

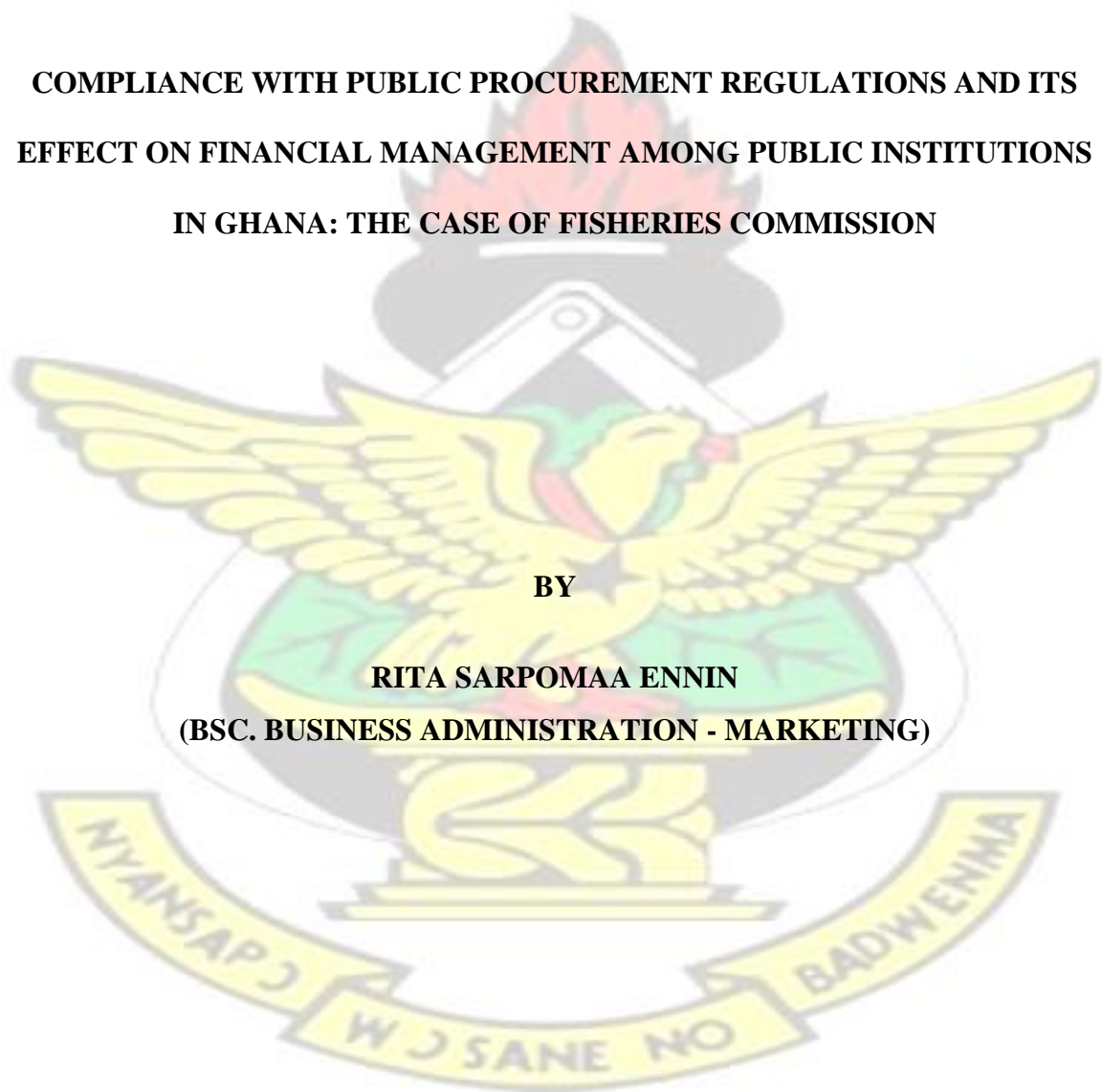
KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY
COLLEGE OF HUMANITIES AND SOCIAL SCIENCE
SCHOOL OF BUSINESS

KNUST

**COMPLIANCE WITH PUBLIC PROCUREMENT REGULATIONS AND ITS
EFFECT ON FINANCIAL MANAGEMENT AMONG PUBLIC INSTITUTIONS
IN GHANA: THE CASE OF FISHERIES COMMISSION**

BY

RITA SARPOMAA ENNIN
(BSC. BUSINESS ADMINISTRATION - MARKETING)



NOVEMBER 2023

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PG9263721

A thesis submitted to the Institute of Distance Learning, Department of Supply Chain and Information Systems, School of Business, College of Humanities and Social Sciences, Kwame Nkrumah University of Science and Technology in partial fulfilment of the requirements for the award of the degree of

MASTER OF SCIENCE IN
LOGISTICS AND SUPPLY CHAIN MANAGEMENT

NOVEMBER 2023

DECLARATION

I, Rita Sarpomaa Ennin, hereby declare that this thesis, “Compliance with Public Procurement Regulations and its Effect on Financial Management among Public Institutions in Ghana: The Case of Fisheries Commission”, consists entirely of my own work produced from research undertaken under supervision and that, to the best of my knowledge and belief, no part of it has been published or presented for another degree elsewhere, except for permissible references from other sources, which have been duly acknowledged.

Rita Sarpomaa Ennin
(PG9263721) Signature Date

Certified By:
Prof. Nathaniel Boso
(Supervisor) Signature Date

Certified by:
Prof. David Asamoah
(Head of Department, SCIS) Signature Date

ABSTRACT

This present study aims to establish the compliance level of the procedures and guidelines of the Public Procurement Laws and its effect on financial management, as well as analyse the implementation challenges. The study would be helpful to public institutions in Ghana to create awareness and establish the compliance level among public institutions to which the Fisheries Commission belongs. It focuses on public procurement in public institutions using the Fisheries Commission as a case study. The study used a descriptive and exploratory research design. The population of the study comprised all employees of the Fisheries Commission who engage in the procurement of Goods, Services and Works. Fifteen (15) respondents were selected through the purposive sampling technique because there was a need to obtain appropriate responses from persons knowledgeable in the subject matter. The data was analysed with Statistical Package for Social Sciences (SPSS) and Microsoft Excel, and the results were presented in tables and charts. Unfortunately, the key limiting constraint to this study is the fact that there are limited resources in terms of funds and time, without which the study would have covered more public institutions. Determination of the level of compliance and its effect on financial management was by the Relative Importance Index (RII) method. At the same time, the Kendall Coefficient of Concordance tested the degree of agreement in ranking the challenges by respondents. The study results revealed that all the respondents have good knowledge about the public procurement legal and regulatory frameworks and documents, with the Standard Tender Documents being well-known. Overall, the Fisheries Commission's compliance level was high (67%) when measured by the criteria of the PPME Tool. Procurement processes recorded the highest level of compliance (76%). Though contract management was above average, on the other hand, it recorded the lowest level of compliance (61%). Furthermore, they showed that the area of financial management those respondents agree to be the most derived benefit from complying with public procurement policies and practices is transparency, which recorded a relative importance index of 80.2%. It was followed by value for money, budgetary, and expenditure controls, with each scoring relative importance index of 78.7%, 70.4% and 63.3%, respectively. Fourteen (14) procurement implementation challenges were identified from the literature and presented to respondents to select and rank the ones that affected them. The study showed that the most pressing challenge is delays in the payment of contractors and suppliers, with a mean rank of 1.8, and the least ranked challenge is that the "Threshold limit is too small for an entity like the Fisheries Commission in case of emergency" recorded a mean rank of 13.1. The study concluded that, notwithstanding challenges encountered in implementing procurement regulations, a high level of compliance was recorded. Key recommendations include procurement entities must adhere to section 43 of the Procurement Act fairly and transparently by adopting electronic procurement in the Public Sector; contractual agreements with contractors/suppliers should be honoured by effecting prompt payment upon completion of projects to foster speedy execution of subsequent assignments. For future research, the scope can be broadened to cover all public institutions in a cross-sectional survey for meaningful generalisation.

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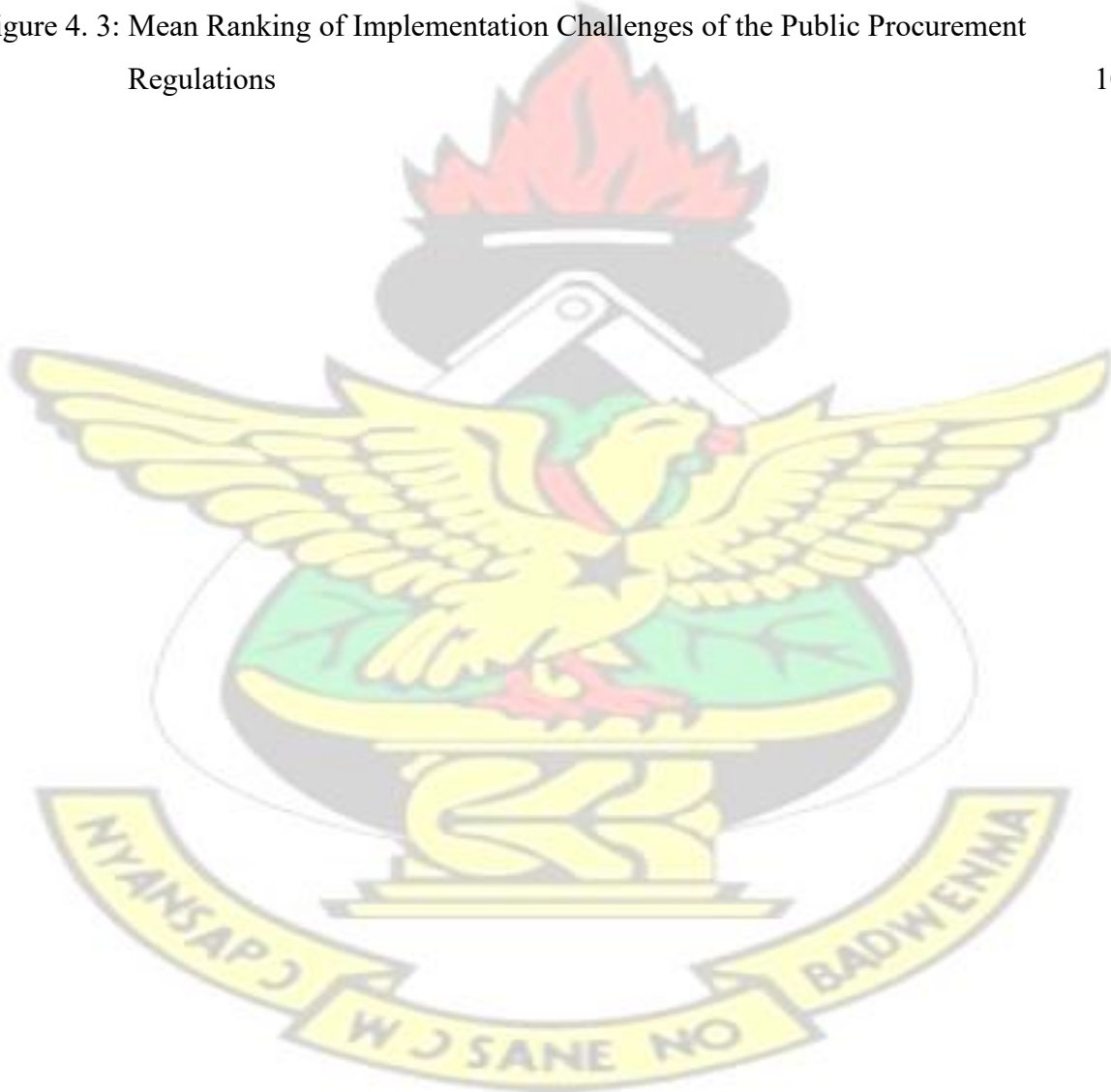
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LIST OF ABBREVIATIONS

CAPI	Computer-Assisted Personal Interviews
CPAR	Country Procurement Assessment Report
DAC	Development Assistant Committee
EC	European Commission
GNP	Gross National Product
IACCM	International Association for Contract and Commercial Management
ICT	International Competitive Tendering
KCI	Concerning Key Compliance Indicator
MMDA	Metropolitan, Municipal and District Assembly
MoF	Ministry of Finance
NCT	National Competitive Tendering
NGO	Non-Governmental Organisation
ODPP	Office of the Director of Public Procurement
OECD	Organization for Economic Cooperation and Development
PFM	Public Financial Management
PNDC	Provisional National Defence Council
PPA	Public Procurement Authority
PPME	Public Procurement Model of Excellence
PUFMARP	Public Financial Management Reform Programme
RII	Relative Importance Index
SPSS	Statistical Package for Social Sciences
STDs	Standard Tender Documents
UCOI	Unit Cost of Infrastructure

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DEDICATION

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CHAPTER ONE

INTRODUCTION

1.1 Background

Financial management entails the acquisition and proficient utilization of funds in a cost-effective and efficient manner (Manasse, 2021; Sarfo and Baah-Mintah, 2013). Public procurement, as a vital facet of government fiscal strategies, is aimed at enhancing the oversight and execution of public spending, ultimately advancing the realm of public financial management (Sarfo and Baah-Mintah, 2013). They are accomplished mainly by guaranteeing appropriate tax and non-tax receipts and cutting back on state spending. Public procurement in Ghana is a substantial government activity that produces considerable financial assets and has been regarded as a component of a broader transformation program to enhance public financial management. The core objective of a procurement system is to oversee this procedure by monitoring expenditure across various commodity categories, expediting invoice processing, monitoring financial commitments, and effectively handling cash flow. Because the system mandates the establishment of particular internal controls and procedures, full integration of a procurement system typically demands substantial alterations to the existing business processes (Senzu and Ndebugri, 2017).

The Public Procurement Act of Ghana, referred to as Act 663, was promulgated by the legislature and formally published in 2003. This legislation laid the foundation for the requisite rules, directives, instructions, and standards essential for the effective governance of public procurement processes. The establishment of organizations and the implementation of guidelines to coordinate public procurement processes and operations are aimed at reinstating order and adherence within the realm of governmental purchasing. To put it differently, the objective is to guarantee equal treatment in public procurement, simultaneously fostering fairness, efficiency, and cost-effectiveness (Osei-Tutu et al., 2011).

As per Osei-Tutu et al. (2011), the changes in public procurement aimed to enhance accountability and transparency, while also reducing or eliminating favouritism and cronyism. Although the legal framework was robust, its effective implementation was hindered by inadequate supervision, monitoring, and evaluation. Adherence to the prescribed procedures and Act-mandated requirements consistently remained low, with compliance levels of 19.58% for the Ashanti Region and 17.8% for the Brong Ahafo Region, exemplifying the widespread issue of poor compliance within the public sector in Ghana.

Given the consistently low compliance levels among public organisations, more investigation into how public procurement is carried out is warranted. Consequently, the objective of this study is to evaluate the extent to which the Ghanaian Fisheries Commission, a public institution, complies with the provisions and regulations outlined in the Public Procurement Act of 2003 (Act 663) and its subsequent Amendment Act of 2016 (Act 914).

1.2 Problem Statement

Governmental procurement holds immense importance for various reasons. The substantial scale of procurement expenditures exerts a significant influence on the economy, necessitating meticulous management. Estimates from experts in government procurement management suggest that it can represent a substantial portion, ranging from 10% to 30%, of the Gross National Product (GNP) universally (Callender and Mathews, 2000; Thai, 2009). When any government entity makes a procurement decision, it must engage in research and carefully choose the right service provider. These determinations hinge on factors such as cost-effectiveness, quality, reliability, and timeliness. Procurement departments must select the appropriate vendor or subcontractor, and these chosen parties must be prepared to execute the supply activity following the provisions of the Public Procurement Laws.

As noted by Senzu and Ndebugri (2017), procurement performance has been a focal point for practitioners, scholars, and researchers for many years due to subpar outcomes stemming from inadequate adherence to established processes and procedures. Additionally, Jaafari-pooyan (2011) underscores that performance forms the cornerstone for organizations to assess their progress towards predefined objectives, identify strengths and weaknesses, and strategize future actions aimed at enhancing performance. In the public sector, adherence to regulations, particularly in contexts emphasizing value for money, is an essential prerequisite. The Fisheries Commission has been challenged with compliance with procurement policies and practices, which sometimes affect budget performance in the institution. Sometimes, the Fisheries Commission cannot successfully procure its goods and services, not because of inadequate funds but due to poor procurement planning. These challenges give rise to concerns regarding the allocation and utilization of funds in the annual budget for the purchase of equipment and services meant to facilitate administrative support and ensure operational effectiveness and efficiency. The experiences accumulated over the years have set the research backdrop for this current study, aiming to evaluate the degree of compliance with the procedures and guidelines of the Public Procurement Laws and their impact on financial management. Furthermore, the study seeks to analyse the challenges encountered during implementation.

1.3 Research Objectives of the Study

The main objective of the study is to establish the level of compliance to the procedures and guidelines of the Public Procurement Laws and its effect on financial management among public institutions using the Fisheries Commission as a Case Study. To achieve this, the study, therefore, focused on the subsequent specific objectives:

- i. To ascertain the extent to which the Fisheries Commission complies with procurement policies and practices of the Public Procurement Act 2003, Act 663 and its Amendment Act 2016, Act 914.

- ii. To determine the effect of compliance with public procurement policies and practices on financial management in the Fisheries Commission.
- iii. To identify the obstacles encountered during the execution of public procurement laws within the Fisheries Commission and propose remedies to enhance adherence.

1.4 Research Questions

In this study, the primary research question was “To what degree does the Fisheries Commission adhere to the procedures and guidelines outlined in the Public Procurement Act of 2003 (Act 663) and its subsequent Amendment Act of 2016 (Act 914), and how does this adherence affect financial management?” The specific questions under consideration are as follows:

- i. To what extent is the Fisheries Commission complying with the public procurement laws?
- ii. How does compliance with public procurement regulations aid financial prudence in the Fisheries Commission?
- iii. What are the challenges the Fisheries Commission faces in implementing procurement law?

1.5 Justification of the Study

The results of this research could provide valuable insights for public institutions in Ghana, aiding them in raising awareness and assessing the degree of compliance across the public sector. This study is of great importance to policymakers and stakeholders in Ghana's public procurement, logistics, and supply chain. By tackling some of the hurdles presented by the Procurement Act, we can strive to establish a procurement process that is more streamlined and productive, ultimately benefiting all stakeholders. With the right strategies and solutions, we can significantly improve this area and create a more sustainable future for Ghana. The study will also examine how adherence to procurement laws and regulations impacts financial

management. In this context, the results of this research would offer relevance to various public institutions, offering guidance on prudent strategies to enhance procurement practices and fund management efficiency. Additionally, this study would contribute to filling the current gap in the literature regarding public procurement procedures and guidelines within Ghanaian public institutions. Consequently, the insights gained from this research would be valuable to future scholars, serving as a foundational resource for academic investigations into the domain of adhering to public procurement procedures and guidelines and its various relationships and associations.

1.6 Summary of Methodology

The primary objectives of this research were to assess the extent of adherence to the procedures and guidelines outlined in the public procurement laws, examine their impact on financial management, and analyse the implementation challenges encountered within the Fisheries Commission. This study used a research design characterized as both descriptive and exploratory. The study population encompassed all employees within the Fisheries Commission involved in the acquisition of goods, services, and work-related activities. They are top management, directors, procurement officers, planning and budget officers, monitoring and evaluation officers, and other relevant officers. It also included Entity Tender Committee Members as well as suppliers.

Procurement officials, finance officers, planning and budget officers, and monitoring and evaluation officers with expertise in Public Procurement and Public Financial Management within the Fisheries Commission were chosen through the purposive sampling technique. Entity Tender Committee Members were also purposively sampled. In this study, we conducted an administration of a semi-structured questionnaire comprising a combination of closed-ended and open-ended questions. The gathered data was subsequently subjected to analysis through

the utilization of the Statistical Package for Social Sciences (SPSS) and Microsoft Excel, with the findings visually represented through tables and charts.

