618	.10000	-.3131	.5131
Lack of Training avenues or institutions	3.943	19	.001	1.00000	.6439	1.3561
Poor Record management	5.684	19	.000	.63208	.4089	.8552
Poor Contract Management and high cost of Advertisement	3.431	19	.001	.40566	.1684	.6429

Table 4.13 Ranking of One-sample statistics of Challenges (Location: Kumasi)

Challenges	Ranking	Mean	Std. Deviation	Sig. (1-tailed)
Delays Payment	6	3.7000	.92338	.1725
Delays the award of contract	1	4.5000	.51042	.0005
Provides too many requirements for a tender document	2	4.4500	.75915	.000
Encourages over concentration on price as the basis of the award instead of quality	8	3.0500	.82558	.0125
Lack of qualified procurement personnel	7	3.6000	.88258	.309
Lack of Training avenues or institutions	4	3.9500	.76089	.000
Poor Record management	3	4.1321	.80950	.000
Poor Contract Management and high cost of Advertisement	5	3.9057	.86077	.0005

Table 4.14 Results of t-test showing one-sample statistics of Challenges (Location: Sunyani)

challenges	N	Mean	Std. Deviation	Std. Error Mean
Delays Payment	20	3.6500	.98809	.22094
Delays the award of contract	20	3.6000	1.04630	.23396
Provides too many requirements for a tender document	20	4.7500	.55012	.12301
Encourages over concentration on price as the basis of the award instead of quality	20	3.0500	.68633	.15347
Lack of qualified procurement personnel	20	4.2830	.73270	.16384
Lack of Training avenues or institutions	20	4.7200	.56034	.13401
Poor Record management	20	3.9434	.88611	.12172
Poor Contract Management and high cost of Advertisement	20	3.7000	.86330	.11858

Table 4.15 One-sample statistics of Challenges (Location: Sunyani)

Test Value = 3.5						
Challenges	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Delays Payment	.679	19	.505	.15000	-.3124	.6124
Delays the award of contract	.427	19	.674	.10000	-.3897	.5897
Provides too many requirements for a tender document	10.162	19	.000	1.25000	.9925	1.5075
Encourages over concentration on price as the basis of the award instead of quality	-2.932	19	.009	-.45000	-.7712	-.1288
Lack of qualified procurement personnel	1.221	19	.237	.20000	-.1429	.5429
Lack of Training avenues or institutions	9.543	19	.000	1.10500	.7825	1.2085
Poor Record management	3.974	19	.000	.51887	.2569	.7809
Poor Contract Management and high cost of Advertisement	5.968	19	.000	.65094	.4321	.8698

Table 4.16 Ranking of One-sample statistics of Challenges (Location: Sunyani)

Challenges	Ranking	Mean	Std. Deviation	Sig. (1-tailed)
Delays Payment	6	3.6500	.98809	.2525
Delays the award of contract	7	3.6000	1.04630	.337
Provides too many requirements for a tender document	1	4.7500	.55012	.000
Encourages over concentration on price as the basis of the award instead of quality	8	3.0500	.68633	.0045
Lack of qualified procurement personnel	4	3.7000	.73270	.1185
Lack of Training avenues or institutions	2	4.7200	.56034	.000
Poor Record management	3	3.9434	.88611	.000
Poor Contract Management and high cost of Advertisement	5	3.7000	.86330	.000

Table 4.17 Summary of Rankings of Challenges by the various locations

Challenges	Sunyani Ranking	Kumasi Ranking	Accra Ranking
Delays Payment	6	6	4
Delays the award of contract	7	1	1
Provides too many requirements for a tender document	1	2	2
Encourages over concentration on price as the basis of the award instead of quality	8	8	6
Lack of qualified procurement personnel	4	7	8
Lack of Training avenues or institutions	2	4	5
Poor Record management	3	3	3
Poor Contract Management and high cost of Advertisement	5	5	7

The fact that most of the standard deviations all less than 1.0 indicates that there is little variability in the data. Alternatively, standard deviation values of less than 1.0 indicated consistency in agreement among the respondents of the reported level of results (see for instance, Field, 2005; Steven, 1996). Critical analysis of the findings presents the palpable explanations to the above.