1.7 Scope of the Study

The study focuses on public procurement in public institutions using the Fisheries Commission as a case study. The study examined whether the Fisheries Commission complies with procurement practices in the public procurement laws and how these practices affect financial management. The data for this study was gathered from a specific group of individuals within the organization, including the deputy executive director, procurement officers, heads of budget, finance and some members of the Entity Tender Committee.

1.8 Limitations of the Study

This study is constrained by limitations, just like other studies. Unfortunately, the key limiting constraint to this study is limited resources in terms of funds and time. The study would have covered more public institutions and a large sample size, but due to limited time, only one public institution, the Fisheries Commission, was studied as a case.

To effectively address the research questions, the assessment tools gathered data from sources including the Public Procurement Authority and defended/published theses related to the topic in various regions. Consequently, any limitations inherent in these sources would also impact this study.

1.9 Organisation of the Study

The study report is structured into five distinct chapters. Chapter One functions as an introductory section, encompassing the background context, formulation of the research

problem statement, delineation of study objectives, articulation of research questions, study justification, a concise summary of the adopted research methodology, specification of the study's scope, disclosure of identified limitations, and an outline of the chapter sequence within the study. Chapter Two is primarily devoted to an extensive review of pertinent literature related to adherence to the procedures and guidelines prescribed in the Public Procurement Act of 2003 (Act 663) and its Amendment Act of 2016 (Act 914). It also delves into the existing body of literature addressing the repercussions of public procurement practices on public financial management, alongside an exploration of the challenges faced by practitioners during the implementation of public procurement legislation.

Chapter Three delineates the research methodology adopted for this study. This includes an explication of the techniques employed for data collection, the design and development of the research questionnaire, the methodology for determining the appropriate sample size, and the strategies employed for distributing questionnaires among the study participants.

Furthermore, Chapter Four provides an in-depth analysis of the findings derived from the study, while Chapter Five provides an overview summarizing the significant results and concludes with the recommendations and conclusions.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter Two thoroughly explores the existing literature relevant to the subject matter. The chapter covers various key areas, including the clarification of essential terms such as procurement, public procurement, financial management, and compliance. It also examines the statutory and regulatory framework governing public procurement, conducts a conceptual review, delves into theoretical perspectives, reviews empirical studies, and culminates in the development of a conceptual model and hypotheses. The chapter is summarized comprehensively at its conclusion.

2.2 Conceptual Review

2.2.1 Procurement

Procurement, as outlined by Dobler et al. (1990), encompasses a spectrum of activities, including involvement in formulating requirements and their specifications, overseeing value analysis initiatives, conducting market research within the supply chain, negotiating with suppliers, handling traditional purchasing tasks, managing purchase contracts, ensuring supplier quality, and the acquisition of incoming logistics. Pericoli (2020) describes procurement as the procedure for acquiring goods, services, and works, a process that may involve acquiring them from external sources. This process involves assessing various options and making the critical "make or buy" decision, a choice that, when appropriately considered, can lead to in the supply of goods and services (PPA, 2003).

Procurement aims to acquire the proper materials in the proper quantities, from the proper sources, at the proper prices, and at the proper times. The principal objectives of procurement are to ensure a continuous provision of goods and services to fulfil the organization's

requirements, to procure efficiently and prudently, to achieve optimal value for every expenditure through ethical practices, to oversee inventory to deliver top-quality service to customers at minimal cost, and to safeguard the government's financial structure (Barly, 1994). Sarpong (2007) defines procurement as the strategic management of acquiring products, services, and projects in a manner that maximizes value for money, employing a proficient, transparent, and verifiable framework. He thinks that the following guidelines should be present in any effective procurement:

- **Efficiency and Effectiveness:** Every procurement operation should attain the precise quantity and quality while minimizing expenses.
- **Competitiveness:** The procurement process must encourage rivalry among the participating entities.
- **Ethical approach:** The procurement process must steer clear of any behaviours that might give rise to potential conflicts of interest.
- **Fairness:** Every procurement effort should strive for impartiality and guarantee that all prospective bidders are provided with an equitable chance to submit their bids
- **Transparency:** The procurement process should maintain transparency to prevent providing a competitive edge to certain bidders over others. These principles align with the World Bank's procurement standards, and their presence in all procurement practices is crucial. A sound procurement is only one that adheres to these principles and objectives, as they are inherent in all forms of procurement and are in the best interest of the nation.

2.2.2 Public Procurement

Public procurement has gained substantial attention in recent times due to its pivotal role in enhancing responsibility and openness within the daily operations of both organizations and nations. Ghana ratified the Public Procurement Act of 2003 (Act 663) on December 31, 2003, and it officially came into effect on January 1, 2014 (Atiga & Azanlerigu, 2017). As per Osei-Tutu et al. (2014), public procurement encompasses the acquisition by governments and

municipalities of a wide spectrum of works, goods, and services essential for their operations. This can span from the procurement of basic office supplies to complex, high-tech equipment (Offei et al., 2016). As per Arrowsmith (2009), the introduction of The Public Procurement Act, 2003 (Act 663) aimed to enhance financial management and the prudent utilization of state resources. Consequently, it is incumbent upon the Fisheries Commission to excel in its efforts, ensuring the realization of Act 663's goals. This is particularly significant given that the Commission receives annual budgetary allocations from the Ministry of Finance, which are endorsed by the Parliament of Ghana.

In the year 2007, the Ghana Integrity Initiative provided a definition of public procurement as the acquisition of goods and services, typically accomplished through a contractual arrangement, intended for the immediate benefit or utilization of governmental bodies, corporations, or individuals. This process is aimed at acquiring these goods and services at the most favourable overall cost of ownership, in the appropriate quantity and quality, and at the correct timing and location. Public procurement encompasses the procurement of items, services, and public infrastructure by government and other public entities. Functioning as a pivotal instrument for the execution of public policies, it wields substantial influence on the economy and directly impacts the daily lives of citizens (Ghana Integrity Initiative, 2007).

Public procurement consists of legally negotiated agreements that are centralized, influenced by political decisions, and effectively executed by numerous regional purchasers. Although it should be noted that public procurement offers both economic and social advantages, the latter are primarily viewed as side effects of cost reductions and enhancements in sustainability (Bjorn Wickenberg, 2004). Procurement can serve as a tool for integrating socially and economically sustainable benefits, supporting livelihood programs in the process.

Public procurement stands as a critical procedure employed by organizations to acquire goods and services utilizing taxpayers' monies. This process encompasses various stages, including planning, soliciting proposals, contract awarding, and contract management. It is imperative to uphold two core principles: professionalism and value for money in ensuring procurement success. By following these principles, organisations can effectively acquire the goods and services they need while achieving the optimal return on their investment.

- In public procurement, emphasizing expertise and cost-effectiveness is crucial. Hence, procurement officers should be educated, experienced, and responsible when making purchase decisions. In Ghana, the contribution of procurement experts plays a pivotal role in the nation's economic progress. The procurement Board recognises this and aims to support and promote individuals engaged in public procurement while ensuring ethical standards are adhered to.
- Value for money entails ensuring a prudent and effective utilization of public assets at a fair cost. It revolves around attaining the most favourable initial cost while striking the ideal balance between overall lifetime expenses and quality.

Global expertise indicates the following fundamental principles underpinning the procurement system (World Bank, 2000).

- Maximising economy and efficiency.
- Encouraging suppliers and contractors to participate as much as possible in the provision of the goods, construction, or services that will be purchased.
- All contractors and suppliers should be treated fairly.
- Keeping processes transparent and reducing the potential for unethical behaviour and collusion.

When addressing procurement concerns, regulators should strive to secure the optimal outcome for citizens and employ the necessary tools to arrive at the most informed choices. This inevitably involves eliminating any prejudice that unjustly skews a procurement decision.

2.2.3 Public Financial Management

Finance encompasses the determination of an organization's enduring investments, the means by which funds are acquired to cover these investments, the mitigation of the company's risks, and the execution of the company's day-to-day financial activities. Financing ensures that a business possesses sufficient funds to conduct its everyday operations. The technique of comparing actual expenditure performance to budgets or planned financial outcomes is known as financial control (Griffin & Ebert, 1999).

As per Prest (1985), the economic domain of public finance is concerned with the strategic planning, budget formulation, revenue collection, and expenditure management of a public sector entity, commonly government agencies. Its primary focus lies in determining the essential expenditures of a public sector entity, the origins of its finances, and the budgetary procedures involved.

Delivering products and services effectively in the public sector depends on efficient financial management and revenue collection. Moreover, efficient resource management and monitoring are essential for the provision of goods and services. The efficiency of the supply of goods and services has been negatively impacted by several factors, including several competitively sensitive areas in procurement management. Management is the process through which an organisation selects its precise goals and directs the efforts of others to carry out the necessary actions to achieve the goals (Burke & Bittel, 1991).

Financial management revolves around the tracking and oversight of a company's financial resources, managing where they come from and how they are employed. Its objective is to secure the necessary capital in the most cost-efficient manner, which can be achieved through sales or investments made by the business owner. Financial management guides the allocation of funds to maximize outcomes. As per Nickel (1999), financial management involves the

administration of both public and private resources with the aim of accomplishing specific aims and targets. The chief financial officer, often known as the business treasurer or vice president of finance, may be in charge of financial management, and his job is to raise capital and oversee its utilisation effectively.

Financial management encompasses all the actions related to acquiring and utilizing funds efficiently. Successful financial management necessitates meticulous planning and the effective utilization of assets. The establishment of financial priorities in keeping with organisational goals and objectives, the planning and control of spending following those priorities, and the availability of sufficient funding, when required, can all be achieved through proper financial management (Pride, 2002).

Efficient financial management, as noted by Ahmad (2005), can reduce both public and private expenditures by guaranteeing the proper provision, maintenance, and operation of essential services, particularly for individuals with limited incomes. It also ensures transparency in the utilization of public resources. The vital objectives of financial management include generating money for the organization, maintaining a healthy cash flow, and achieving a satisfactory return on investment.

Governmental efforts in fiscal management strive to uphold a steady budget that is either equitable or in excess. This is achieved primarily by ensuring appropriate tax and non-tax income and by reducing government expenditures. They are carried out, among other things, by evaluating spending plans, revenue generation, and revenue diversification (World Bank, 2001). Effective public financial management encourages an accounting system that efficiently uses the nation's financial resources, gives the general public a window into the government's financial situation, and plays a vital role in formulating and implementing governmental

policies (Moitui, 2015). Effective public financial management comprises the administration of cash, aid, and debt, revenue, auditing, and procurement.

Cash management: The goal is to ensure the efficient allocation of a government's cash resources, preventing resource immobilization and minimizing borrowing costs.

Aid and debt management: This initiative aims to improve the administration of procuring, servicing, and retiring public debt, with the concurrent objective of averting an escalation in the total debt burden.

Revenue management: This ensures the development of an administrative framework aimed at augmenting taxpayer adherence and convenience, while concurrently enhancing the effectiveness of revenue collection, reporting, and predictive capabilities.

Audit: It ensures that transactions are assessed promptly and practically. This assists in verifying that resources are utilized for their designated objectives. Both external and internal audits are focused on achieving value for money, establishing adequate controls to accurately record expenses, and preventing impropriety and fraud.

Procurement: To bolster the acquisition of goods, services, and works, the objective is to institute a robust monitoring and tracking system, with the overarching aim of curbing government expenditures to achieve a balanced or surplus budget. As articulated by Shand (2006), the Public Financial Management (PFM) framework delineates the essential components of a robust PFM system as follows:

- The internal *control system* must guarantee that budget allocations are not surpassed, funds are utilized according to their designated purposes, and that dependable information is generated.
- *Transparency* throughout the budget processes and information is paramount. The budget ought to be crafted and executed via a structured and comprehensible procedure.

Both the legislature and the public should possess comprehensive data on budget outcomes, including the achievement of goals, the government's financial standing, and the assumptions and risks underpinning the budget.

- The budget's *credibility* is essential, requiring a foundation in realism and feasibility. In numerous countries, significant resources are invested in creating budgets that later prove unworkable, often due to the unpredictability of donor funding. Ensuring clarity for line ministries, departments, and agencies regarding their annual funding allocations and the expected outcomes of their expenditures is crucial.
- It is *comprehensive*, encompassing all government operations. The existence of off-budget accounts should be reduced, especially those lacking transparency.
- The budget *reflects the government's policies and priorities* – The anticipated expenditure outcomes should be discernible to the extent that they can be reasonably assessed.
- There exist accounting systems that furnish *timely and reliable reporting* across all tiers of decision-making, serving both internal management and control needs as well as external accountability requirements. Effective external reporting hinges on the foundation of robust internal reporting.
- By holding public officials accountable, the *ex-post systems of external scrutiny* conducted by the legislature and external audit systems should contribute to maintaining budget adherence and enhancing performance. A robust public financial management system can aid in achieving this by implementing thorough budgeting, establishing effective internal controls, ensuring dependable information systems, and upholding fiscal transparency.

Four widely acknowledged goals of a public financial management system encompass the need for it to:

- Consistent fiscal discipline both across and within fiscal years;
- Strategic prioritisation in the allocation of expenditure, recognizing the budget as a pivotal tool for implementing governmental policies;
- Operational efficiency in resource utilization, ensuring that the budget system fosters efficiency rather than discouraging it.
- Fiscal Transparency: A goal in its own right, aimed at facilitating social oversight.

As per Shand (2005), the goals of public financial management should encompass:

- Effective and streamlined financial reporting and accounting systems
- Institute precise and resilient cost controls;
- Correlate program responsibility with the budgets of ministries, departments, and agencies.
- Promote transparency in government operations.

The nation should recognize procurement as a pivotal tool for managing government spending, enhancing transparency and accountability in the use of public funds, establishing government priorities, and enhancing public financial management to bolster the budget. Procurement addresses gaps in financial management by encompassing meticulous planning, precise accounting and auditing, comprehensive reporting, information dissemination, and addressing grievances.

As indicated by Senzu and Ndebugri (2017), public financial management represents the government's endeavour to maintain a balanced budget or even a surplus to address unforeseen circumstances. On the other hand, as highlighted by Lysons and Farrington (2012), the term "procurement" defies a singular definition. Neupane et al. (2014) characterized public procurement as the procedures by which government agencies, departments, and other public entities obtain goods, services, works, and activities from external parties. The procurement of goods and services for the government encompasses a wide array of tasks. This can include everything from describing the requirements to selecting and awarding contracts to vendors. Whether acquiring, purchasing, buying, or procuring supplies, construction, or services, the procurement process plays a vital role in guaranteeing that the government can provide the best possible services to its citizen. As per Nichols (2002), procurement represents a pivotal policy within the procurement process, substantially influencing the efficacy of government operations and the enhancement of service delivery. Consequently, it is reasonable to assert

that the vital objective of procurement is to ensure the efficient execution of government activities.

2.2.4 Compliance

Compliance entails conforming to a predetermined set of rules, an established order, a request, or the generally accepted standard of conduct. Therefore, procurement compliance can be defined as the alignment or conformity to the rules and regulations set forth for procurement by the organization or the pertinent governing body. Hornby et al. (2010) provide a definition of compliance as the act of adhering to orders or directives issued by authoritative figures. Various scholars hold differing perspectives when it comes to assessing and quantifying compliance. Jaafar et al. (2016), for example, define compliance as the capacity to act in alignment with particular recognized norms, which may include orders, established regulations, or directives.

Procurement entities have faced various accusations regarding their adherence to the procurement regulations outlined in Act 663. These assertions encompass inadequacies within management and control systems, a dearth of commitment from managerial personnel, suboptimal contract administration, frail procurement frameworks, and a scarcity of proficient staff to oversee procurement operations effectively within these entities (Ayitey, 2012). Research undertaken by Ayitey (2012) in the Ashanti Region revealed that the overall average compliance of public entities within the spheres of local government, education, and healthcare could have been more substantial, attaining a potential level of 55.22%.

The concept of compliance involves evaluating the actions of regulators in relation to the corresponding legal obligations they should adhere to (Gelderman et al., 2006; Lange, 1999). Thus, compliance is viewed by political and social regulators as a structured process aimed at minimizing or mitigating risks typically linked to public procurement systems. The assessment

of public procurement management performance is essentially an evaluation of adherence to established procurement regulations (Schapper et al., 2006).

In light of the definitions pertaining to procurement compliance, procurement non-compliance would signify a departure from and failure to follow the established rules and accepted best practices in procurement activities.

Numerous studies have highlighted that enhanced adherence to public procurement policies can lead to more effective procurement management and the adoption of superior best practices within government organizations (Jaafar et al., 2016). According to Hornby et al. (2010), compliance can be succinctly described as the act of conforming to rules or fulfilling directives made by individuals in positions of authority. However, various researchers hold diverse perspectives on how to assess and quantify compliance. Jaafar et al. (2016) propose that compliance revolves around the capability to act in accordance with established acceptable standards, which could encompass orders, prescribed rules, or mandates. Ibrahim et al. (2017) concurred with Jaafar et al. (2016) regarding the characterization of compliance and extended this perspective to encompass not only conformance with legal and regulatory frameworks but also adherence to the prescribed duties and obligations. Nonetheless, it has been contended that certain procurement legislations may have encountered effectiveness challenges during their implementation phases (Ibrahim et al., 2017). Addressing this concern, Ibrahim et al. (2017) proposed that procurement experts have underscored the necessity of paying specific attention to the hurdles encountered during the implementation process, emphasizing that adherence is a pivotal element for realizing the advantages stipulated by public procurement regulations. Furthermore, Ibrahim et al. (2017) underscored that, particularly in developing countries, while emphasizing adherence to procurement laws is crucial, equal attention should be given to how it translates into achieving procurement objectives. In line with this perspective, the present study adopts the characterization proposed by Ibrahim et al. (2017), defining compliance as the

observance of the regulations, norms, laws, rules, or other regulatory frameworks and expectations governing any procurement management system.

To accomplish procurement compliance, several internal and external elements are at play. External factors encompass aspects such as the suppliers' understanding of and adherence to the procurement policies of the central company, the robustness of the relationship between the supplier and the central company. Meanwhile, internal factors encompass elements like the efficiency of employees engaged in procurement, the effectiveness of the organizational governance structure, the practical training provided to procurement personnel, and more (Amarasuriya et al., 2018).

2.2.5 The Legal and Regulatory Framework of Public Procurement

Ghana has implemented various regulations to monitor its procurement procedures. These regulations include the Ghana Supply Commission Act and the Contracts Act, 1960 (Act 25), which underwent revision and replacement by Provisional National Defence Council (PNDC) law 245 in 1990. Additionally, the Ghana National Procurement Agency Decree of 1976 (SMCD 55) received approval from the Supreme Military Council in 1976, and the Financial Administration Decree (SMCD 221) was enacted in 1979 to oversee government expenditure (Amoah, 2017).

The government's enduring commitment to enhancing public financial management in the country has spanned numerous years. Back in 1996, they initiated the Public Financial Management Reform Programme (PUFMARP) as a pivotal step to enhance overall financial management. Subsequently, in 1999, the establishment of the Public Procurement Oversight Group represented a pivotal advancement in the development of an extensive procurement reform initiative. This collaborative endeavour ultimately culminated in the crafting of the Public Procurement Bill in 2002, subsequently endorsed as the Public Procurement Act of 2003

(Act 663) on December 31, 2003 (Senzu and Ndebugri, 2017; Adjei, 2006). More recently, the Public Financial Management Act of 2016 (Act 921) was enacted to address weaknesses in the PFM system, including issues with fiscal policy formulation, budget implementation and reporting, commitment control and debt management.