Provides too many requirements for a tender document

The Act is supplemented by several documents including the standard tender document. The tender document provides the legal framework that guides a particular contract. However, the Act provides too many requirements for a tender document. Several requirements would have to be met in order to successfully bid and win a particular contract. This has been found to be a major challenge of procurement activities at the Department of Feeder Roads. Accordingly, the respondents in the three locations all considered the challenge as significant, ranking 1st, 2nd and 2nd in Sunyani, Accra and Kumasi respectively.

Delays the Award of contract

The bureaucratic process of the procurement process as stipulated by the Act leads to a delay in the award of contract. Depending on the threshold involved, various correspondences would have to be submitted to appropriate institutions and bodies for concurrent approval among other things. To prevent this, contracts are usually split into smaller lots. This, Ameyaw et al. (2012) found it to be a major implementation challenge of the public procurement Act in Ghana. Surprisingly, respondents in Accra and Kumasi ranked the challenge 1st whilst was ranked 7th by respondents in Sunyani. The plausible explanation may be that contracts in Sunyani are usually in small lots that avoids the bureaucratic nature of the process as proposed by the Act.

Poor Record management

Record Keeping and management are imperative to sound procurement system. Accordingly, Thai (2001) argued that feedback is critical in a procurement system, especially the public procurement system. This is because record management can improve accountability and enhance communication, the very tenets of the public procurement Act in Ghana. Unfortunately, organisational and logistical limitations hamper effective record management during and after the procurement process at the Department of Feeder Roads. Consequently, the respondents in the three locations all ranked the challenge as the 3rd significant challenge. The findings corroborates the works of Ameyaw et al. (2012) and Osei-Tutu et al. (2011) that identified poor record keeping as a challenge that militate against the implementation of the Act. More so, moving from paper-based procurement to E-procurement will further deepen this challenge if not addressed immediately.

4.3.2 Benefits of Procurement ACT on Procurement Activities at the Department of Feeder Roads

More so, it deemed necessary to establish from the respondents the benefits of the passage of the Act on procurement activities at the Department of Feeder Roads. Respondents were thus asked to rate the benefits identified from literature to indicate their level of significance. In the analysis of the extent of their agreement to the variables in order to ascertain the benefits of the Act on procurement activities, the Relative Importance Index (RII) together with standard deviation and mean score was used. Based on the five-point likert scale, variables with Mean greater than 3.5 are considered

important. The score of each factor is calculated by summing up the scores given to it by the respondents (for instance see Badu et al., 2013; Fugar and Agyakwah-Baah, 2010). For a five-point response item, RII produces a value ranging from 0.2 – 1.0 (cf Badu et al., 2013; Ugwu and Haupt, 2007). In the calculation of the Relative Importance Index (RII), the following formula was used (Badu et al., 2013):

$$RII = \frac{\sum W}{A * N}$$

Where, W: weighting given to each statement by the respondents and ranges from 1 to 5;

A – Higher response integer (5), and N – total number of respondents.

The drivers were all considered to be important having mean values greater than 3.50 and standard deviations less than 1.00.

Table 4.18 Benefits of the Procurement Act

A. Benefits of PPA on procurement activities	Weighting	RII	Mean	Standard Deviation	Ranking
Ensures same procedures applied are to all	90	0.90	4.500	.51299	1
Promotes competition	87	0.87	4.350	.58714	2
Increases accountability	85	0.85	4.250	.91047	3
Reduces fraud-Over/under invoicing	84	0.84	4.200	.76777	4
Provides value for money	81	0.81	4.050	.68633	5
Cost savings	81	0.81	4.050	.88704	6
Effective procurement ethics	78	0.78	3.900	.78807	7

The perspectives of respondents in Accra, Kumasi and Sunyani of the seven benefits of the Procurement Act to the Department of Feeder Roads and their procurement practices were analysed based on the relative importance index and mean score ranking. Table 4.16 presents the results and ranks of the various factors by all the respondents. Generally, the respondents in the various locations agreed that the top four most palpable benefits of the Act to the Department of Feeder Roads are:

- Ensures same procedures applied are to all
- Promotes competition
- Increases accountability
- Reduces fraud-Over/under invoicing

Fairness and Equality

The main object of the Public Procurement Act, 2003 (Act 663) is to ensure sanity in the procurement process by providing equal opportunity for all potential bidders whilst also ensuring that same procedures are applied to all bidders (Osei-Tutu et al., 2011). Correspondingly, the Act was noted to have brought such benefits. This is seen in the response of the respondents in which the respondents altogether ranked “*ensures same procedures applied are to all*” first. The findings corroborate the findings of (Osei-Tutu et al., 2011; Ministry of Finance, 2001). The variable obtained 4.500 and 0.513 mean value and standard deviation respectively. The mean value exceeds the hypothesized mean value suggesting that the respondents perceived it as significance. Also, the standard deviation less than 1.00 indicates consistency among the respondents with respect to their response.