The Public Procurement Act, 2003 (Act 663) establishes the Procurement Structures for the Public Procurement Board. The procurement process is overseen by various committees, including Tender Committees, Tender Evaluating Panels, and Tender Review Boards. These committees ensure that procurement is conducted fairly and transparently and that all parties are held accountable for their actions. It is essential to ensure that the administration and institutional arrangements for the procurement committees are well-structured and organised. This will guarantee the procurement process's success and ensure all stakeholders benefit from the best possible outcomes. Section 2, Act 663 states that the need for effective oversight cannot be overstated. Therefore, having a sound Public Procurement Oversight Group in place is crucial to help regulate and monitor the procurement process. The Act provides clear guidelines and regulations for procurement methods, thresholds, procedures, appeals, complaints resolution methods, as well as divestitures of assets. Furthermore, it confers the authority to promulgate binding regulations, directives, Standard Tender Documents (STDs), and manuals in accordance with the Act. These measures ensure openness and fairness in the procurement process and help to prevent misconduct and unscrupulous practices. Overall, the Act is crucial in ensuring procurement processes are conducted responsibly and with accountability.

According to Essel (2021), the primary objective of all these laws, regulations, and other legal documents was to establish a comprehensive administrative framework for overseeing procurement activities within the public sector. Nevertheless, a subsequent evaluation of Ghana's public procurement administrations unveiled notable inefficiencies, instances of corruption, and a deficiency in transparency throughout the procurement procedures conducted

by public institutions. These issues were attributed to a convoluted legal framework, a lack of standardized procedures, regulations, and unclear official and administrative protocols necessary for effective management of the public procurement process. Furthermore, there was a need for expanded career opportunities for individuals in the Public and Civil Service who hold procurement authority, as well as a requirement for enhancing the capabilities of procurement practitioners (Essel, 2021).

Table 2. 1: Legal Framework of Procurement Act

Legal Framework	Details
Public Procurement Act, 2003 (Act 663)	Establish a thorough legal framework to unify and protect public procurement.
Public Procurement Manual	This guide provides practical guidance and step-by-step procedures that, when followed, ensure a fair, efficient, and effective procurement process.
Standard Tender Documents (STD)	They include common invitation and contract forms for purchasing goods and services of all values. For products, works, and services, distinct standard documents are available.
Public Procurement Regulations	They include comprehensive policies and guidelines that cover all facets of the procurement system, PPA and procurement entity operations, and the conduct of procurement activities.
Guidelines	Issued by the Public Procurement Authority (PPA) to provide supplementary guidance on disposal, single source procurement, preference margins, framework contract agreements, sustainable public procurement (SPP), etc.

Source: PPA Regulations (2003); Amoah (2017)

2.3 Theoretical Review

It has been noticed that the development of the procurement field involves the application of various interdisciplinary theories (Flynn and Davis, 2014). In spite of the multitude of studies related to procurement or procurement compliance, there is still an untapped opportunity for creating a theoretical framework specifically focused on procurement compliance. The literature review highlights the significance of these theories in understanding and studying compliance in public procurement.

2.3.1 Agency Theory

According to the Agency Theory formulated by Jensen and Meckling (1998), procuring personnel serve as agents of the organization's stakeholders, who are the principals. These agents are expected to act in accordance with the optimal interests of the principals and fulfil their designated responsibilities in compliance with the organization's rules and regulations. as the principals have delegated authority to the agents to act on their behalf. Consequently, the procuring employees are anticipated to conduct their activities in accordance with organization policies and adhere to established norms, reflecting the principal-agent relationship between the procuring employees and the company's shareholders. However, when there is a disparity in information access between the principal and the agents, this information asymmetry could result in agents, or the procuring personnel, exploiting their informational advantage, thereby not acting in the best interests of their principal. This, in turn, results to instances of procurement non-compliance (Fama, 2003).

Information asymmetry leads to an inequality of power, resulting in inefficiencies and representing a significant factor in market shortcomings. When applied to public procurement, it becomes evident that opportunities for unethical conduct emerge due to this knowledge disparity. A case in point is the public procurement of buses by the Bangkok Metropolitan Transport Authority in Thailand. In this scenario, there exists significant informational variance among the procuring agency, potential suppliers, and anti-corruption agencies, as well as watchdog groups, including civil society. In response, the concept of integrity agreements has recently gained traction within the procurement process. Nevertheless, recent experiences highlight that this provision alone is insufficient, and proactive involvement by law enforcement agencies remains essential. It's important to emphasize that there are no insinuations of misconduct implied here. Still, a closer examination of procurement documents reveals that conditions, selection criteria, product specifications, and other particulars can

unduly favour certain suppliers to the detriment of society as a whole. This case illustrates that cooperation between law enforcement agencies and industry professionals can bridge knowledge disparities and enhance the effectiveness of anti-unethical practices measures.

2.3.2 Transaction Cost Economics Theory

According to the Transaction Cost Economics Theory (Coase, 1937), a company will encounter transaction costs throughout the entire procurement process. Procurement encompasses a variety of tasks, such as conducting market research to identify suppliers, engaging in communication and negotiation with suppliers, selecting the best supplier based on criteria like cost, product quality, and timely delivery, establishing contractual relationships with the chosen supplier, and monitoring the supplier's performance post-contract. The Transaction Cost Economics Theory elucidates that at each of these stages within the procurement process, costs are inevitable. These costs take the form of expenses related to market research, contract establishment, documentation, monitoring, and more. Consequently, the extent to which the organization's procurement personnel and suppliers adhere to the organization's prescribed policies and standards for the procurement process will determine the level of procurement compliance within that organization. From a cost perspective, maintaining procurement compliance plays a pivotal role in reducing the expenses associated with the procurement process, ultimately leading to cost savings for the focal company (Gelderman et al., 2006)

2.3.3 Legitimacy and Stakeholder Management Theory

According to legitimacy theory, the organization is accountable for transparently sharing its actions and procedures with stakeholders, particularly the public, and providing a rationale for its presence within the framework of society (Wilmshurst and Frost, 2000). Hui et al. (2011) supports the concept of legitimacy. As adapted to procurement compliance studies, according to Cleland's Stakeholder Management Theory (1995), proficiently managing various company stakeholders will eventually lead to achieving procurement compliance. Stakeholder

management theory also emphasises disclosure of activities paramount to public procurement compliance. Therefore, disclosure of activities helps justify fairness and transparency to ensure accountability in the public procurement arena, especially to the public by the authorities assigned the responsibility of managing public funds (Hui et al., 2011).

Per the theory, a stakeholder is described as anyone with a concern in or a share of the central organization. Consequently, a stakeholder could be an individual or a collective that directly or indirectly impacts the company's operations. In terms of procurement compliance, among the various affected entities, the primary stakeholder groups of significance encompass shareholders, procurement personnel, and suppliers.

Mendelow (1991) introduced a Stakeholder Theory in which he assessed the influence of each stakeholder on an organization's activities in relation to their interest in the organization. Consequently, the suppliers and procurement personnel of the organization would fall into the "Keep Informed" category, indicating they have low power over the organization but a high level of interest in its activities. To effectively and efficiently manage stakeholders in the "Keep Informed" category and align them with the organization's processes and practices, it is advisable to provide them with the appropriate information at the right time. Therefore, ensuring compliance among procurement employees and suppliers with the best practices of the focal company requires identifying their needs and furnishing them with accurate information about the organization's activities. This might involve engaging employees in decision-making and providing suppliers with insights into the focal company's pricing and procurement strategies, among other details.

2.3.4 Theory of Competitive Bidding

Earlier research has established that engaging in Competitive Bidding is a pivotal factor influencing procurement compliance. This practice enables the implementation of equitable

supplier selection processes and empowers the focal company to make informed decisions about selecting the best supplier based on crucial criteria such as the lowest offered price, quality, delivery speed, sustainability, and more. The adoption of competitive bidding procedures ensures that supplier selection takes place in an unbiased and transparent manner. Competitive bidding is primarily favoured due to its capacity to guarantee accountability, transparency, secure the most suitable service provider, and provide optimal value for money. Competitive tendering can incur costs for both the tenderer and the tendering party due to the procedures involved, as highlighted by Filippini et al. (2015). Procuring entities can face high administrative costs as a result. However, it remains the standard tendering approach in numerous procurement regulations globally because it is thought to mitigate favouritism and fraudulent practices, lower costs, enhance quality, and foster greater participation by service providers (Erridge et al., 1999; Nash and Wolański, 2010). According to Odolinski and Smith (2016), competitive tendering can lead to up to 11% cost savings.

The effectiveness of competitive tendering has been debated among industry players and researchers. Some argue that the process can be costly for both the tenderer and the tendering party, while others believe it can lead to cost savings and improved quality. A research study conducted by Filippini et al. (2015) on public transportation services in Switzerland found that there is no substantial distinction in the cost efficiencies attained through competitive tendering and performance-based negotiation. Nevertheless, their ultimate conclusion was that competitive tendering plays a disciplining role during the procurement process. Further investigation is required to gain a comprehensive understanding of the overall expenses for all parties involved. Ameyaw et al. (2013) also deduced that, from the client's standpoint, the cost of tendering amounts to 0.5% of the project's total cost in Ghana. According to Chinyio (2011), the UK tender cost averages £30,000.

2.4 Provisions of the Public Procurement Act, 2003 (Act 663) Relevant to the Study

Public procurement refers to the process of obtaining goods, services, works, and other supplies by the public service through a competitive contractual arrangement. This process encompasses the entire lifecycle, starting from the initial identification of the public service's requirements to the end of an asset's useful life. In essence, public procurement involves the acquisition of goods and services using government resources by the procuring entity (OECD, 2001).

The Public Procurement Act (663) regulates and defines Ghana's public procurement laws. The rules in the public procurement system cover: Procurement plan; Qualification of tenderers; Form of communication; Record of procurement proceedings; Rejection of tenderers, proposals and quotations; Entry into force of the procurement contract awards; and Inducement from suppliers, contractors, and consultants.

Procurement plan: deals with preparing a plan annually and developing updates quarterly for approval by the Tender Committee.

Tenderers Qualification: refers to the tenderers who are expected to possess essential professional and technical tenderers.

Mode of communication: The Act stipulates that all interactions between procurement organizations and bidders must be in written form.

Record of proceedings: The Act mandates the maintenance of a thorough record for each proceeding and outlines requirements for disclosure when necessary.

Rejection of tenderers, proposals and quotations: It is contingent upon the criteria outlined in the tender, proposal, or quotation materials.

Enforcement of the procurement contract awards: The Act dictates that the accepted tender must be acknowledged, and the tenderers notified within a 30-day period.

Inducement from suppliers, contractors, and consultants: Procurement entities and/or personnel must refuse any type of incentive, whether given directly or indirectly, in the process of contract awarding.

2.4.1 Procurement Procedures, Practices/Methods and Structures

2.4.1.1 Procurement Procedures

a) Procurement Planning

It is the procedure through which a company decides on what, when, and from whom to purchase (Lynch, 2012). As described by Himmie (2010), it is a method where procurement professionals proactively strategize how purchases will be executed, encompassing what, when, and how they will occur. In essence, planning empowers organizations to set a clear direction, anticipate and mitigate potential challenges, mitigate risks linked to uncertainty, allocate resources to accomplish objectives, establish and establish performance benchmarks, and effectively coordinate diverse operations. Procurement entities must plan their procurement. The procurement approach is designated during the procurement planning process, and the specifications for meeting procurement needs are established. According to Lynch (2012) and Himmie (2010), all procuring entities must conduct efficient procurement planning to achieve their purchasing goals for the following reasons: Time and money are saved with a good plan. This is due to the fact that planners can project the requisite timeframe for concluding the procurement procedure and awarding a contract for each requirement.

Creating a successful plan is crucial for achieving an entity's objectives. It serves as a bridge that connects the goals with the procurement strategy required to procure each requirement. The procurement strategy involves conducting market research and selecting the appropriate procurement approach based on the circumstances and requirements. A successful plan is essential as it helps planners determine if the expectations of the requesting entities are realistic. Often, the entities expect their requirements to be fulfilled quickly, which may not be possible

within the time frame of the corresponding procurement method. Moreover, a well-devised plan ensures adherence to governing guidelines and provides a structure for procurement officers to follow in accomplishing their responsibilities and duties.

b) Tendering Process

The tendering process is governed by Part IV of Act 663. As per Section 47 of Act 663, entities are obligated to publicize their plan to secure goods and works via International and National Competitive Tendering. Advertising serves as a means to solicit offers. The primary objective of advertising is to convey information to the public for transparency and to encourage offers.

In line with Section 49, procurement entities must furnish suppliers and contractors with tender documents as per the procedures and criteria specified in the advertisement. The fee for the tender document should include the expenses associated with its production and distribution to suppliers and contractors. A sufficient quantity of tender documents should be provided to accommodate all potential tenderers. It is not permissible to disqualify any supplier or contractor from participating in a tender solely because the documents are unavailable.

After the tenders have closed, it is recommended that they be opened immediately. To facilitate the seamless conduct of the proceedings, the Procurement Unit should offer advice on procedural matters to the chairperson leading the opening session upon request, subsequent to the preparation of the opening minutes. The Tender Opening Committee should comprise a minimum of three individuals, with at least one member being part of the Tender Committee. It is essential that the representatives of the tenderers do not disrupt the committee's activities, as they oversee and manage the proceedings. Should a tenderer have any reservations regarding the procedures or decisions made during the tender opening, they must submit a written complaint to the head of the procurement entity.

C) Contracts Management

An essential element in the acquisition of goods and services involves the formation of a formal, legally enforceable agreement that delineates the rights and obligations of each contracting party. This contractual agreement plays a pivotal role in guaranteeing adherence to the stipulated terms and conditions, facilitating negotiations for their adjustment, and documenting and reaching consensus on any modifications or amendments that might arise during the contract's execution phase. This critical step can be succinctly characterized as a comprehensive approach to proficiently overseeing the entire contract lifecycle, encompassing its formulation, execution, and analysis. The overarching objective, as per the International Association for Contract and Commercial Management (IACCM) in 2011, is to optimize financial and operational performance while mitigating associated risks. Subsequently, the administration of the contract becomes imperative to facilitate the fulfilment of commitments by both the purchaser and the provider as per the contractual terms. This necessitates various actions, such as accelerating delivery, instituting inspection or freight forwarding procedures, scrutinizing bank guarantees, formalizing letters of credit, orchestrating the reception and installation of items, reviewing accompanying documentation, and executing payment processes. Moreover, it is not uncommon for technical supervision to be exercised by an engineer or project management team to ensure adherence to the stipulated quality, timeliness, and cost aspects of the work contract. Furthermore, the client organization may find it essential to actively engage in consulting agreements, thereby seeking training, technical guidance, or responding to research findings or reports. According to the Public Procurement Authority (PPA) Annual Report of 2009, the contract accomplishment rate for that period stands at approximately 68%. This underscores the prevalent challenge faced by many organizations in effectively managing their contracts.

d) Monitoring and Evaluation

Efficient management of the procurement process hinges on retaining control over the procurement function's performance, ensuring its efficacy and productivity. A pivotal aspect of this management involves evaluating the procurement process's performance, identifying any shortcomings or challenges, and devising strategies to prevent their recurrence.

The procurement evaluation aims to assess if the organization's procurement needs and expectations have been fulfilled and if it has achieved "value for money." This assessment involves collecting information gathered throughout the procurement process and includes input from various stakeholders, such as the entity's management, PPA personnel, private sector representatives, oversight organizations (including Non-Governmental Organisations (NGOs)), civil society groups (including NGOs), project participants, and the media (PPA, 2008). The procurement assessment phase is designed to elicit suggestions for enhancing and optimizing the results of future procurement projects. This process entails identifying the specific interview subjects, developing comprehensive value stream maps at both a general and granular level, conducting project-related surveys, appraising performance metrics, scrutinizing noncompliance reports, and performing cause-and-effect analyses in connection with issues like delays, costs, timeframes, and other pertinent variables. This approach is in accordance with the methodology outlined by Alarcón et al. (1999). The strategic function of the procurement process, which is to increase organisational productivity and profitability, must be fulfilled at this step.

e) Appeals and Complaints

Part VII of Act 663, specifically Section 78, outlines the protocol for addressing grievances from individuals who believe they have encountered injustices throughout the procurement process. Any supplier, contractor, or consultant has the prerogative to seek redress under this section if they perceive that the procurement entity has neglected its responsibilities, causing

or potentially causing them loss or harm. To facilitate the timely investigation of complaints, it is imperative to diligently adhere to and adequately document the procurement decision-making process. Instances have arisen in which those engaged in auditing and prosecuting procurement-related violations have faced difficulties in enforcing penalties due to inadequate or deficient procurement records.

In the year 2007, the Public Procurement Authority inaugurated a seven-member Appeals and Complaints Panel, comprising legal procurement specialists and delegates from both the private and public spheres. These appeals and complaints mechanisms afford bidding firms the avenue to articulate their objections, both prior to and following the conclusion of the procurement procedure.

In 2011, the Appeals and Complaints (A&C) Panel of the Authority handled and resolved ten cases, with one case remaining unresolved as of December 31, 2011. These cases encompassed a range of issues, including challenges related to the revocation of contract award recommendations, requests for independent laboratory testing of tender samples to ensure fairness in the procurement process, allegations of improper division of awarded Lots among competing tenderers, complaints about unfair treatment in the award of a security services contract, and disputes regarding exclusion during prequalification (PPA, 2012).

2.4.1.2 Procurement Practices/Methods (Part IV of Act 663)

a) Competitive Tendering (Section 35 & PART V)

The Act and Regulations support the standard high-value procurement of products, works, and consulting services through competitive tendering. The two different approaches to competitive tendering include:

1. National Competitive Tendering (NCT) is utilized when determined by the procurement entity, in accordance with stipulations in Section 44, and is contingent upon specified value limits for contracts. This method is legally favoured as it

encourages maximum competition within the procurement system. Invitations to tender are consistently advertised and conducted through a public, open process.

2. International Competitive Tendering (ICT) is employed when the involvement of foreign firms is essential to ensure effective competition, as outlined in Section 45b.

b) Two-Stage Tendering (Sections 36-37)

Two-stage tendering is authorised under specific circumstances, such as when intricate specifications are not yet ascertainable before the tender (as per Section 36), or when the optimal solution is still in the process of being defined. In the context of services, this approach is utilised to solicit proposals or offers that encompass a range of potential methods for meeting the procurement requirements.

c) Restricted Tendering (Sections 38-39)

This is a strategy of purchasing with little rivalry. Three shortlisted suppliers are invited to tender, with a maximum of six. The Public Procurement Authority (PPA) must give particular permission before a procurement body can use this method. When there are just a few viable suppliers and the procurement requirement is of a specialised type, the Restricted Tendering method is typically used. As opposed to 2008, when 166 out of 173 applications were approved, 167 out of 179 entities in 2009 were given permission to employ this procurement method (PPA, 2009).

d) Single Source Procurement (Sections 40-41)

In this arrangement, purchases are made from a single supplier without any other options. It is typically used to procure requirements from a single provider. The law permits this procedure when purchasing things that are legitimately urgent, need to be provided by a single supplier, have additional requirements for standardisation, need to be purchased for research, experimentation, study, or development, or are necessary for national security. Over the years, organisations and political figures have frequently abused this strategy.

Given its intricacy, the magnitude of financial transactions involved, and the extensive interaction it facilitates between the public and private sectors, public procurement appears to be one of the government's activities most vulnerable to inefficiency, dishonesty, and unethical conduct. Consequently, the Public Procurement Authority Board was advised to thoroughly assess the criteria for granting sole-source procurement requests, with the aim of ensuring that such requests are more of a rare occurrence than a routine practice.

e) Request for quotations (Sections 42-43)

When dealing with contracts of low value, there is an opportunity to circumvent the necessity of orchestrating a comprehensive or alternative competitive bidding process, which is often both time-consuming and costly. The primary objective here is to provide procurement entities with the flexibility to implement a basic process in cases the contract's worth is so minimal that the administrative overhead associated with a comprehensive bidding process appears excessive (Acts 663, 2003).