Promotes competition

Subsequently, the respondents ranked competition as the second highest benefit after **fairness and equality** attracting a mean value of 4.350 significantly higher than the hypothesized mean and a standard deviation of 0.587. The finding agrees with Raymond (2008) that observed that many of the works are procured under competition. Competition promotes value for money and ensures efficiency in the public procurement system.

Increases Accountability

In the light of pervasive corruption in the procurement system, the only way to restore public trust is through transparent business conduct. Accordingly, Smith-Deighton (2004) defined accountability as government or public officials having high regard for the law in the conduct of business. This is what the public procurement Act sets to achieve; it details the necessary framework arrangement for the conduct of public procurement. It was therefore not surprising respondents' rated "*increases Accountability*" third benefit of the Act.

4.3.3 Impact of Procurement Act on Procurement Activities

Having known the benefits of the procurement Act and the implementation challenges of the Act, it deemed fit to establish from the respondents the impact of the Act on the procurement practices at the Department of Feeder Roads. As part of the data collection respondents were asked to indicate the impact of the Act.

In the analysis of the impact of the Act on procurement practices, a ONE- WAY ANOVA was used to cast inference on the calculated mean scores and standard deviations to

determine the extent of agreement among the three groups on the impact of the Act on the procurement practices at the Department of Feeder Roads. The aim is to find the relationship among the three locations identified in the study scope. In this case, the test statistic has an F sampling distribution with df1 and df2 degrees of freedom at a significant level (α) of 0.05 (5%). The analyses and results of the investigation are presented (Tables 4.17) and discussed in this section.

Null Hypothesis (H_0): There is no difference between locations about the variables impacting on the procurement practices at the Department of Feeder Roads

Alternative Hypothesis (H_a): There is significance difference between locations about the variables impacting on the procurement practices at the Department of Feeder Roads

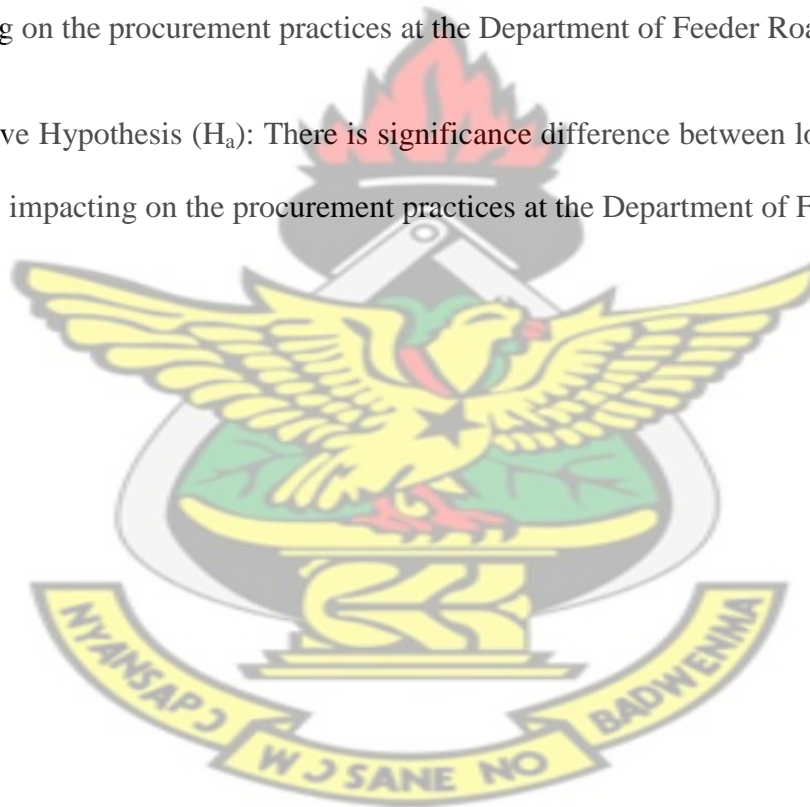


Table 4.19 One-way Anova of Procurement Act on Contracts in the Department of Feeder Roads