2.4.1.3 Procurement Structures (PART II)

a) Scope and application of Act 663

Act 663 applies to the following (Section 14 (1)):

- Procurement funded through public resources, whether in full or in part;
- Procurement encompassing the purchase of goods, execution of works, provision of services, and the management of contracts;
- The disposition of public assets, including stores and equipment;
- Procurement supported by finances and loans originating from the Government of Ghana, which may also encompass foreign aid funds.

The exclusions are as follows:

When, in light of national interests, the Minister deems it suitable to explore alternative procedures, or when a loan or financial agreement explicitly specifies different approaches,

such as certain aid agreements, it should be emphasized that the Act does not encompass the administration and distribution of public stores.

b) Act 663-Binding Institutions

The subsequent institutions fall within the jurisdiction of Act 663, as defined by Section 14(2):

- Central Management Agencies;
- Ministries, Departments and Agencies;
- Sub-vented Agencies;
- Governance Institutions;
- State-owned enterprises (when using public funds);
- Public universities, schools, colleges and hospitals;
- The Bank of Ghana and financial institutions-owned or majority-owned by the Government; and
- Institutions formed by the Government for the entire wellbeing of the public.

Act 663, Part II delineates the establishment of the necessary frameworks for executing procurement within the Public Sector. Each of these frameworks is established in accordance with the specified compositions detailed in Schedules 1 and 2 of Act 663.

The primary organizational frameworks, as delineated in Part II and falling within the purview of this study, are as follows:

- Public Procurement Authority;
- Procurement Entity;
- Head of Procurement Entity;
- Procurement Unit;
- Entity Tender Committees;
- Entity Review Boards; and
- Tender Evaluation Panel

i. Public Procurement Authority (PPA)

The Public Procurement Authority serves as the designated advisory and coordinating entity for procurement matters, as outlined in Part I. The PPA's regulatory requirements

and technical specifications must be followed by all Procurement Entities, Tender Committees, and Tender Review Boards. The PPA is in charge of overall procurement practises and policies coordination, development, and direction.

ii. Procurement Entity

A Procurement Entity refers to a company or individual entrusted with the legal and administrative authority for procurement functions (Chapter 2.2, Procurement Manual).

In simpler terms, it encompasses any entity engaged in public procurement activities under the Act. A Procurement Entity bears the responsibility for overseeing all procurement operations within the organization, ensuring strict adherence to the legal framework, and complying with any regulations or administrative directives established by the Ministry of Finance in collaboration with the Authority (Section 15, (1) Act 663). Section 15 (2) outlines the specific duties and obligations of the head of a procurement entity.

iii. Head of Entity

Every Procurement Entity designates a leader who holds the authority to make decisions concerning procurement and address all issues outlined in Section 15(2). It is obligatory for the head of the entity to institute a dedicated procurement unit responsible for executing all procurement-related tasks within the organization in relation with the provisions of the Act. For the purpose of carrying out the specific procurement activities on behalf of the procurement entity, it shall nominate or designate as head of the procurement unit a competent procurement person who possesses the necessary training, experience, and abilities (Regulation 15).

iv. Procurement Unit

Within a procurement entity, the Procurement Unit serves as the department entrusted with the supervision of all procurement procedures. The head of the Procurement Unit assumes the duty of executing and coordinating all procurement-related responsibilities in collaboration with the procurement entity.

Functions of Procurement Unit

Here are some of their functions:

- Receiving procurement solicitations from originating officers, scrutinizing that the proposed procurement aligns with the approved procurement plan and confirming the availability of budgetary funds before commencing procurement proceedings.
- Ensuring that funds are appropriately allocated before issuing any contract or purchase order.
- Coordinating the development of specifications, terms of reference, bills of quantities, drawings, shortlists, advertisements, and prequalification, tender, or request for quotation documents. When necessary, submitting these documents to the Tender Committee for evaluation before their issuance.
- Managing the publication of contract award notices and advertisements.
- Coordinating the procedure for unsealing tenders and quotations while ensuring the creation of official records for tender or quotation opening as stipulated in Section 56 of the Act.
- Engaging in assessment activities in collaboration with the tender evaluation panel as required and contributing to the development of comprehensive evaluation reports.
- Compiling submissions for contract award approval by the appropriate authority, following the threshold values specified in Schedule 3 of the Act.
- Overseeing and routinely maintaining the database of Suppliers, Contractors, and Consultants.
- Engaging in negotiations with consultants when necessary, or involving other tenderers when explicitly allowed by the Act or Regulations.
- Drafting notifications for contract awards.

- Coordinating the publication of notices regarding contract awards.
- Preparing contract documents and purchase orders in alignment with the awarded decision.
- Creating and issuing letters of tender rejection and debriefing to tenderers.
- Preparing documentation for contract variations and modifications.
- Assisting in the inspection and acceptance processes for goods, works, and services.
- Maintaining procurement records in strict accordance with the provisions detailed in Section 28 of the Act and the associated Regulations.

v. Entity Tender Committee

According to the stipulations set forth in Section 17 of the Act, each procurement entity is mandated to institute a Tender Committee in strict adherence to the directives delineated in Schedule 1. The principal duties and obligations assigned to the Tender Committee encompass:

- a) ensure that at throughout each phase of the procurement process, procedures outlined in this Act have been adhered to;
- b) apply prudent judgment when making procurement choices and
- c) refers to the suitable Tender Review Board for approval, any procurement above its approval threshold, considering that approval above the Entity Committee is a one-stop-only approval.

Establishment of Entity Tender Committee

The Tender Committee is instituted at the following levels:

- a) Central Management Agency/Ministry/Subvented Agency;
- b) Tender Committee for Regional Coordinating Council; and
- c) Metropolitan/Municipal/District Tender Committee

Nonetheless, the research zeroed in on the Tender Committee of the Sub-vented Agency Entity in the Greater Accra Region.

The committee comprises nine (9) members and is tasked with various functions, including the following:

- a. Valuate procurement plans to ascertain their alignment with the objectives and operational strategies of the entity.

- b. Validate the permissible cost ranges for items earmarked for procurement and cross-reference these with the financial resources allocated in the entity's approved budget.
- c. Scrutinize the procurement schedules and specifications, ensuring strict adherence to the prescribed procurement procedures as outlined within the provisions of this Act, its accompanying operational regulations, and pertinent guidelines.
- d. Verify that the requisite concurrent approval, in accordance with the specified threshold delineated in Schedule 3 of this Act, is obtained from the relevant Tender Review Board prior to the contract's award.
- e. Facilitate the effective administration of contracts and ensure adherence to all mandatory reporting obligations as stipulated within this Act.
- f. Oversee the disposal of stores and equipment in accordance with the guidelines and provisions articulated within this Act.

If contracts exceed the entity tender committee's threshold, the committee will forward its decisions to the relevant review Tender board for concurrent approval.

vi. Tender Evaluation Panel

Each procurement entity must create a Tender Evaluation Panel in accordance with Section 19 of the Act in order to review tenders and support the tender committee's work. A panel is an ad hoc group with a maximum of five members established for a particular procurement package (Regulation 19(20)). Members of the panel have expertise, knowledge, and skills pertinent to procurement criteria.

vii. Tender Review Board

A Tender Review Board is mandated to undertake the subsequent responsibilities:

- a) In relation to the specific procurement under evaluation, scrutinize the activities at each stage of the procurement cycle leading to the selection of the most favourable bid, or best offer, by the procurement entity to ensure conformity with the stipulations outlined in this Act and its accompanying operational instructions and guidelines.

- b) Pending the provisions of subsection (2)(a), grant concurrent approval or withhold approval as needed to facilitate the continuation of the procurement process by the procurement entity.
- c) Provide the Board with reports in a predetermined format.
- d) Engage in participation in public procurement forums.
- e) Assess decisions made by heads of entities regarding any complaints lodged within the procurement process.

A Tender Review Board has the authority to enlist the assistance of consultants, advisors, or individuals with specialized expertise as necessary to effectively and efficiently fulfil its duties.

viii. Ministry Tender Review Board

Following the provisions of Schedule 2 in the Act, a Ministry Review Board is constituted to evaluate procurement decisions rendered by the Sub-vented Agency Entity Tender Committee, adhering to the criteria outlined in Schedule 3 of Act 663. Each procurement cycle's operations are subject to assessment by the Ministry assessment Board, which results in the Ministry Tender Review Board selecting the lowest-scoring tender. Five (5) members of the review board are required by Act 663. When contracts surpass the entity tender committee's threshold, the committee is obligated to forward its results to the relevant review Tender board for simultaneous endorsement (Section 17 (2(c))). It's important to note that endorsement beyond the entity committee constitutes a one-stop-only authorization.

2.5 Empirical Review

This section of the chapter discusses past studies linking public procurement compliance to financial management (Table 2.4). The theoretical and methodological direction of the present study would be spelt out. The major themes presented in the review include performance effects

of procurement compliance, effects of procurement compliance on public financial management, contexts of public procurement compliance empirical research, research design, data for procurement compliance-performance research, and gaps and direction for the present study.

2.5.1 Performance Effects of Procurement Compliance

The Public Procurement Act functions as a pivotal benchmark for assessing the efficacy of procurement processes. This implies the presence of a favourable association between compliance with the Public Procurement Act and the performance of procurement activities. In simpler terms, a higher level of compliance corresponds to better performance within an entity. Consistent with Knudsen (1999), the transition from a reactive to a proactive approach, aiming for predetermined performance standards within an entity, must commence with the procurement regulatory framework. This framework delineates the parameters for procurement efficiency and effectiveness.

Baidoo-Baiden and Amarteifio conducted an assessment in 2020 to determine the extent to which procurement entities adhere to the Public Procurement Act. Among the 25 Ministries in Ghana, twelve (12) were selected for this study. Their compliance with international best practices was assessed by evaluating four fundamental areas of compliance: management systems, information and communication, procurement processes, and contract management. Their findings unequivocally confirmed a generally poor compliance with the Act's provisions. The study revealed that procurement authorities were not consistently keeping precise records aligned with the functioning of the Ghanaian procurement system. During this period, it was the executing agencies that were responsible for initiating procurement activities. The procurement official did not have access to proper accounting procedures. Additionally, the investigation showed that the Ministry of Finance exhibited the highest level of compliance among the ministries evaluated, achieving a comprehensive compliance rate of 38.06%.

Following closely was the Ministry of Trade and Industry, with a compliance rate of 27.51%. In contrast, the Ministry of Youth and Sports demonstrated the lowest level of compliance, registering just 11.68%.

Ayitey (2012) and Osei-Tutu et al. (2011) both utilized the four core categories to evaluate the performance of local government, health, and education sectors in Ghana's Ashanti and Brong Ahafo Regions. They combined their findings into consolidated compliance levels, as indicated in Table 2.2. Upon reviewing the results of both studies (Table 2.2), it was evident that the education sector exhibited a lower compliance rate compared to the other sectors. As a result, this study determined the level of compliance for the fisheries sector. According to Osei-Tutu et al. (2011), both regions saw extremely low compliance levels, which are shown by the percentages in Table 2.2. In contrast to the other three principal areas of compliance, the procurement entities exhibited relatively superior procurement management systems. Nonetheless, it is noteworthy that the compliance levels within all three sectors remained subpar, with none achieving a threshold of 50% compliance across the four primary compliance domains. Osei-Tutu et al. (2011) employed a sample size consisting of procurement officers and engineers from 49 Metropolitan, Municipal, and District Assemblies (MMDAs) in their study. The selection of participants in this research was purposeful and carried out within the framework of a survey research design. The primary data was gathered through the administration of questionnaires and interviews and subsequently subjected to analysis employing descriptive statistical methods. The findings are indicated in Table 2.2.

Table 2. 2: Aggregate Compliance Levels of Entities

Researcher / Region	Entity Studied	Management System (%)	Information and Communication (%)	Procurement Process (%)	Contract Mgt. (%)	Average (%)
Ayitey (2012) (Ashanti)	Local Government	56.84	54.33	71.89	60.75	60.95
	Health	51.71	56.26	73.98	55.55	59.38

Researcher / Region	Entity Studied	Management System (%)	Information and Communication (%)	Procurement Process (%)	Contract Mgt. (%)	Average (%)
	Education	42.67	48.89	57.56	32.22	45.34
Osei-Tutu et al. (2011)	Local Government	35.00	20.54	37.50	41.07	33.53
(Ashanti)	Health	31.58	10.53	23.95	9.21	18.82
	Education	15.56	1.39	5.91	2.78	6.41
Osei-Tutu et al. (2011)	Local Government	22.61	8.69	17.39	45.65	23.59
(Brong-Ahafo)	Health	22.67	18.33	10.67	11.67	15.84
	Education	28.18	18.64	5.91	3.41	14.04

Source : Ayitey (2012) and Osei-Tutu et al. (2011)

Sumaila et al. (2014) carried out a descriptive survey to examine the role of public procurement in Ghana's income enhancement efforts. The study aimed to evaluate how public procurement is used at the Tamale Polytechnic to raise money while highlighting the key elements to take it into account when employing procurement as a tool. According to the writers, Ghana's revenue is mobilised mainly through public procurement. The results show that reducing public official corruption has decreased Ghana's income loss since the country's public procurement program began. Public procurement is still burdened with a shortage of procurement specialists and cumbersome bureaucratic procedures, but procurement laws are nonetheless adequately enforced in selecting competing bidders for contract awards. A questionnaire was employed to gather primary data from a sample of 120 respondents, encompassing both academic and administrative staff. This sample included 5 Principal Officers and 115 other personnel. The Principal Officers were purposefully selected, while the remaining respondents were chosen using a simple random sampling technique. Descriptive statistics, in the form of frequencies and percentages, were utilized for data analysis. The findings were presented through tables, charts, and graphs.

Frempong et al. (2013) conducted a survey study in which a questionnaire was distributed to a sample of 50 subjects, including staff and procurement managers, store officers, senior managers, Heads of Departments, and employees of the Lower Manya District Assembly Procurement Board, in order to collect primary data. These individuals were chosen using simple random selection methods and with a purpose. Improved products, timely and accurate quantity deliveries, precision, reduced corruption, value for money, the provision of correct prices and consistency in carrying out procurement operations, as well as the competent and reasonable use of resources, are just a few advantages that can be attained from Public Procurement Act 663, according to empirical results.

The Public Procurement Authority (PPA) bears the responsibility of evaluating the performance of its various constituent units to ensure their adherence to the provisions of the Act of 2003, as articulated in Sections 3(d), 13(e), and 3(h) of the aforementioned legislation. Within the framework of the Performance Assessment System, the outcomes for the years 2007 and 2008 exhibited a lower level of performance across all evaluated categories in comparison to the results of the preceding year, 2007. This observed disparity can be chiefly attributed to the inclusion of a larger number of low-expenditure entities in the assessment during those particular years (PPA, 2009). Nevertheless, notable progress was discerned in the nationwide assessment for the year 2009, with marked enhancements evident across all four performance indicators. While the national performance for 2007 and 2008 stood at 38.96% and 36.94% respectively, the 2009 performance marked a notable increase, reaching 59%, signifying an enhancement in comparison to the earlier accomplishments. The performance increased marginally in 2010 (60.91%) and dropped in 2011 (44.04%).

Table 2. 3: Trends in Compliance Level of Public Entities in Ghana by PPA

Year	Description				Total
	Management System (%)	Information and Communication (%)	Procurement Process (%)	Contract Management (%)	
2007	34.84	43.15	44.34	33.52	38.96
2008	34.62	39.82	42.65	30.66	36.94
2009	54.93	56.03	67.73	53.98	59.00
2010	57.04	60.88	70.04	55.66	60.91
2011	46.16	44.13	48.91	36.95	44.04

Source: PPA Annual Report, 2008-2011

2.5.2 Compliance Effects of Public Procurement Policies and Practices on Financial Management

The proficient execution of governmental initiatives and the delivery of public services, in conjunction with sound principles of public financial management, are contingent upon the achievement of value for money in public expenditures. This attainment is intricately linked to several vital objectives, including the mitigation of corruption, the cultivation of competitive dynamics, the realization of fiscal savings, the mitigation of debt burdens, and the facilitation of private sector engagement (PPA, 2012). Key elements of Act 663, such as the establishment of an oversight authority, procurement systems, the development of procurement regulations, procurement methodologies, and administrative assessment, serve as potent safeguards against corruption within the procurement sector (MoF, 2013).

Based on research conducted by the PPA, the Ghanaian government has the potential to achieve savings of approximately 25% of its local revenue by implementing prudent public procurement methods and reducing expenditures. Buying procedures are typically heavily bureaucratized and call for the signature of each superior on the intended order. Procurement is difficult, time-consuming, and slow because of the necessary authorisation procedures. It explains why most procurement departments inside developing-nation governments prioritise procedures over results (Adu-Gyamfi, 2005; Lawson, 2011).

As per the European Commission (EC), its member states could achieve annual savings of at least 4% in their procurement budgets by consistently implementing competitive tender procedures when dealing with suppliers (Van Weele, 2018).

Abebrese and Konadu (2017) looked at two major categories of financial management methods. They were cost-effectiveness, transparency, and financial controls. Financial controls were looked at in three primary areas. They were the internal, financial, and expenditure controls.

Financial Controls

Internal Controls

Internal controls may be used to ensure that predetermined protocols and practices are followed while managing financial resources in public entities. In this vein, the internal auditing procedures that the Act may have mandated are typically used to carry out this work (Chang et al., 2019). Public financial management may be improved based on the requirements of the Procurement Act in terms of internal auditing of procurement activities (Sambo, 2017).

Budgetary Control and Public Financial Management

The term "budgetary control", operationally, refers to comparing actual income and expenses to budgeted ones. Budget planning is a crucial part of efficient public financial management. In addition to other things, budgets may make an effort to stop wasteful expenditures and enforce order in public financial management (Ahmad et al., 2006). When budgetary controls are supported by procurement regulations in public institutions, public financial management can be improved (Wescott, 2009).

Expenditure Control

Efficiency in public financial management may be accomplished by observing spending patterns and trends through routine review programs. Reviewing and monitoring expenditures further ensure the careful use of public funds. It might be considered a type of expense audit.

Public spending is subject to critical examination and monitoring in the institutions under study, and this may significantly improve public financial administration in these institutions, ensure economic accountability, and reduce or prevent public expenditure excesses (Abebrese and Konadu, 2017; Prest, 1985).

If spending stays within budget and there is no deficit, public finances are said to have been well handled. Therefore, excess spending over revenue is prevented. Procurement planning is done in cognisance of budgets to identify discrepancies in expenditure for better fiscal management and control, and the argument may be advanced that public financial management, to some extent, is improved through the identification of anomalies in public spending and corrective measures put in place (Abebrese and Konadu, 2017).

Value for Money and Financial Management Transparency

Sarfo (2011) conducted an empirical investigation into the impact of the Public Procurement Act (PPA) on public financial management in the Ashanti region and noted a significant degree of transparency in public procurement practices. The author asserts that this observation stemmed from the fact that procurement decisions were made in compliance with the Act's provisions, and these choices were publicly disclosed. Another finding of this study was that adherence to the Act's provisions resulted in lower government expenditures, assuring slight misappropriation of state financial resources. This was made feasible due to the cost-effectiveness tactics implemented to achieve value for money, auditing and expenditure control mechanisms, and monitoring activities. The research used an explanatory study methodology. Using a questionnaire, procurement officials, financial officers, planning officers, consultants, and contractors from five randomly chosen districts were contacted in order to gather core data. Further information was utilized. Both quantitative and qualitative data analysis were undertaken. The districts were chosen using simple random selection, but the sixty-six respondents—sixty consultants and sixty contractors—were chosen intentionally. The author

suggested, among various other recommendations, that the government should revise the Act to reduce the degree of administrative complexity in the country's procurement processes.

In light of the finite resources available to the government, the imperative of guaranteeing Value for Money (VFM) within procurement practices becomes paramount, as it serves as a pivotal strategy for optimizing the judicious allocation of limited financial resources. The central driving principle underlying procurement operations resides in the pursuit of Value for Money. Often, it entails choosing the product or service with the most cost-effective price, ensuring it meets the intended purpose and adheres to specifications. If a product is selected despite not having the least overall price, there must be clear and compelling evidence of additional "value added" advantages. In the public sector, achieving value for money involves weighing how to advance government objectives and initiatives while achieving the best possible performance and return on investment (Bauld and McGuinness, 2006). Contracts can be awarded by public procurement organizations using criteria other than the most economical option. The complete life cycle cost is one of the factors considered (Raymond, 2008).

Two fundamental principles of the Public Procurement Act are to guarantee openness, cost-efficiency, and government finances' management. The extent to which employees in an institution mistrust the procurement management system and the degree to which the system may have been flooded with financial malfeasance, corruption, party politics, and organisational politics are sometimes associated with procurement activities, which the Act is intended to address.

Behan (1994) observes that the actual cost of ownership and use of the goods or services determines the value for money. Barnett et al. (2010) suggest that Value for Money shows a commitment to increased accountability and transparency in the utilization of public funds and the optimization of these resources.

According to the 2007 Batho Pele Handbook, the attainment of Value for Money in public procurements relies on the proficient and cost-effective execution of such endeavours. To realize this objective, government agencies are encouraged to adopt innovative strategies aimed at streamlining procedural aspects, curtailing superfluous expenditures, and enhancing resource utilization within the realm of public procurement. Within the Value for Money framework, three fundamental principles, often collectively referred to as the "3 E's," play a pivotal role. These principles encompass Economy, which assesses the acquisition of specific inputs at the lowest cost and within appropriate timelines; Efficiency, which pertains to the productivity and effectiveness of procurement processes; and Effectiveness, which gauges the extent to which the outputs of these processes successfully attain the desired outcomes (Handbook of Batho Pele, 2007).

2.5.3 Procurement Act and its Implementation Challenges

Schiele and McCue (2006) state that public procurement must contend with many environmental elements (external factors), including the market, the legal environment, the political environment, the organisational environment, and the socioeconomic environment. Despite the efforts of the central government and its associated agencies and the recognition that the procurement department can potentially add value to the organisation, some internal customers still act independently and frequently avoid the procurement department. Setting up precise procurement methods and performance requirements is necessary to solve this issue.

Numerous nations have undergone transformations in their public procurement processes (Hunja, 2003). These changes aim to enhance competition, transparency, efficiency, and accountability within the public procurement sectors. Thus, it's important to note that these transformations have encountered various challenges (Hunja, 2003). The issue includes inadequate procurement law dissemination (Azeem, 2003) and inadequate training for procurement process managers (Forgor, 2007).

Since the Act's introduction, various pertinent contemporary procurement principles have been included, which are anticipated to fix the rot and abnormalities formerly extensively connected with public procurement. Moreover, the effective implementation of this well-conceived act has encountered numerous challenges that hinder its intended objectives.

In a separate study, Kusi et al. (2014) noted that Takoradi Polytechnic utilizes the Ghana Public Procurement Act for procuring goods, services, and works from suppliers. However, they identified several challenges in implementing the Act, including excessive bureaucracy, protracted documentation processing, and insufficient storage facilities. This study adopted a survey research design, employing questionnaire administration and semi-structured interviews to gather primary data from 66 respondents. These respondents included members of the procurement unit, end-user departments, the central stores, and suppliers. Data analysis involved the use of descriptive statistics presented in tables, charts, and graphs.

After conducting an assessment in 2006, the public procurement authority found that the system lacks qualified procurement professionals, which results in numerous irregularities and the concept's blatant inefficiency (Dagaba, 2013). Section 3(k) of the Public Procurement Act requires the procurement board to "establish, promote, and offer training and professional development assistance to individuals involved in public procurement, as well as monitor the ethical conduct of these trained individuals." However, the current situation is the exact opposite of this. The concept of "value for money" was not achieved, as indicated in a Country Procurement Assessment Report (CPAR) authored by a consortium of government officials, World Bank donors, and local consultants (Osei-Tutu et al., 2011).

Tabish and Jha (2011) categorize irregularities in public procurement into five groups: discrepancies related to transparency, professional standards, equity, contract oversight, and regulations and procedures. Nevertheless, it would be inaccurate to claim that the enactment

and execution of the Public Procurement Law have significantly curbed corruption in Ghana's public procurement sector. Another substantial challenge to implementing public procurement reforms is political interference in the procurement process. Many politicians assert their right to meddle in procurement, resulting in arbitrary procurement decisions (World Bank, 2004b). Additionally, the lack of career advancement opportunities and inadequate compensation for procurement personnel further obstruct the implementation of procurement reforms (World Bank, 2003a), poor data storage (World Bank, 2003a; ODPP, 2007). Late payments to suppliers and contractors have all been named as significant obstacles to the implementation of procurement reforms (Azeem, 2007). Enhancing service provider capabilities is a fundamental component of public procurement reforms. Many potential bidders encounter various capacity-related challenges, including a deficiency in basic legal knowledge, limited ability to comprehend standard tender documents, restricted access to tender information, and a shortage of the technical and managerial skills essential for participating effectively in the tendering process (ODPP, 2007).

Furthermore, according to Schiele and McCue (2006), environmental issues might adversely affect public procurement implementation challenges. Several factors contribute to these challenges, including market conditions, organizational and socioeconomic contexts, and legal and political environments. In spite of the identification of numerous flaws in the procurement process, many government agencies continue to operate autonomously and often bypass procurement regulations. This is the case even though central government and its affiliated agencies have made endeavours to tackle the issues associated with implementing these regulations, comprehend how to enhance the value within the procurement process, and strengthen the capabilities of procurement departments.

In order to examine the difficulties in procurement in Ghanaian public institutions, Aduamoah and Baba-Campion (2012) conducted an evaluation study of public procurement in Ghana.

Through interviews and the administration of questionnaires, primary data were gathered from 49 respondents. The study participants were chosen using simple and purposeful random sampling methods. Descriptive statistics were used to analyse the data by computing frequencies and percentages. The article said that public sector projects must be put out to contract to guarantee the full participation of people and the private sector in the procurement processes. One way to lessen the time spent creating payment vouchers was to enforce and follow the payment processes. Among the challenges in procurement procedures mentioned in this study were bottlenecks in receiving payments, communication bottlenecks, bureaucracy, and process delays.

The majority of respondents, especially those on procurement committees, struggled to articulate the relevant provisions of Act 663 (Adusei and Awunyo-Victor, 2015).

This discovery was made in a survey study of 14 MMDAs in Ghana's Asante region, with a sample size of 126 respondents. Techniques for deliberate and essential random sampling were employed. As usual, primary data were gathered through focus group discussions and questionnaires. The study aimed to examine the problems faced by the chosen MMDAs in implementing the Public Procurement Act 663.

To outline and document the procurement planning procedures employed by these entities and to assess the significance of the problems faced in the development and execution of procurement plans, Lokko (2014) employed a survey research design to conduct a comparative study on procurement planning practices in selected public and private institutions in Ghana. Data was gathered from six (6) private entities through interviews and a questionnaire, and subsequently, descriptive statistics were used for analysis. The study revealed that Metropolitan, Municipal and District Assemblies (MMDAs) do prepare procurement plans in accordance with the Act, but face challenges such as a shortage of qualified staff for the

planning process and delays in plan preparation. Private institutions employ planning and statistical software in their operations. However, the study found that many procurement committee members had difficulty explaining essential aspects of the Act, even though respondents claimed to adhere to the Act's procedures in each of the sampled MMDAs. Nonetheless, they listed the following as the major obstacles to the Act's compliance: political meddling, unqualified employees, a lack of oversight, and insufficient motivation for the committee members. The MMDAs must take action to deal with these difficulties.



Table 2. 4: Summary of Reviewed Past Relevant Empirical Studies

Author(s) (year)	Focus	Methodology: Context and data	Key findings
Baidoo-Baiden and Amarteifio (2020)	.	<ul style="list-style-type: none"> • Services Sector was involved. • Twelve (12) out of 25 ministries in Ghana were purposively selected and assessed for their compliance with the key global best practices. They used four core compliance areas, namely management systems, information and communication, procurement process and contract management, to assess the compliance level. 	<ul style="list-style-type: none"> • A prevalent lack of conformity with the Act's regulations. • The conclusion was that procurement officials were failing to maintain accurate records. • Procurement officials lacked established accounting procedures.
Osei-Tutu et al. (2011)	Assessment of compliance levels of public institutions in Ghana with the Public Procurement Act.	<ul style="list-style-type: none"> • Services (local government, health and education) sectors in Ashanti. • Four core compliance areas, namely management systems, information and communication, procurement process and contract management, were used for the assessment. • Procurement officers and engineers from 49 MMDAs constituted the study's sample size. 	<ul style="list-style-type: none"> • Extremely poor levels of compliance were observed across the board, with all three sectors falling significantly below the average, none achieving more than 50% compliance in any of the four primary areas. • In comparison to the other sectors, the education sector exhibited a relatively lower level of compliance.

Author(s) (year)	Focus	Methodology: Context and data	Key findings
		<ul style="list-style-type: none"> The respondents were purposefully selected in a survey study design in which questionnaires and interviews were used to collect primary data that was analysed in descriptive statistics and presented in tables and charts. 	
Sumaila et al. (2014)	Examine the role of Public Procurement in revenue mobilization in the Tamale Polytechnic.	<ul style="list-style-type: none"> The questionnaire was used to gather primary data from 120 respondents comprising academic and administrative staff, including 5 Principal Officers and 115 other personnel. The 5 Principal Officers were selected with a purposive sampling technique, whereas the other respondents were selected through simple random sampling. Descriptive statistics were employed in data analysis in the form of frequencies and percentages, while tables, charts and graphs were used to present data. 	<ul style="list-style-type: none"> Public procurement contributes greatly to revenue mobilisation in Ghana. The outcome indicates a declined revenue loss since the inception of public procurement in Ghana through reduced corruption among public officials. Procurement rules are effectively applied in selecting competitive bidders for contract awards, and public procurement is still saddled with insufficient procurement professionals and bureaucratic procedures.
Frempong et al. (2013)	An Evaluation of the Influence of the Public Procurement Act 663	<ul style="list-style-type: none"> The research drew upon a combination of primary and secondary data sources. 	<ul style="list-style-type: none"> The Public Procurement Act has been largely effective. Some of the benefits of using the Public Procurement Act, 2003 (Act 663) are assurance of quality goods, timely

Author(s) (year)	Focus	Methodology: Context and data	Key findings
	(2003) of the Republic of Ghana, Approaching a Decade of its Enactment	<ul style="list-style-type: none"> • The targeted population was 70 people that made up the target group comprised members of the Lower Manya Krobo district assembly procurement board, store officers, senior staff, and the staff and managers of the procurement department. • A sample size of 50 was chosen with the purposive sampling technique. 	<p>delivery of goods, proper delivery of right quantities, transparency, reduced corruption, value for money, the right price is given and the assurance of delivery to the correct location, consistency in carrying out procurement processes, economical and efficient use of state resources, and harmonisation of public procurement processes in the district assemblies. There are also greater benefits of using the Public Procurement Act, 2003 (Act 663) than the previous law.</p> <ul style="list-style-type: none"> • The research also identified the following issues: challenges in applying and implementing the Public Procurement Act, 2003 (Act 663); a lack of flexibility in usage; a lack of authority to dispose of public assets; a lack of an independent auditing function for procurement; a lack of a central body with technical expertise; and thresholds that are too low for entities like a district assembly in an emergency.
Abebrese and Konadu (2017)	Investigated the effects of the Public Procurement Act on	<ul style="list-style-type: none"> • The research study covered a sample size of 200 respondents that comprised procurement officers, finance directors, planning and 	<ul style="list-style-type: none"> • The study revealed that public financial management practices have improved in the institutions surveyed, given effective financial control measures implemented.

Author(s) (year)	Focus	Methodology: Context and data	Key findings
	public financial management in the Ashanti region of Ghana.	<p>budget officers, engineers, store officers, senior managers, heads of departments, and personnel of the Procurement Board of various District Assemblies, selected from 15 MDAs in the Tamale Metropolis.</p> <ul style="list-style-type: none"> • The sampling method for the MDAs was a purposive sampling procedure. • The researchers employed a survey design in which a questionnaire was the main instrument to collect relevant data. • Primary sources of data were used for the study. • Qualitative analysis was adopted. • Descriptive statistics in which summary statistics of data were presented using tables, bar charts, and pie charts. 	<ul style="list-style-type: none"> • Value for money has been achieved regarding economy, efficiency, equity, and effectiveness in procuring goods, services, works, materials, and equipment for public institutions. • The study, however, revealed that transparency in public financial management has not been encouraging. • Serious problems affecting the implementation of the law include bureaucracy, frequent changes in the membership of the tender board, limited logistics, and the lack of requisite skills for the procurement tender board. • Interference by higher-level officials represents the most critical of all obstacles militating against procurement planning activities. • The study recommended that monitoring and evaluation schemes must be put in place. In addition, the government should ensure funds are released at appropriate times to facilitate procurement activities and programmes.
Sarfo (2011)	Assessment of the effects of the Public Procurement Act (PPA)	<ul style="list-style-type: none"> • The study adopted an explanatory study design. The questionnaire was used to gather primary data from procurement officials, 	<ul style="list-style-type: none"> • Contrary to other studies, the researcher reported high transparency in public procurement actions and measures.

Author(s) (year)	Focus	Methodology: Context and data	Key findings
	on the public financial management in Ashanti region	<p>finance officers, planning officers, consultants and contractors from five districts, which were randomly selected. Secondary data was also used.</p> <ul style="list-style-type: none"> Both quantitative and qualitative data analyses were conducted. Sixty-six (66) respondents comprising sixty (60) consultants and six (6) contractors were purposively selected, whereas the districts were selected through simple random sampling. 	<ul style="list-style-type: none"> Adherence to the Act's provisions positively impacted government expenditure through reduced government spending by ensuring low misuse of state financial resources. The author suggested that the government should revise the Act to reduce the degree of bureaucratisation of the procurement processes in the country.
Kusi et al. (2014)	Assessment of Public Procurement Policy Implementation in the Educational Sector: the case of Takoradi Polytechnic	<ul style="list-style-type: none"> A descriptive survey design was adopted for the study, with questionnaires and semi-structured interviews as the main data collection instruments. Takoradi Polytechnic was selected for the study and had a total population of 80 workers. Sixty-six (66) respondents were selected to participate in the study. The sample size selection was based on the Population- 	<ul style="list-style-type: none"> Several significant challenges, including excessive bureaucracy, complex documentation processing, and insufficient storage facilities, exist. It is imperative for the Public Procurement Authority to take proactive measures to mitigate these challenges, in conjunction with specific internal interventions implemented by the Polytechnic to address these issues within the procurement cycle.

Author(s) (year)	Focus	Methodology: Context and data	Key findings
		Sample Size Matrix that Kirk, R. E. (1995) designed.	
Tabish and Jha (2011)	Identification and evaluation of success factors for public construction projects	<ul style="list-style-type: none"> A questionnaire-based survey was undertaken to elicit the views of 105 professionals on 36 success attributes identified in the literature. 	<ul style="list-style-type: none"> The analysis yielded four success factors: awareness of and compliance with rules and regulations, pre-project planning and clarity in scope, effective partnering among project participants, and external monitoring and control. Through a multivariate analysis, the most significant factor for overall performance was awareness of and compliance with rules and regulations.
Schiele and McCue (2006)	Development of an improved understanding of the conditions under which municipal purchasing departments can be meaningfully involved in acquisition processes for consulting services.	<ul style="list-style-type: none"> Data were gathered from five Canadian municipalities, and ten cases where the supply function showed significant involvement in the procurement process were thoroughly examined. 	<ul style="list-style-type: none"> Environmental factors, such as market conditions, organisational and socioeconomic environments, and legal and political environment factors, impact public procurement implementation issues.

Author(s) (year)	Focus	Methodology: Context and data	Key findings
Aduamoah and Baba-Campion (2012)	Examining the challenges in procurement in Public Institutions in Ghana.	<ul style="list-style-type: none"> • Primary data was collected from 49 respondents with questionnaire administration and interviews. Purposive and simple random sampling techniques were employed to choose the study subjects. • Data analysis was conducted in descriptive statistics format using frequency tables and percentages. 	<ul style="list-style-type: none"> • Tendering in public sector projects is required to ensure the full involvement of individuals and the private sector in the procurement processes. • Among the challenges in procurement procedures mentioned in this study were bottlenecks in receiving payments, communication bottlenecks, bureaucracy, and process delays. • Enforcement and adherence to the payment systems were recommended to reduce delays associated with preparing payment vouchers.
Adusei and Awunyo-Victor (2015)	The study aimed at examining the implementation difficulties of the Public Procurement Act 663 as encountered by the selected MMDAs.	<ul style="list-style-type: none"> • A study of 14 MMDAs with a sample of 126 respondents in the Ashanti region of Ghana was carried out. • The selection of respondents was done through purposive and simple random sampling techniques. • Primary data was gathered using questionnaires and focus group discussion guides. 	<ul style="list-style-type: none"> • The majority of respondents, mostly procurement committee members, could not explain the relevant provisions of Act 663.

Author(s) (year)	Focus	Methodology: Context and data	Key findings
Lokko (2014)	outlining and recording the procurement planning procedures employed by these entities as well as identifying the relevance of the difficulties encountered in preparing and implementing procurement plans.	<ul style="list-style-type: none"> • A survey study design was used to compare procurement planning practices in selected public and private institutions in Ghana. • Primary data from 6 private entities were gathered using interviews and questionnaires and analysed with descriptive statistics. 	<ul style="list-style-type: none"> • The study disclosed that MMDAs comply with the Act in preparing procurement plans. • Key challenges regarding the compliance of the Act were political interference, unqualified staff, lack of monitoring, and inadequate motivation for the committee members.



2.5.4. Empirical Context and Methodology

Previous studies (e.g., Saunders et al., 2019; Etemesi, 2010; Carter and Williamson, 1996; and Wallen, 1993) primarily used data from the public sector, educational, and healthcare domains of the economy to evaluate compliance levels of the procurement act through survey methodology and cross-sectional data.

2.5.5. Major Issues in Previous Studies and the Direction of the Present Study

An analysis of the literature reveals some important limitations and opportunities for future studies:

- 1) There is a deficiency of empirical studies on the impact of procurement compliance on public financial management.
- 2) Past studies have not focused on the agricultural sector of the economy. Hence, a vacuum exists regarding the level of procurement compliance and how it affects financial management in the sector. This research, however, addresses this research void by analysing the extent to which the fisheries sub-sector, part of the agricultural sector, adheres to procurement regulations and enhances understanding of challenges encountered during the implementation of these regulations.

2.6 Conceptual Framework

A conceptual framework is very important in any research study being undertaken. It shows the relationship between the dependent variables and the independent variable (Kotter, 1995). Figure 2.1 shows the study's conceptual framework which illustrates the relationship between compliance to procurement laws and financial management. Procurement decisions made in compliance with the Act's provisions on principles, procedures, methods and structures would lead to benefits such as Financial Controls (Internal Controls, Budgetary Controls, Expenditure Control), Value for Money and transparency.