Impact		Sum of Squares	df	Mean Square	F	Sig.
Delays in payment	Between Groups	.500	2	.250	.603	.552
	Within Groups	19.500	47	.415		
	Total	20.000	49			
Cumbersome and expensive procedures or requirements	Between Groups	.000	2	.000	.000	1.000
	Within Groups	20.000	47	.426		
	Total	20.000	49			
Enhancing competition	Between Groups	.920	2	.460	.936	.399
	Within Groups	23.100	47	.491		
	Total	24.020	49			
Communication enhancement	Between Groups	.420	2	.210	.449	.641
	Within Groups	22.000	47	.468		
	Total	22.420	49			
Saves Time	Between Groups	.630	2	.315	.717	.494
	Within Groups	20.650	47	.439		
	Total	21.280	49			
Ensures checks and Balances	Between Groups	.900	2	.450	.896	.415
	Within Groups	23.600	47	.502		
	Total	24.500	49			
Political interference	Between Groups	.070	2	.035	.058	.944
	Within Groups	28.250	47	.601		
	Total	28.320	49			

4.3.3.1 Delays in payment

Decision: Reject H_0 since F calculated (0.603) is greater than significant value (0.552) and conclude that there is significant difference between the agreements of respondents in the three locations on the impact of the Act on procurement practices at the Department of Feeder Roads. The implication is that the Act has impacted severely on payment of contractors and suppliers, thus affecting the procurement practices at the Department of Feeder Roads.

4.3.3.2 Cumbersome and expensive procedures or requirements

Decision: Accept H_0 since F calculated (0.000) is less than significant value tabulated (1.000) and concludes that there is no significant difference between the agreements of the different respondents in the three locations on the impact of Act on procurement practices at the Department. This shows that among the locations strongly believed that the cumbersome and expensive procedures or requirements in the Act and its supporting documents impact significantly on the procurement practices at the Department of Feeder Roads. For instance, the advertisement in the national dailies (PPA, 2003) adds on to the high cost of the procurement process, for which the Department may not be adequately funded to observe.

4.3.3.3 Enhancing Competition

Decision: Reject H_0 since F calculated (0.936) is greater than significant value (0.399) and conclude that there is significant difference between the agreements of respondents in the three locations on the impact of the procurement Act on the procurement process at the Department of Feeder Roads in enhancing competition. This finding is contrary to

what Ameyaw et al. (2012) observed procurement entities deliberately limit competition in the procurement process.

4.3.3.4 Communication Enhancement

Decision: Accept H_0 since F calculated (0.449) is less than significant value tabulated (0.641) and concludes that there is no significant difference between the agreements of the different respondents in the three locations on the impact of the Act on communication in the procurement process at the Department of Feeder Roads. The findings corroborate the work of Adu (2011) which established that procurement information reached audience on time.

4.4 CHAPTER SUMMARY

This chapter was devoted to the analysis and discussions of the results obtained from the field survey. It began with a brief discussion of the survey questionnaires and descriptive statistics of the results obtained from the field. The chapter concluded with mean score index of the challenges of procurement practices as a result of the public procurement Act. Additionally, Relative important index (RII) and A ONE-WAY ANOVA was used to analyse other specific objectives of the research.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The history and the essence of procurement have long been understood by historians and researchers alike. To them, standard of living and economic growth can be achieved through efficient management of public procurement. The complex nature of the procurement system calls for an integrated and collective approach to discussing and initiating reforms in the public procurement system. Since the enactment of the public procurement Act, a lot of public procurement processes at various MMDAs has been impacted. This was instrumental in fueling the conduct of this study.

In this chapter, the research is concluded by summarizing the issues that have thoroughly been discussed throughout the study. Additionally, an overview of how the research objectives were attained is presented followed by the main conclusions of the study. The study is finally ended with recommendations and direction for further research based on the limitations and conclusion of the study.