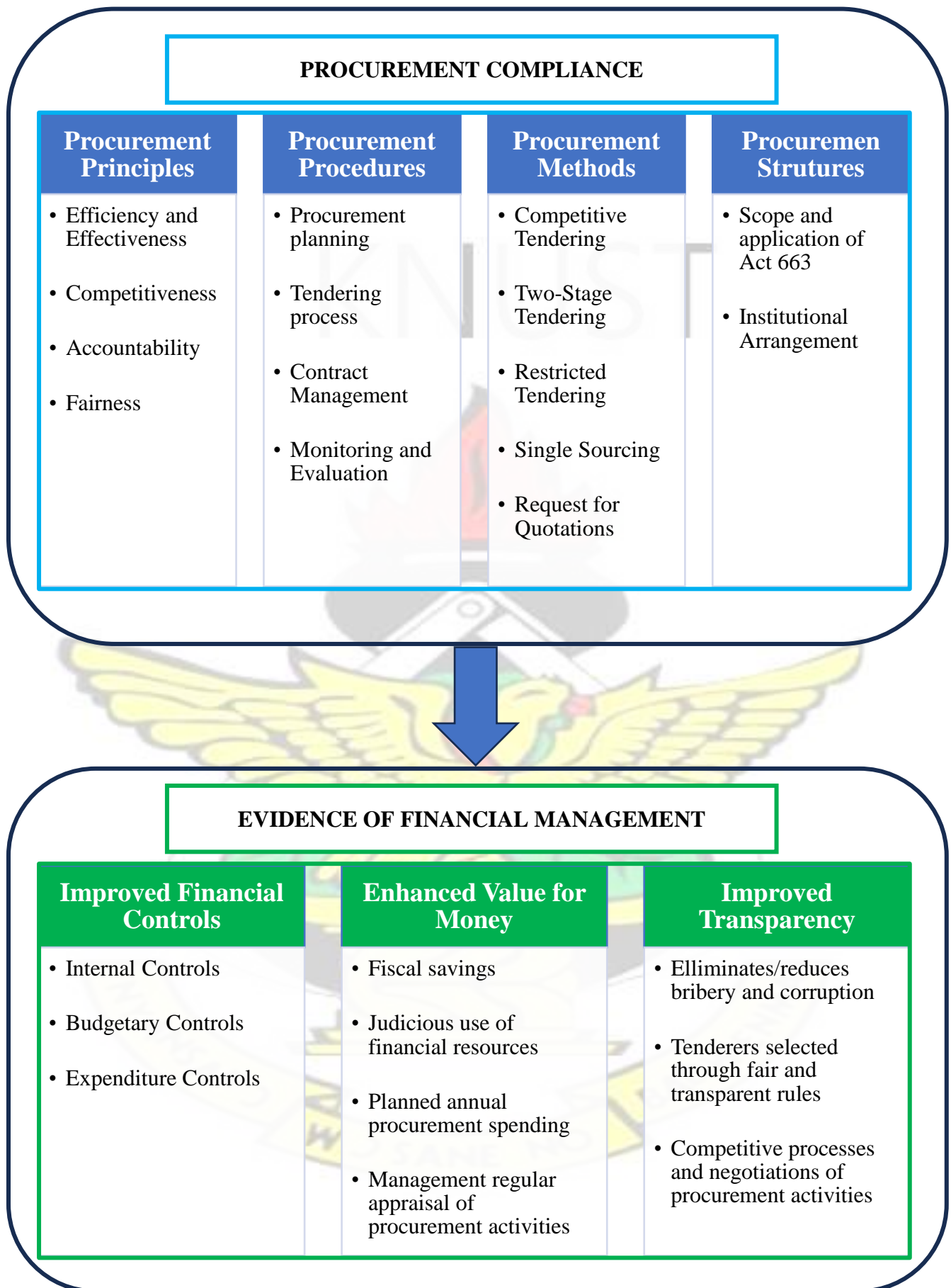


Figure 2. 1: Conceptual Framework

Source: Author's Construct

CHAPTER THREE

METHODOLOGY

3.1 Introduction:

This chapter offers a comprehensive outline of the research methodology employed in the study. It includes a discussion on the profile of the agency under examination, the research approach and design, the sampling method and sample selection, the development of the questionnaire, the procedure for data collection, strategies for data processing and analysis, reliability testing, and ethical considerations.

3.2 Research Approach and Design

According to Bell et al. (2019), there are many ways to carry out research, which suggests that different data possibilities and approaches for obtaining and analysing data are available and used by researchers. However, the design and, consequently, the strategy or technique to be adopted are influenced by the nature of a particular study. In general, a study's research approach indicates whether it focuses on developing a theory based on the evidence at hand (inductive technique) or testing a hypothesis with the use of relevant empirical data (deductive approach) (Saunders et al., 2019). Using a deductive methodology, this study tests hypotheses concerning the level of concordance among respondents in ranking the challenges faced in procurement implementation processes.

Research design is the systematic approach employed to organize data collection and analysis in a manner that effectively accomplishes research objectives through concrete evidence (Cooper and Schindler, 2006). It is a blueprint or strategy explicitly created to address a research topic (Bell et al., 2019). The research design framework for data collecting and analysis is the research design, which can take many forms, including the experimental design, survey design (cross-sectional or longitudinal survey), case study design, and comparison

design (Bell et al., 2019; Saunders et al., 2019). To determine the degree to which the Fisheries Commission complies with public procurement procedures and standards, this study will use a case study and cross-sectional approach. A cross-sectional design collects data on the study variables at a single time. This study will be descriptive and explanatory as it describes and interprets a situation (Etemesi, 2010). A descriptive survey entails the collection of data from individuals within a given population to assess the existing status of that population concerning one or more variables, as described by Wallen (1993). In this design, we explore the degree of compliance, relationships, and the challenges associated with the implementation of public procurement laws in Ghana.

3.3 Population and Target Population

3.3.1 Sampling Frame/Target Population

A population is an extensive collection of people, things, or events that share a specific observable trait Mugenda and Mugenda (2003). Amin (2005) defines the target population as the complete group of people or researchers interested in generalising the findings. All Fisheries Commission workers who purchase goods, services and works, suppliers, and members of entity committees constitute the study's population. Top management, directors, buyers, planners and budgeters, monitors and evaluators, and other pertinent officers were included. The Fisheries Commission has a total of 562 employees of all categories, out of which about sixty (60) have schedules related to procurement, planning and budget, monitoring and evaluation, finance and audit.

3.3.2 Sample Selection and Sampling Technique

In order to create a composite profile of the complete population, it is essential to select the sample from a sampling frame when conducting a survey (Kelley et al., 2003). Mugenda and Mugenda (2003) argue that a sample size equivalent to ten percent of the target population can

be selected. Top management, directors, procurement officials, finance officers, planning and budget officers, monitoring and evaluation officers, and anyone involved in or knowledgeable about procurement activities at the Fisheries Commission were chosen for the research using the purposive sampling technique. Also, members of the Entity Tender Committee were chosen. The deliberate selection of an informant based on specific attributes possessed by the informant is referred to as the purposive sampling technique. Unlike random sampling, this method doesn't require a predetermined number of informants or set criteria. In essence, the researcher identifies the needed information and then seeks out individuals with the requisite knowledge or experience who are willing to provide it (Bernard 2002, Lewis and Sheppard 2006). The study, therefore, sampled eleven (11) out of the sixty (60) staff and four (4) external persons who are in the Entity Tender Committee, to sum up to a total of fifteen (15) respondents.

3.4 Research Instrument

There are several methods for gathering data for research projects. Surveys, interviews, observations, and documentary analysis are a few ways. Every data collection tool is better suited for a particular study plan (Easterby-Smith et al., 2018). The effectiveness of the data-gathering technology significantly impacts the quality of the research. The two research methods that are most frequently employed are conducting interviews and giving out questionnaires. Hence, creating a survey instrument is crucial in developing most study projects. Therefore, in this research, a semi-structured questionnaire comprising both closed and open-ended questions was crafted and employed as the primary tool for data collection. The structure was based on the research questions and objectives. A questionnaire helps gather data when the researcher is not present and is frequently quite simple to analyse (Cohen et al., 2005). According to Kerlinger (1973), the questionnaire is frequently used in educational

research to gather data because it is particularly successful at obtaining details on practises and circumstances that respondents are assumed to be aware of.

The study made use of both primary and secondary data sources. Primary data, gathered through questionnaires administered in the field, constitutes the information collected directly by the researcher. Using the questionnaire helped the researchers gather data that the respondents would not have provided and allowed the respondents to respond freely. According to Carter and Williamson (1996), one benefit of questionnaires is that they are more objective than interviews because the responses are acquired in a standardised manner. The potential to gather data from a big section of a group is another advantage over the other instruments. The researcher created a survey instrument, which was divided into four portions. It used appropriate questions that were modified from relevant research as well as original questions. Section A recorded the demographic details of the respondents. Section B focused on the extent to which the Fisheries Commission complies with the Public Procurement Act 2003, Act 663. Section C concentrated on the effect of compliance with public procurement policies and practices on financial management. Section D focused on the challenges of implementing the Public Procurement Act 2003.

3.5 Method of Data Collection

Survey studies use various methods to obtain data (Saunders et al., 2019). As per Warwick and Lininger (1975), the methods utilized for data collection should provide a combination of high accuracy and ease in gathering information from the respondents. Online, web-based, mobile-based surveys (Moyano-Fuentes et al., 2016; Kim et al., 2013; Qrunfleh and Tarafdar (2013)), hand-delivery/face-to-face surveys (Ataburo et al., 2022; Essuman et al., 2021), and postal surveys are often employed methodologies in supply chain and logistics management (Asamoah et al., 2021; Wagner et al., 2012). The Kobo Toolbox platform, also known as the

ENKETO Smart Paper Software, has both offline and online capabilities and was used in this study's mobile-based methodology (i.e., computer-assisted personal interviews [CAPI]), where the researcher conducted in-person administration. This approach is deemed appropriate due to time and logistical constraints. The electronic mode of data collection was employed because it makes it easier to collect data. The data collected was transmitted to a server, where the researcher retrieved and analysed it. The collected data was later exported to Statistical Package for Social Sciences (SPSS) and Microsoft Excel for analysis.

3.6 Data Processing and Analysis

The filled-out questionnaires were reviewed for coherence and thoroughness, as well as for mistakes and omissions. They were then imported into and coded with the Statistical Package for Social Sciences (SPSS), where they underwent qualitative and quantitative analysis. According to Saunders (2007), the data was organised qualitatively into themes, categories, and patterns to allow the researcher to generalise the noticed characteristics. After being verified, the data were organised in a way that made analysis simple. Statistical techniques and methods were used to analyse the quantitative data. The acquired data was evaluated using descriptive and inferential statistics, including means, standard deviations, relative relevance index, and non-parametric tests. The data was then analysed using SPSS 26.0 because of its more user-friendly interface and ease of integration with Microsoft Office utility programs.

Reviewing the questionnaires to identify blank responses and ensure respondents had answered each item constituted the editing process. During tabulation, the count of cases falling into each category was determined.

Measuring compliance with public procurement policies and practices

In 2006, the World Bank and the Development Assistant Committee of the Organization for Economic Cooperation and Development (OECD) developed methodologies for evaluating

procurement systems for compliance with various procurement laws. The performance assessment system is one technique. With the help of this assessment system, procurement procedures can be continuously monitored, specific needs may be identified, and remedies can be suggested. It offers a detailed analysis of the effectiveness of the procurement entities (Asbury University, 2002–2014). The four key areas of compliance that are taken into account by the performance evaluation system report are management systems, information and communication, the procurement process, and contract management (OECD-DAC/World Bank, 2006).

The management systems closely examine ethics, adherence to the legal framework, leadership, human resources, financial management, and processes for handling complaints, appeals, and disputes (Laboratory Response Network, 2007). Information and communication assess the capacity of procurement entities to furnish information in the correct format and effectively utilize the information they receive (Ayitey, 2012). The procurement process aims to learn more about the cycle's knowledge and how the procurement organisations carry out each stage's activities. This encompasses the following aspects: procurement planning, notification of tender document preparation, tender invitation, bid submission, tender opening, tender evaluation, and contract award (Lynch, 2013). Contract management evaluates how procurement entities oversee and supervise the execution of awarded contracts. This encompasses planning, mobilization, implementation, inspection and supervision, inventory control and disposal, as well as reporting (OECD-DAC/World Bank, 2006). This study adopted the compliance rating by the World Bank/OECD/DAC (Table 3.1).

Table 3. 1: Rating of Compliance

Main Compliance Area	Key Compliance Indicator	Information rated on a scale of 0-5
Management Systems	Effective Leadership	Seeking technical support from the body with an oversight role

Main Compliance Area	Key Compliance Indicator	Information rated on a scale of 0-5
		Carrying out internal procurement auditing Good record keeping
	Human Resources Development	Having professional procurement qualified staff. Establishing the presence of internal auditors and providing them with procurement-oriented training Assessment of the performance of procurement staff
	Monitoring and Control Systems	Ensuring proper payment systems are put in place for all contracts Recording procurement transactions in the cash budgets Having in place quality control mechanisms for contracts Effective use of available procurement information dissemination
	Compliance with ethics and regulatory framework	Effective utilization of procurement plans and contractual documentation. Use of Standard Tender Documents (STD) and Manuals Utilization of appropriate procurement methodologies.
	Complaints system, structure and sequence	Fairness and transparency in resolving cases within the timelines specified in the legal framework.
Information and Communication	Procurement Information Searching and Dissemination Interaction with the marketplace	Awareness of the use of procurement websites, procurement internal notice boards and newspapers Capacity to use and use the procurement information dissemination systems Knowing of and interacting with the marketplace. Interacting with all procurement stakeholders
Procurement processes	Procurement Planning Procurement Publicity Bid Preparation and Invitation	Having an adequately defined procurement plan Posting plan on the net Advertising tender invitations Sending information for placement in the procurement bulletin Using internal notice boards to display procurement information Use of STDs All bid documents containing the same evaluation criteria

Main Compliance Area	Key Compliance Indicator	Information rated on a scale of 0-5
	Submission, opening and evaluation of bids	Stating a reasonable date and time for bid opening Explicitly stating the date, time and venue for bid submission. Stating date, time and venue for bid opening Having a secured tender box in place Having a tender opening register Keeping minutes of bid opening, including all opening records Evaluating tenders in accordance with tendering requirements
	Award of Contract	Notifying the Winner(s) of the Contract Publicising contract awards Notifying losers of bid
Contract Management	Project Planning and Mobilisation	Taking Works Programme from executors Ensuring that Advance payment Guarantees for advance payments are made
	Project Implementation and Supervision	Preparation of project monitoring reports The organisation of project progress meetings Comparing and analysing planned progress against actual
	Inspection and Inventory control	Compilation of completion or delivery reports Creating handing over certificates. Utilization of a suitable stock control recording system.
	Disposal	Constituting the required Board of Survey team Maintaining records of the Board of Survey meetings Maintaining records of disposed items.

Source: World Bank/OECD/DAC (2005)

To evaluate compliance with procurement regulations, we employed an adapted version of the compliance assessment tool originally developed by the World Bank/OECD/DAC (2005). Respondents were tasked with assessing their adherence to key compliance indicators designed to ensure transparency in procurement activities. They rated their agreement with statements provided using a 5-point Likert scale, where 1 denoted "strongly disagree," 2 indicated "disagree," 3 represented "neutral," 4 signified "agree," and 5 corresponded to "strongly agree." An overall mean distribution skewed towards 1 and 2 was interpreted as a negative response,

while a mean distribution skewed towards 4 and 5 was considered a positive response. A mean distribution cantered around 3 was regarded as a zero (0) or no response.

Some key compliance indicators that could be used to assess the compliance level of implementation of Act 663 and other regulations were obtained from the literature review. The primary compliance areas and key compliance indicators (KCIs) were initially constructed to assess compliance levels in line with the Act. KCIs were then identified under each main compliance area. Forty-four (44) key performance indicators (KCIs) were found from the desk study of the Procurement Act 663 (2003) and categorised into four primary areas, including the following: management systems (14 KCIs), information and communication (3 KCIs), procurement processes (15 KCIs) and contract management (11 KCIs).

Given that the research's respondents provided feedback on a Likert scale, it was impossible to assess respondents' preferences using parametric methods for this study. Instead, the relative importance index (RII) method was used to gauge how important the key compliance indicators are.

It is a non-parametric statistical technique frequently utilized by researchers in the fields of construction and facilities management for the analysis of data comprising ordinal measurements of attitudes collected through structured questionnaire responses. In Turkey, Gunduz et al. (2017) applied RII to assess the relative importance of various causes of delays. Rooshdi et al. (2018) also employed RII to pinpoint factors crucial for successful sustainable design and construction in green highway projects. Their findings indicated that addressing urban heat island effects in design was the most pivotal factor for sustainability. In Egypt, Hafez et al. (2014) concentrated on factors influencing labour productivity, highlighting payment delays and inadequate supervision as significant issues. In efforts to enhance construction project performance, Abd Elhamid and Ghareeb (2011) employed RII, concluding

that 'customer satisfaction' and 'leadership' were among the top factors for improving project performance. For road construction, Aziz and Abdel-Hakam (2016) employed RII to rank 293 delay factors, identifying the most critical contributors to road project delays. Marzouk (2017) conducted a survey encompassing 35 indicators drawn from prior research to identify the most critical performance indicators affecting construction projects in Egypt. The RII scores attributed to these indicators revealed that Cost, Quality, Time, Productivity, Safety, Client satisfaction, and cost control effectiveness were the most crucial indicators. In the Ghanaian context, Larbi et al. (2019) employed the Relative Importance Index (RII) methodology to appraise the adherence of Colleges of Education to the transparency provisions delineated in Act 663. Likewise, Ayitey (2012) and Osei-Tutu et al. (2011) adopted the RII approach to evaluate the performance of the local government, health, and education sectors within the Ashanti Region of Ghana, with a specific emphasis on the four fundamental compliance domains.

The RII was determined using the following formula (Dominowski, 1980; Hassanain et al., 2019):

$$RII = \frac{\sum_{i=1}^5 (a_i)(x_i)}{5 \sum x_i} \times 100\%$$

Where a_i is the constant representing the weight assigned to I, and x_i is the variable representing the frequency assigned to i. The response for i is 1, 2, 3, 4, 5, and is illustrated as follows:

- x_5 = frequency of “Extremely Important” response corresponding to $a_5 = 5$.
- x_4 = frequency of “Very Important” response corresponding to $a_4 = 4$.
- x_3 = frequency of “Important” response corresponding to $a_3 = 3$.
- x_2 = frequency of “Somewhat Important” response corresponding to $a_2 = 2$.
- x_1 = frequency of “Not Important” response corresponding to $a_1 = 1$.

For the quantification of the level of importance for each of the KCIs, the following range was adopted:

- An RII value within ($0 \geq 12.5\%$) implies that the respondents categorised the KCI as "not important".

- An RII value within ($12.5 \geq 37.5\%$) implies that the respondents categorised the KCI as "somewhat important."
- An RII value within ($37.5 \geq 62.5\%$) implies that the respondents categorised the KCI as "important."
- An RII value within ($62.5 \geq 87.5\%$) implies that the respondents categorised the KCI as "very important."
- An RII value within ($87.5 \geq 100\%$) implies that the respondents categorised the KCI as "extremely important".

Challenges facing the implementation of procurement law by the Fisheries Commission

The examination of the challenges associated with the implementation of the Public Procurement Act was executed using Kendall's Coefficient of Concordance (W) analysis. This analytical method aimed to gauge the degree of consensus or concurrence among respondents regarding the prioritization of these challenges, subsequently organizing them in a descending order of significance. To accomplish this, we employed the Kendall's Coefficient of Concordance test, a non-parametric statistical technique. These challenges were assigned ordinal ranks ranging from 1 to n, reflecting their perceived impact, with n being a positive integer. The mean rank score for each challenge was then computed, with the challenge having the lowest mean rank score being considered the most critical, and conversely, the one with the highest mean rank score being regarded as the least significant. The cumulative rank scores were utilized to calculate Kendall's Coefficient of Concordance (W) statistics, a statistical measure used to quantify the degree of consensus among respondents regarding the rankings of these challenges. The formula for computing Kendall's coefficient of concordance, as presented by Al-Hassan et al. (2008), is articulated as follows:

$$w = \frac{12[\sum T^2 - (\sum T)^2 / n]}{nm^2(n^2 - 1)}$$

In the presented formula, W denotes Kendall's Coefficient of Concordance, T represents the summation of ranks allocated to the constraints being assessed, m signifies the overall count of respondents, and n stands for the total number of constraints that are subject to ranking.

W serves as an estimation of the variance pertaining to the sums of ranks within each row, denoted as R_i , and is normalized by the highest conceivable value that this variance can attain.

This maximum value is reached when all variables are in complete accord

Hence $0 \leq W \leq 1$

A value of 1 for W signifies absolute concordance or agreement, while a value of zero (0) indicates complete discord or disagreement in the ranking.

The significance of the obtained W was evaluated using the Friedman's chi-square statistic (χ^2).

The formula for Friedman's chi-square statistic (χ^2) is as follows:

$$\chi^2 = m(n-1)W$$

This quantity follows an asymptotic distribution with (n-1) degrees of freedom, which can be employed to assess the significance of W. It's important to note that this method is most reliable when dealing with relatively large values of both m and n, as outlined by Kendall and Babington (1939) and Legendre (2010).

Test of Hypothesis

The subsequent hypothesis underwent testing:

H_0 : There is no agreement among the rankings of the challenges.

H_1 : There is an agreement among the rankings of the challenges.

The null hypothesis is rejected when the calculated χ^2 -value surpasses the critical chi-square value. The rejection indicates that respondents agree with each other on ranking the challenges.

3.7 Reliability Test

The "degree to which a measurement is devoid of variable errors" is the definition of reliability (Tull and Hawkins, 1987). According to Taber (2013), reliability refers to the degree in which a research instrument can be relied upon to consistently yield the same measured result. Another definition of reliability, as presented by Cook and Beckman (2006), is the extent to which the outcomes of a test, questionnaire, observation, or other measurement process remain consistent over time. It is, thus, the consistency or stability of scores throughout time or across raters. Internal consistency, stability, and equivalency are the three components of reliability (Creswell, 2008; Lin et al.).

Internal consistency pertains to the degree to which items within the instrument measure the same underlying construct (Patten, 2005). The advantage of utilizing an internal consistency index of reliability lies in its ability to be computed following a single test administration, mitigating complications that may arise from protracted testing periods, as articulated by Creswell (2008). These reliability tests focused on the degree of internal consistency among indicators indicating a latent construct (Hair et al., 2019). Stability is evaluated through the comparison of results obtained from repeated measurements (Polit and Beck, 2004). The aspect of equivalence examines the extent of potential error that might arise when different investigators or various samples of the studied items are involved (Patten, 2005). According to Creswell (2008), equivalence can be determined using a parallel forms procedure or by evaluating inter-rater reliability. This study evaluated the reliability of measuring scales with multiple-point items related to the primary compliance areas of the public procurement legislation and their effects using Cronbach's alpha reliability test. Based on this, Cronbach's alpha test with a value of 0.70 per cent was considered acceptable to ensure reliability (Nunnally, 1967).

Concerning validity, pertains to how effectively the instrument can measure the specific attribute it is intended to assess (Cook and Beckman, 2006). This suggests that any psychometric assessment's results are only meaningful (valid) in relation to the construct they are intended to measure. Validity is a characteristic of the instrument's scores and interpretations rather than the instrument itself (Cook and Beckman, 2006). Consequently, each intended interpretation needs to have validity proven. Three different types of validity claims that academics have made are content, criterion and construct validity. Most people consider all types of validity to fall under the "construct validity" umbrella term, which describes how well a measure measures the construct it intends to measure (Nunnally and Bernstein, 1994).

Construct validation always depends on theory (Cook and Beckman, 2006). In other words, the degree to which an instrument's observed connections with measures of other variables meet theoretical predictions about how it should be linked with those variables is a statement about the instrument's validity. The correlation pattern will invalidate the measure if the theory is incorrect. The main goal of concept validation is to determine how it relates to other factors with which it should ideally be positively, negatively, or not at all practically connected (Nunnally and Bernstein, 1994). As a result, construct validity is often demonstrated by showing correlations between a construct's measure and a small number of other measures that, in theory, should either be related to it (convergent validity) or fluctuate separately from it (discriminant validity) (Cook and Beckman, 2006). Moreover, one verifies the existence of concept validity when evaluating convergent and discriminant validity simultaneously (Cook and Beckman, 2006). This suggests that examining convergent and discriminant validity is the most effective technique to assess construct validity (Ame, 2005). The researcher employed this strategy.

To ascertain the feasibility of the questionnaire and its effectiveness in eliciting responses from the respondents without encountering difficulties, a pilot study was conducted. This

preliminary investigation involved the participation of five individuals possessing procurement expertise and was conducted within the Ministry of Fisheries and Aquaculture Development, which serves as the overseeing authority of the Fisheries Commission. Following the pilot study, the questionnaire was subjected to a comprehensive review, considering the feedback and outcomes derived from this initial testing phase. Additionally, the instrument's reliability was assessed using Cronbach's Alpha coefficient as a measure of its internal consistency and dependability.

3.8 Ethical Consideration

Gaining entry to the study participants and upholding ethical considerations constitute critical dimensions of the research process. To acquire the essential data, the researcher hinged on the procurement of access to the respondents. The researcher formally introduced herself as a postgraduate scholar affiliated with the School of Graduate Studies at Kwame Nkrumah University of Science and Technology to the directors and heads of diverse units and divisions to gain their cooperation and access to the respondents. They were told that the researcher would use the Fisheries Commission in academic research titled "Procurement Regulation Compliance and Financial Management among Public Institutions in Ghana: The Case of Fisheries Commission". Stakeholders, including Entity Tender Committee Members, were also contacted through the procurement officer.

The researcher explicitly communicated to the survey participants that the study was exclusively conducted for academic purposes, as stipulated for the fulfilment of a Master of Science degree in Logistics and Supply Chain Management. Respondents were comprehensively informed of their pivotal role in providing invaluable information and the specific purpose for which their data would be employed.

To uphold principles of confidentiality, anonymity, and privacy, the questionnaire deliberately refrained from soliciting any personally identifiable information. Furthermore, it's important to note that the final report was crafted from aggregated responses contributed by the respondents, ensuring the preservation of their confidentiality.

The researcher visited respondents and administered the mobile-based questionnaire (Computer Assisted Personal Interview). In an event where a respondent was busy and would like to respond later, the researcher scheduled another visit with the respondent. Respondents were given a time frame of one week for the subsequent visit.

3.9 Profile of the Fisheries Commission

Mandate: The Fisheries Commission was founded in accordance with the provisions of the Fisheries Act, 2002 (Act 625), with the primary objectives of:

- Regulating and overseeing fisheries activities.
- Advancing the growth of the fishing industry and addressing related concerns.

Object: The Commission's object is to oversee and administer the utilization of Ghana's fishery resources while harmonizing the policies associated with them.

Vision: To be a viable and dynamic Agency for accelerated development of Fisheries and Aquaculture.

Mission: To promote the development and sustainability of Fisheries and Aquaculture through research, technical services, cooperation and collaboration with stakeholders.

Functions: as stated in the Fisheries Act, 2002 (Act 625), are as follows:

- a) develop and regularly revise plans for the administration and enhancement of fisheries within Ghana's jurisdictional waters;
- b) Establish priorities for the utilization of fishery resources that will yield the most substantial benefits to the nation.
- c) Ensure the effective conservation of fishery resources by preventing overfishing.

- d) Strive to minimize conflicts among users of fishery gear, as far as practicable.
- e) Ensure rigorous monitoring, control, and surveillance of fishery waters.
- f) Foster sub-regional, regional, and international cooperation in fisheries management.
- g) Promote collaboration among local fishermen and facilitate the development of artisanal fishing.
- h) Conduct research and survey activities to assess the stock of fisheries resources.
- i) Establish connections between fisheries and other water-related activities, as well as environmental protection, particularly concerning fish resources and the food chain in rivers, lagoons, lakes, and the continental shelf along the country's coast.
- j) Standardize fish quality, weight, and the basis for fish pricing in consultation with any other agency responsible for fish quality standards.
- k) Provide recommendations to the Minister regarding the issuance of fishing licenses.
- l) Collaborate with the Minister to oversee and coordinate the importation of fish and frozen fish.
- m) Work in conjunction with the competent authority to establish requirements for manning fishing vessels and boats, ensuring safety for crew and vessels, and safeguarding fishing gear from damage by other vessels.
- n) Adjudicate and resolve complaints from individuals who feel aggrieved due to issues related to or arising from fishing activities and the broader fishing sector.
- o) Collaborate with District Assemblies in fishing communities to enforce fishery laws, including any bye-laws enacted by the respective District Assemblies.
- p) Perform any other functions vested in it under this Act or any other legislation.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter first introduces the study findings and subsequently delves into their implications. The following section analyses the demographic data of the respondents. Next, results and analyses of awareness of legal and regulatory frameworks/documents are presented. The chapter also presents results on compliance with procurement policies and practices of the public procurement regulations and analyses the same. Subsequently, the study explores how adhering to public procurement policies and practices influences financial management. In the following section, the study outlines the challenges faced in the enforcement of public procurement laws and provide recommended solutions to enhance compliance. The last section is a summary of the chapter.

4.2 Demographic Information of Respondents

The demographic characteristics of the interviewed individuals are presented in Table 4.1. It indicates that in the Fisheries Commission, persons involved in procurement activities are mostly males (80%), as there are few females who have knowledge of and work within the procurement area. This is reflected in the proportion of females interviewed (20%).

As anticipated, all the selected respondents had an educational background, which was a requirement for entry into the Public or Civil Service, where they are presently employed. As indicated in Table 4.1, it was evident that all the respondents possessed a minimum of a bachelor's degree qualification. Most of the respondents had master's degrees/postgraduate (86.7%), while the remaining 13.3 per cent had bachelor's degrees.

To guarantee that the questionnaire receives responses from individuals with the relevant expertise and yields suitable answers, the study specifically aimed at individuals actively engaged in procurement activities.

The results show that 26.7 per cent of the respondents were external and served on the Entity Tender Committee. This was closely followed by Procurement Officers (20%). Monitoring and Evaluation Officers and Planning and Budgeting Officers constitute 13.3 percent each. Other respondents included the Deputy Executive Director, Auditor, Finance Officer and the Stores and Supply Officer, which were 6.7% each.

For the level of procurement structure, 46.7 per cent were members of the Entity Tender Committee, followed by the staff of the procurement unit (26.7%). Respondents who are members of the Tender Evaluation Panel and those who do not belong to any level of the procurement structure constitute 13.3%, respectively.

The duration of experience in procurement activities serves as a valuable factor in assessing the respondents' potential to provide meaningful insights into procurement practices within the institution. The results reveal that the majority (66.7%) of respondents possessed six (6) years or more of work experience. While length of service is appealing, it does not guarantee accuracy, a viewpoint consistent with Bower (1993), who proposed that the number of years spent by respondents in their workplace can shape their experience, thereby affecting their comprehension and level of compliance with the Public Procurement Act 2002 (Act 663).

Table 4. 1: Demographic Information of Respondents

Demography	Detail	Frequency	Percentage (%)
Gender	Female	3	20.0
	Male	12	80.0
Educational Level	Graduate	2	13.3
	Postgraduate	13	86.7
Procurement related qualification	Yes	8	53.3
	No	7	46.7
Role in the Organisation	Auditor	1	6.7
	Dep. Head of the Institution	1	6.7
	External person	4	26.7
	Finance officer	1	6.7
	M&E Officer	2	13.3
	Planning/Budgeting Officer	2	13.3
	Procurement Officer	3	20.0
	Stores/Supply Officer	1	6.7
Level of procurement structure	Entity Tender Committee Member	7	46.7
	Evaluation Panel Member	2	13.3
	Procurement Unit Staff	4	26.7
	None of the above	2	13.3
Years of experience in procurement	Less than 3 years	2	13.3
	3 to 5 years	3	20.0
	6 to 10 years	5	33.3
	More than 10 years	5	33.3

Source: Field Survey, 2023

Number of respondents = 15

4.3 Reliability Analysis

Reliability, as a measurement tool, incorporates a measure of variable error. To assess the level of consistency among different factors within the same dimension, Cronbach's alpha values are frequently employed. The questionnaire encompasses various dimensions, and a higher reliability coefficient signifies a stronger correlation among these respective dimensions, indicating enhanced internal consistency. When the Cronbach's alpha value exceeds 0.7, it is considered to indicate high reliability. From Table 4.2, reliability coefficients for awareness and knowledge of regulatory/legal frameworks and the four main compliance areas range from 0.928 to 0.972, which are greater than the minimum recommended value of 0.7. It indicates that the scales were reliable. Consequently, the instrument developed for assessing the compliance level and financial management among public institutions using the Fisheries

Commission as a case were judged to be reliable. A similar pattern was observed in the four key effects of complying with the public procurement regulations, where the reliability coefficients ranged from 0.807 to 0.871. From the discussions above, it can be concluded that the respondents are consistent in their responses to statements/constructs used to measure the compliance level and the effect of the complying.

Table 4. 2: Reliability Statistics

Construct	Number of measures	Cronbach's alpha
Awareness and knowledge of regulatory/legal framework	6	.972
Management Systems	14	.958
Information & Communication	4	.964
Procurement Processes	17	.928
Contract management	11	.970
Budgetary control	3	.807
Expenditure control	6	.871
Value for money	6	.860
Transparency	6	.861

Source: Field Survey, 2023

4.4 Awareness of Legal and Regulatory Frameworks / Documents

The findings presented in Table 4.3 demonstrate the level of awareness among the respondents regarding legal and regulatory frameworks and documents. It is worth noting that all the respondents exhibit a solid understanding of public procurement legal and regulatory frameworks and documents, as evidenced by the mean scores above 3.0. Standard Tender Documents is well known by respondents since it recorded the highest mean score of 4.3. It was followed by the Public Procurement Act 2003, ACT 663, which scored a mean of 4.2. The Amendment Act, 2016 (ACT 914), the Procurement Manual and the PPA Regulations Guide had the same mean score of 4.1. The regulatory framework that had the lowest score was the Unit Cost of Infrastructure User Guide, having a mean score of 3.9. As noted by Eyaa and

Oluka (2011), a deficiency in understanding procurement rules often results in subpar compliance levels.

From Table 4.3, it is evident that when respondents were asked to rate their knowledge about the Standard Tender Documents, 53.3 per cent indicated that they have very good knowledge. About 27 per cent of respondents (26.7%) had good knowledge of the document, while 13.3 per cent fairly knew it. About 7 per cent of respondents (6.7%) had a poor understanding of the Standard Tender Document.

For the Public Procurement Act 2003 (Act 663), 46.7 per cent of the respondents had a very good understanding, while 26.7 per cent had a good and fair understanding, respectively. With regards to the Public Procurement (Amendment) Act 2016 (ACT 914), 40 per cent of the respondents had a very good understanding, while 33.3 per cent had good knowledge. About 27 per cent (26.7) indicated that their knowledge of the Amendment Act, 2016 (ACT 914) is fair.

Table 4.3 also reveals that 53.3 percent of the respondents possessed a very good comprehension of the Procurement Manual, while 20 per cent and 13.3 per cent had a good and fair understanding, respectively. However, 13.3 percent of the respondents revealed that they had a limited understanding of the Procurement Manual.

With regards to the PPA Regulations 2022, 46.7 percent of the respondents expressed a very good knowledge, while 26.7 per cent had good knowledge. About 14 per cent of respondents (13.3%) fairly understood the PPA Regulations 2022. The proportion of the respondents who had a poor understanding of the PPA Regulations 2022 was 13.3 per cent.

For the Regulation on Unit Cost of Infrastructure (UCOI) User Guide, respondents with very good understanding were lower (26.7%) relative to the other frameworks and documents. Forty (40) per cent of the respondents had a good understanding of the guide, while 26.7 per cent had

a fair understanding. Only 6.7 per cent of the respondents showed that they have a low understanding of the guide (Table 4.3).

Table 4. 3: Awareness and Knowledge of Legal and Regulatory Frameworks / Documents

Regulatory framework	Level of awareness/knowledge					Mean	SD
	Very poor (1)	Poor (2)	Fair (3)	Good (4)	Very good (5)		
Public Procurement Act 2003 ACT 663	0	0	4 (26.7%)	4 (26.7%)	7 (46.7%)	4.2	0.86
Public Procurement (Amendment) Act 2016 ACT 914	0	0	4 (26.7%)	5 (33.3%)	6 (40.0%)	4.1	0.83
Regulations (Unit Cost of Infrastructure (UCOI) User Guide)	0	1 (6.7%)	4 (26.7%)	6 (40.0%)	4 (26.7%)	3.9	0.92
Regulation (PPA Regulations 2022)	0	2 (13.3%)	2 (13.3%)	4 (26.7%)	7 (46.7%)	4.1	1.1
Procurement Manual	0	2 (13.3%)	2 (13.3%)	3 (20.0%)	8 (53.3%)	4.1	1.13
Standard Tender Documents	0	1 (6.7%)	2 (13.3%)	4 (26.7%)	8 (53.3%)	4.3	0.96

Source: Field Survey, 2023

4.5 Compliance with Procurement Policies and Practices of the Public Procurement Act, 2003 (Act 663) and the Amendment Act of 2016 (Act 914)

To ascertain whether the Fisheries Commission is compliant with procurement policies and practices of the Public Procurement Act, 2003 (Act 663) and the Amendment Act of 2016 (Act 914), data obtained on the four main compliance areas as well as their respective key compliance indicators were analysed and discussed.

4.5.1 Key Compliance Indicators under Management Systems

In this section, we present the data gathered concerning management systems, encompassing aspects such as ethics and adherence to regulatory frameworks, human resources, leadership, financial and control systems, as well as procedures for handling complaints, appeals, and dispute resolution mechanisms (LRN, 2007). Table 4.4 is the summary of statistics of 14 key compliance indicators used to measure compliance with management systems. The results indicate that "practice good record-keeping" and "utilize Standard Tender Documents (STD) and Manuals" were the KCIs with the highest mean scores of 3.87 and RIIs of 77.3% each. The next KCIs to score a mean of more than 3.5 and RII of 70% were "ensure fairness and transparency in resolution of cases within the terms established in the legal framework" (3.71 and 74.3%) and "capture procurement transactions in cash budgets" (3.60 and 72%). The KCI with the lowest mean score and RII was "evaluate the performance of procurement staff on a regular basis", being 2.79 and 55.7%. Overall, a compliance rate of approximately 68 percent was attained within this primary compliance category.