5.2 REVIEW OF OBJECTIVES

The main aim of this research, as noted previously, was to assess the impact of the Public Procurement Act (663) on contracts in the Department of Feeder Roads. In achieving this aim, four objectives were outlined. They are:

- To ascertain the competence of procurement officials in the Department of Feeder Roads

- To identify the challenges in the procurement of works, services and goods in the Department of Feeder Roads.
- To examine the benefits of the implementation of the Public Procurement Act (663) in the Department of Feeder road.
- To identify the impacts of the implementation of the Public Procurement Act (663)

A methodological approach involving a literature review process, a questionnaire development and administration stage and finally a data analysis section using important indices to rank the benefits of the Act 663, a one-sample t-test to determine the significance of the challenges of procurement activities and A ONE-WAY ANOVA assess the impact of the Act 663 on procurement practice, were used.

Here, the research objectives are revisited to highlight the extent to which they were attained through the various stages of the research.

OBJECTIVE 1: To identify the challenges in the procurement of works, services and goods in the Department of Feeder Roads.

The first objective was realised through the reviewing of extant literature to identify the challenges of procurement activities at the Department of Feeder Roads. Eight (8) challenges were identified altogether from the literature. Here, various views among the three classes of respondents were analysed to validate the relationship of their agreement. Out of the eight (8) variables, most of the challenges were indicated as significant by the respondents except few that varied across the various locations.

OBJECTIVE 2: To examine the benefits of the implementation of the Public Procurement Act (663) in the Department of Feeder Roads

This objective was satisfied by examining the benefits of the implementation of the Act 663. In all seven (7) benefits were identified and all the seven came out as significant benefits of the implementation of the Act.

OBJECTIVE 3: To identify the impacts of the implementation of the Public Procurement Act (663).

In order to identify the impacts of the implementation, seven impacts were identified from literature and the ONE-WAY ANOVA was subsequently used to assess the variance of the impact of the implementation of the Act in order to validate the relation of their agreement. Out of the seven (7) impacts, there were four (4) variables with significant difference between the agreements of the respondents at the three different locations whereas the remaining three (3) variables had no difference.

5.3 RECOMMENDATIONS

As noted throughout the study, public procurement activities constitute a larger portion of government budget after personal emoluments. The World Bank reports even pegged it at 50-70% of the national budget. This suggests the importance and significance of procurement in Ghana and its causality with economic growth. If well managed can boost the growth of the economy. As a result, several studies have been conducted in this discipline mostly around reforms and implementation challenges. Ameyaw et al. (2012), indeed, argue that no empirical evidence even exists on the significance impact of the Act on public procurement. Consequently, this study was conducted to assess the impact of

the Public Procurement Act (663) in the Department of Feeder Roads. Against this background, the following recommendations are set forth.

- **Training avenues and Institutions**

From the findings and the literature became apparent that the greatest challenge to the implementation of the Act 663 is inadequate professionals. Their knowledge influence their interpretation of the Act which can either flout or conform to the requirements of the Act. It was also revealed from the literature that after the training programs in 2007, there have not been any kind of training since. In view of this, the study recommends regular training and short courses in order to update and upgrade their procurement skills. Of course, that will require funding. It is therefore proposed that budgetary allocations be made to the Public Procurement Authority in carrying out this mandate.

- **Setting up a Professional Procurement Body**

Like many disciplines it is important to set up professional body regulated by law to have an oversight responsibility of the actions and omissions of her members. In other parts of the world, there exist procurement professionals' body; but unfortunately, such a body is yet to be formed in Ghana. Hence, the ethical standards of the professionals are in question, no code of conduct whatsoever except those stipulated possibly by the Act. It is, therefore, recommended that the formation of such a body to administer this important role of oversight responsibility is long overdue.

- **Record Keeping and Management**

Feedback and communication in procurement are imperative to ensuring sound management procurement system. Unfortunately, there seems to be a gap in the

management of record keeping, a mismatch between what is practiced and what is known to be the best practice. The gradual inclination towards E-procurement should even be a more reason for the adoption of good record keeping habits and policies. However, the findings revealed that there is a poor record keeping habit among the three locations of study. Hence, it is recommended that management and policy making at the various levels of procurement process ensures strict adherence to good record keeping and management policies.

5.4 LIMITATION OF THE STUDY

As with every survey based research there are bound to be limitations which need to be acknowledged. It is important to acknowledge the relative small sample size used for the study. Consequently, analyses of the dependent variables were constrained by the fact that those variables with mean less than the hypothesized mean are subjective; and the possibility that the mean scores may change when a larger sample size is chosen.

Notwithstanding, the demographic profile of the respondents suggest that they have reasonable experience in research which should generate some credibility in the responses received.

5.5 DIRECTIONS FOR FUTURE STUDY

The study limitation spurred new areas to be explored. These areas need further research attentions. The following areas have been suggested for future studies:

- A more holistic approach must be adopted to include the end users of the road in order to assess the impact the implementation of the Act 663 has had on them.

- More so, the current study employed quantitative research design. Qualitative study can thus also be performed in order to possibly develop a framework for the assessment of the impact of the Act on procurement processes i.e. Quantify the extent of the impact.

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APPENDICES

APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF ARCHITECTURE AND PLANNING

DEPARTMENT OF BUILDING TECHNOLOGY

KUMASI

KNUST

INTRODUCTORY LETTER

I am **WUAKU SAMUEL HANS KWEKU**, a student at Kwame Nkrumah University of Science and Technology offering **MSc. PROCUREMENT MANAGEMENT**. I am carrying out my research on **‘INVESTIGATING THE IMPACT OF PUBLIC PROCUREMENT ACT, 2003 (ACT 663) OF GHANA ON CONTRACTS IN DEPARTMENT OF FEEDER ROADS**. I kindly request you to provide the necessary information having chosen you to be one of the respondents to enable me complete my research project successfully. This questionnaire is for academic purposes only.

Thank you

.....

SAMUEL HANS KWEKU WUAKU

SECTION A: BACKGROUND INFORMATION

Tick where applicable (✓)

1. Please indicate your location in line with the research scope?
 - a) Brong Ahafo Region (Sunyani)
 - b) Ashanti Region (Kumasi)
 - c) Greater Accra Region (Accra)
2. What is your profession?
 - a) Regional Contracts Manager
 - b) Regional Quantity Surveyor
 - c) Regional Civil Engineer
 - d) Regional Procurement Officer
 - e) Contractor
3. How many years have you worked on procurement related activities?
 - a) Less than 5 years
 - b) 5 – 10 years
 - c) More than 10 years
4. What is your level of academic qualification?
 - a) First Degree
 - b) Master's Degree
 - c) Diploma
 - d) Certificate

SECTION B: THE ESTABLISHMENT OF PROCUREMENT SYSTEM IN GHANA

5. Are you aware of the existence of the Public Procurement Act, 2003, (Act 663) in the regulation of public procurement activities?
 - a) Yes ☐
 - b) No ☐

6. Have you ever partaken in any seminar or workshop on the public procurement

Act and its related activities

- a) Yes
- b) No
- c) Neutral

SECTION C: CHALLENGES FACED IN PROCUREMENT

I. In your years of experience, do you think the following are challenges faced in procurement at the Department of Feeder Roads? Kindly indicate the level of significance using the scale below.

1-Not Very Significant; 2-Not Significant; 3-Neutral; 4-Significant; 5-Very Significant

No	CHALLENGES	RANKINGS				
		1	2	3	4	5
	Delays Payment					
	Delays the award of contract					
	Provides too many requirements for a tender document					
	Encourages over concentration on price as the basis of the award instead of quality					
	Lack of qualified procurement personnel					
	Lack of Training avenues or institutions					
	Poor Record management					
	Poor Contract Management and high cost of Advertisement					

SECTION D: BENEFITS OF THE IMPLEMENTATION OF THE ACT 663

- I. In your years of experience, do you perceive the following as benefits the implementation of the Act 663 in procurement at the Department of Feeder Roads? Kindly indicate the level of significance using the scale below.

1-Not Very Significant; 2-Not Significant; 3-Neutral; 4-Significant; 5-Very Significant

No	BENEFITS	RANKINGS				
		1	2	3	4	5
	Ensures same procedures applied are to all					
	Promotes competition					
	Increases accountability					
	Reduces fraud-Over/under invoicing					
	Provides value for money					
	Cost savings					
	Effective procurement ethics					

SECTION E: IMPACT OF PROCUREMENT ACT ON PROCUREMENT PRACTICES

I. Kindly rank the following impacts on the likert scale provided below

1-Not Very Significant; 2-Not Significant; 3-Neutral; 4-Significant; 5-Very Significant

No	BENEFITS	RANKINGS				
		1	2	3	4	5
	Delays in payment					
	Cumbersome and expensive procedures or requirements					
	Enhancing competition					
	Communication enhancement					
	Saves Time					
	Ensures checks and Balances					
	Political interference					

THANK YOU