Table 4. 4: Summary Statistics on the Level of Compliance with Key Compliance Indicators of Management Systems

KCIs_ Management Systems	N	MEAN	STD	RII (%)	RANK
practice good record keeping	15	3.87	0.74	77.3	1
utilize Standard Tender Documents (STD) and Manuals	15	3.87	1.19	77.3	1
ensure fairness and transparency in resolution of cases within the terms established in the legal framework	14	3.71	0.99	74.3	3
Capture procurement transactions in cash budgets	15	3.60	1.24	72.0	4
carry out internal procurement auditing	15	3.47	1.13	69.3	5
Put in place quality control mechanisms for contracts	14	3.43	1.09	68.6	6
effectively use available procurement information dissemination mediums	15	3.40	1.12	68.0	7
appropriately use procurement plans and contract documents	15	3.40	1.18	68.0	7
utilize right procurement methods	15	3.40	1.24	68.0	7

KCIs_ Management Systems	N	MEAN	STD	RII (%)	RANK
seek technical support from the body with an oversight role	15	3.33	0.98	66.7	10
put internal auditors in place and give them procurement training	15	3.20	1.21	64.0	11
Put proper payment systems in place for every contract	15	3.13	1.19	62.7	12
engage staff with professional procurement qualification	15	3.00	1.25	60.0	13
evaluate the performance of procurement staff on a regular basis	14	2.79	1.25	55.7	14

Source: Field Survey, 2023

RII = Relative Importance Index

4.5.2 Key Compliance Indicators under Information and Communication

Concerning Key Compliance Indicators (KCIs) related to Information and Communication, which assess procurement entities' capability to disseminate information in the correct format and effectively utilize received information (Ayitey, 2012), compliance was relatively low. Table 4.5 showed that all four KCIs were sometimes adhered to, as evidenced by means of 3.20, 3.13, and 3.07 and RIIs of 64%, 62.7%, and 61.3%, respectively. "Effectively use the procurement information dissemination systems" had the highest RII of 64%, while "interact with all procurement stakeholders" obtained an RII of 61.3%. This main compliance area achieved a compliance level of about 62%.

Table 4. 5: Summary Statistics on Level of Compliance with Key Compliance Indicators of Information and Communication

KCIs_ Information and Communication	N	MEAN	STD	RII (%)	RANK
effectively use the procurement information dissemination systems	15	3.20	1.15	64.0	1
demonstrate knowledge of and interact with the marketplace	15	3.13	1.13	62.7	2
Maximise the use of procurement websites, procurement internal notice boards and newspapers	15	3.07	1.10	61.3	3
Interact with all procurement stakeholders	15	3.07	1.16	61.3	3

Source: Field Survey, 2023

4.5.3 Key Compliance Indicators under Procurement Processes

This section discussed 17 KCIs that relate to the procurement process compliance area. The procurement process aims to assess procurement entities' familiarity with the procurement cycle and their procedures at each stage of the cycle. This encompasses procurement planning, tender document preparation notice, tender invitation, tender submission, tender opening, tender evaluation, and contract award (Lynch, 2013). The summary statistics provided in Table 4.6 reveal that out of the 17 Key Compliance Indicators (KCIs), 10 were consistently followed most of the time, while six were intermittently adhered to., while one of the KCIs, 'notifies all losers of bid professionally', was complied with just a few times. The results showed that the Fisheries Commission, most of the time, notifies all winners of the contracts according to procurement regulations, as proven by a mean score of 4.33 and RII of 86.7%. The next highest KCI in this main compliance area was "state date, time and venue for bid submission", which scored a mean of 4.27 and RII of 85.3%. Five KCIs "advertise tender invitations", "utilizes Standard Tender Documents", "have in place tender opening register", "keep minutes of all bid opening including all opening records" and 'evaluate all tenders in accordance with tendering requirements" had mean scores of 4.13 and RII of 82.7%. Two KCIs "have a secured tender box in place" and "unambiguously state the date, time and venue for bid opening" each had a mean score of 4.07 and RIIs of 81.4% and 81.3% respectively. The Key Compliance Indicator (KCI) that was relatively infrequently encountered was "use internal notice boards to display procurement information". Approximately 53% (8 out of 15) of the respondents explicitly stated that they had not previously encountered this scenario. Procurement processes achieved the highest compliance level of about 76%.

Table 4. 6: Summary Statistics on the Level of Compliance with Key Compliance Indicators of Procurement Processes

KCIs_ Procurement Processes	N	MEAN	STD	RII (%)	RANK
notifies all winners of contract according to procurement regulations	15	4.33	0.82	86.7	1
State date, time and venue for bid submission	15	4.27	0.70	85.3	2
advertise tender invitations	15	4.13	0.64	82.7	3
utilizes Standard Tender Documents	15	4.13	0.64	82.7	3
have in place tender opening register	15	4.13	0.92	82.7	3
Keep minutes of all bid openings, including all opening records	15	4.13	0.74	82.7	3
evaluate all tenders in accordance with tendering requirements	15	4.13	0.92	82.7	3
Have a secured tender box in place	14	4.07	0.73	81.4	8
unambiguously state the date, time and venue for bid opening	15	4.07	0.80	81.3	9
Ensure that all bid documents contain the same evaluation criteria	15	4.00	0.93	80.0	10
Publicize all contract awards according to procurement regulations	15	3.67	0.90	73.3	11
State a reasonable date and time for bid opening	15	3.60	1.40	72.0	12
post plan on the internet	14	3.57	1.28	71.4	13
Use an adequately defined procurement plan	15	3.53	1.13	70.7	14
Use internal notice boards to display procurement information	7	3.29	1.38	65.7	15
disseminate information for placement in the procurement bulletin	15	3.07	1.53	61.3	16
notifies all losers of bid professionally	15	2.47	1.46	49.3	17

Source: Field Survey, 2023

4.5.4 Key Compliance Indicators under Contract Management

Table 4.7 presents a summary of the data obtained regarding contract management, encompassing a total of eleven (11) Key Compliance Indicators (KCIs). Contract management involves the evaluation of how procurement entities supervise and manage the implementation of contracts they have granted. This encompasses various activities such as planning and mobilization, execution, quality control, inventory management, as well as reporting, as outlined by OECD-DAC/World Bank (2006). Five (5) KCIs were sometimes complied with, while six (6) were adhered to just a few times. Among the KCIs that were adhered to some of the times were "keep minutes of all meetings of Board of the survey" and "keep records of all items disposed of", which had the same mean score and RII of 3.53 and 70.7%, respectively. The other KCIs were "form the required membership of Board of the survey", "take works programme/schedule from executors", and "take advance payment guarantees for advance payments made", which had RIIs of 69.3%, 68.6% and 66.7%, respectively. The KCI that had the lowest mean score (2.47) and RII (49.3%) among those that were adhered to just a few times was "compare and analyse planned progress against actual". From this analysis, it is clearly shown that about 61% compliance level was obtained in this main compliance area.

Table 4. 7: Summary Statistics on the Level of Compliance with Key Compliance Indicators of Contract Management

KCIs_ Contract Management	N	MEAN	STD	RII (%)	RANK
Keep minutes of all meetings of the Board of survey	15	3.53	1.25	70.7	1
Keep records of all items disposed	15	3.53	1.36	70.7	1
form the required membership of the Board of survey	15	3.47	1.19	69.3	3
Take works programme/schedule from executors	14	3.43	0.85	68.6	4
Take advance payment guarantees for advance payments made	15	3.33	1.18	66.7	5
utilizes appropriate stock control record system	15	2.93	1.28	58.7	6

KCIs_ Contract Management	N	MEAN	STD	RII (%)	RANK
organizes regular project progress meetings	15	2.87	1.30	57.3	7
Prepare project completion or delivery reports	15	2.80	1.66	56.0	8
prepares timely project monitoring reports	15	2.73	1.49	54.7	9
prepares timely handing over certificates	15	2.67	1.45	53.3	10
Compare and analyse planned progress against actual	15	2.47	1.36	49.3	11

Source: Field Survey, 2023

4.5.5 Overall Level of Compliance Based on the Four Main Compliance Areas

As per Schapper et al. (2006), the evaluation of public procurement management performance should primarily be delineated by adherence to established procurement regulations. Subsequently, Figure 4.1 illustrates the degree of compliance with procurement regulations, focusing on four (4) principal domains of the Public Procurement Model of Excellence (PPME) Tool, as devised by the Public Procurement Authority. The overall level of compliance of the four main compliance areas was obtained by taking the averages of the relative importance indices of the individual key compliance indicators of each major compliance area. Overall, the level of compliance of the Fisheries Commission was high (67%) when measured by the criteria of the PPME Tool. Per Osafo-Marfo (2003), compliance with these rules fosters the efficient use of public funds, ensuring impartiality, equity, transparency, and accountability throughout the procurement procedure.

Procurement processes recorded the highest level of compliance (76%). Though contract management was above average, on the other hand, it recorded the lowest level of compliance (61%). This suggests that the Fisheries Commission may not prioritize contract management to the same extent as the other three compliance areas. The level of compliance in terms of management systems (68%) and information and communication (62%) were high since all were above average. The order of the performance of the four main compliance areas was in

line with the work of Berko-Aidoo (2018), which assessed the compliance with Public Procurement Act 2003 (Act 663) among public entities in the Asante Akim North Municipality.

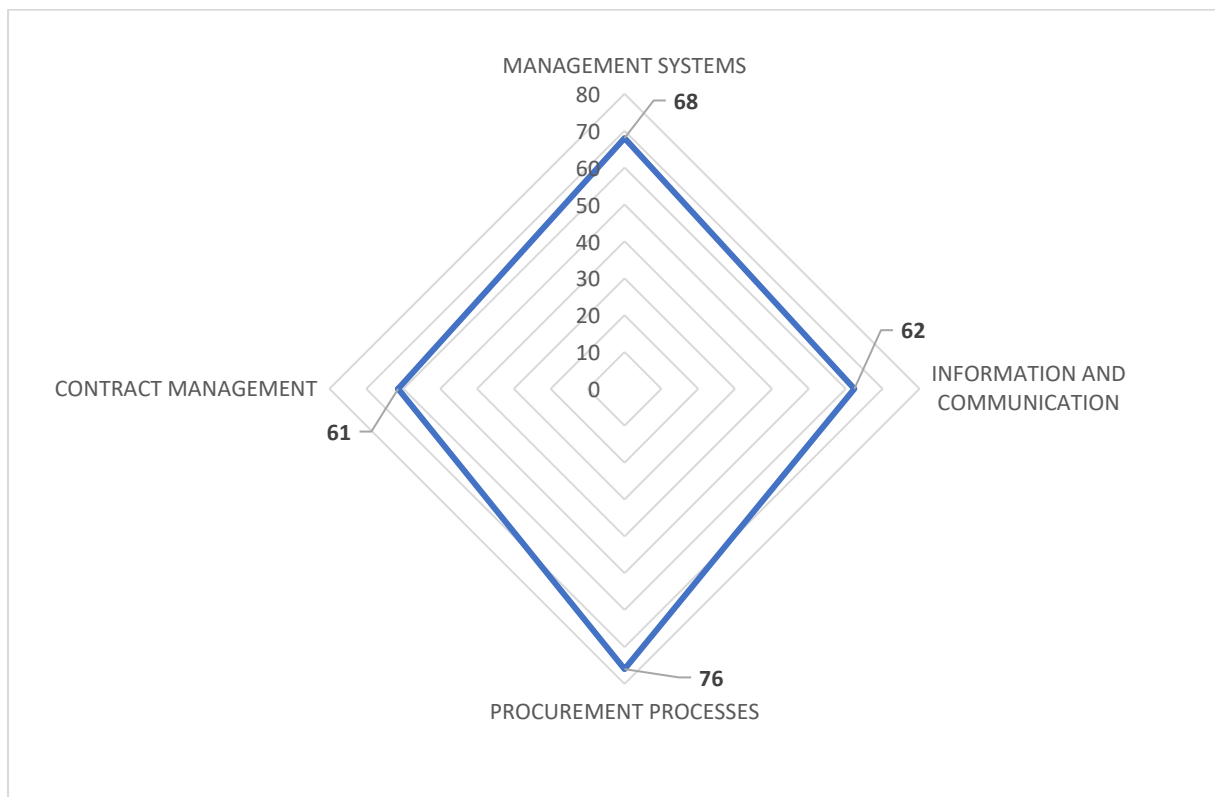


Figure 4. 1: Compliance Levels under the Four Main Compliance Areas
Source: Field Survey, 2023

4.6 Effect of Compliance with Public Procurement Policies and Practices on Financial Management

To assess how compliance with public procurement policies and practices influences financial management within the Fisheries Commission, respondents assessed the extent to which procurement has influenced the following aspects of financial management (budgetary controls, expenditure controls, value for money and transparency) using the scale of 0 to 5, where 0 means no impact at all; 1 = rarely; 2 = just a few times; 3 = some of the times; 4 = most of the times; 5 = All the time.

Figure 4.2 shows that the area of financial management which respondents agree to be the most derived benefit from complying with public procurement policies and practices is transparency,

which recorded a relative importance index of 80.2%. The next highest financial impact is value for money (RII = 78.7%), followed by budgetary controls (RII = 70.4%) and expenditure controls (RII = 63.3%).

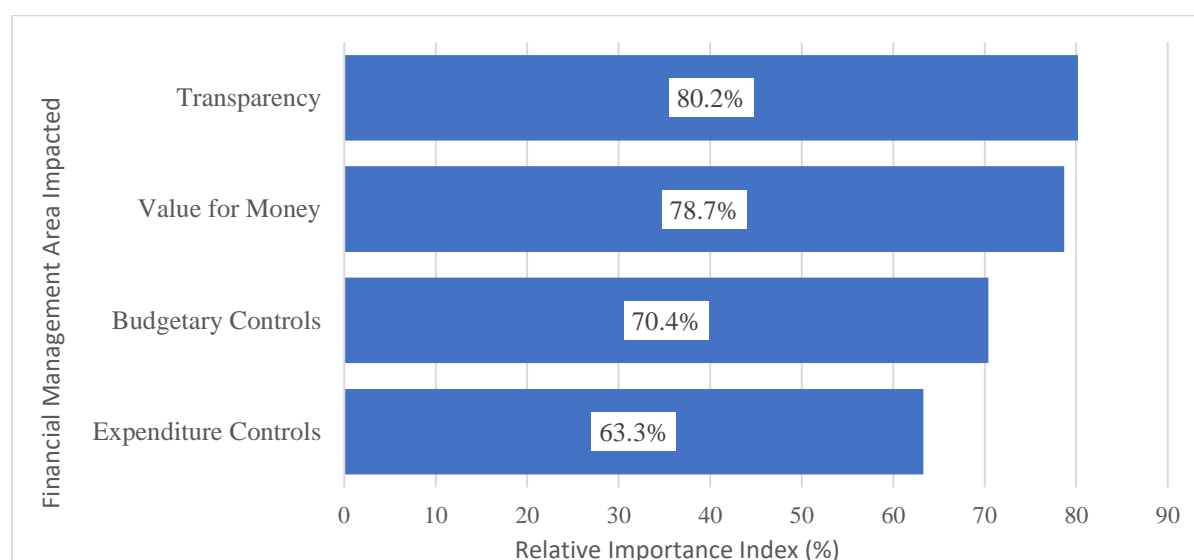


Figure 4. 2: Impacted Area of Financial Management

Source: Field Survey, 2023

4.6.1 Budgetary Controls

The fundamental tenets of procurement prioritize cost control over strict regulations, aiming to safeguard the public and its constituents against misuse (Boone and Kurtz, 2007). The research aimed to ascertain whether the Procurement Act had indeed established budgetary control, as stated by Nickel et al. (1999), wherein organizations routinely compare their actual revenues to planned expenditures to attain effective financial management. The research showed that 70.4 per cent of the respondents agreed that the Procurement Act has brought about budgetary controls in the Fisheries Commission (Table 4.8). The most rated key compliance indicator that suggests that budgetary controls exist now is "the commission now has in place a well-prepared annual procurement plan, and this plan is annually updated and posted using the e-procurement planning site of PPA" having a mean score of 3.87 and RII of 77.3%. "Increased budgets supervision and control has been experienced" and "procurement plans are now recorded against budget to identify anomalies in recorded expenditure" were rated with mean scores of

3.36 and 3.33 and RIIs of 67.1% and 66.7%, respectively (Table 4.8). Their estimated relative importance indices indicate that there is room for improvement in those two indicators, though the overall rating of budgetary control was high.

Table 4. 8: Budgetary Controls

Indicators	N	MEAN	STD	RII (%)	RANK
The commission now has in place a well-prepared annual procurement plan, and this plan is annually updated and posted using the e-procurement planning site of PPA	15	3.87	0.83	77.3	1
increased budgets, supervision, and control have been experienced	14	3.36	0.93	67.1	2
Procurement plans are now recorded against the budget to identify anomalies in recorded expenditure	15	3.33	1.05	66.7	3
Average	15	3.52	0.94	70.4	

Source: Field Survey, 2023

4.6.2 Expenditure Controls

The study aimed to determine if the Procurement Act had contributed to the surveillance of expenditures, enabling the identification and correction of irregularities in spending. Excessive government expenditure in the economy is because public institutions are not to effectively monitor and trace government expenditures. Hence, the implementation of the Procurement Act seeks to streamline and control public expenditure. From Table 4.9, the research indicated that, overall, the Procurement Act most of the time brought about expenditure control in the Fisheries Commission with a mean score of 3.16 and RII of 63.3%. the study also revealed that a significant majority of the respondents strongly concurred that "the procurement unit regularly conducts market surveys to update its knowledge of prevailing prices for goods and works", which scored a relatively higher mean of 3.50 and RII of 82.9%. "Periodic review and analysis of expenditure is now conducted" and "We have seen a significant reduction in fraud

and corruption in procurement processes" had mean scores of 3.29 and 3.20 and RIIs of 65.7% and 64.0%, respectively. Again, the study indicated that most of the time, there has been a significant reduction in waste in procurement processes (Mean score of 3.13 and RII of 62.7%). The respondents agreed that some of the times, there has been a massive reduction in costs of services and products (Mean score of 3.00 and RII of 60.0%) and also delays in the procurement of goods and services have reduced significantly (Mean score of 2.87 and RII of 57.3). Following the discussion above, it seems that most of the respondents are somewhat uncertain that delays in the procurement of goods and services have reduced significantly (Table 4.9).

Table 4. 9: Expenditure Controls

Indicators	N	MEAN	STD	RII (%)	RANK
The procurement unit regularly conducts market surveys to update its knowledge of prevailing prices for goods and works.	14	3.50	1.02	82.9	1
periodic review and analysis of expenditure is now conducted	14	3.29	0.99	65.7	2
We have seen a significant reduction in fraud and corruption in procurement processes	15	3.20	1.15	64.0	3
There has been a significant reduction in waste in procurement processes	15	3.13	1.06	62.7	4
There has been a massive reduction in the costs of services and products	13	3.00	1.29	60.0	5
Delays in the procurement of goods and services have been reduced significantly	15	2.87	0.99	57.3	6
Average	15	3.16	1.08	63.3	

Source: Field Survey, 2023

4.6.3 Value for Money

According to Cane (2004), public organizations are obliged to embrace sustainable development objectives within their procurement processes, aligning them with the principles

of value for money and the legal framework governing public procurement, as highlighted by Wanyama (2010). In accordance with this, participants were requested to specify the degree to which the Procurement Act guarantees value for money in the execution process. Table 4.10 shows that value for money as a benefit derived from the adoption of the Procurement Act, with a mean score of 3.93 and RII of 78.7%, was the second highest rated positive impact of the Act. Value for money indicators such as "the Commission now lays stronger emphasis on achieving VFM than before" and "we have achieved more value for money (VFM)" were equally rated by respondents with mean scores of 4.13 and RIIs of 82.7% respectively. The respondents also asserted that procurement activities in the Commission have been streamlined, resulting in VFM most of the time (that is, recording a mean score of 4.07 and RII of 81.3%. "Management regularly appraises its procurement activities to ensure VFM" and "The Commission plans annual procurement spending to ensure VFM" were also perceived to have the same value since each scored means of 3.93 and RIIs of 78.7%, respectively. It looks like the Commission does not have a policy on value for money for procurement activities or pays little attention to that, as it had the lowest rating by having a mean score of 3.40 and RII of 68.0%. The preceding discourse demonstrates that a majority of the respondents concurred that the Procurement Act had indeed delivered value for money, aligning with existing literature (World Bank, 2000).

Table 4. 10: Value for Money

Indicators	N	MEAN	STD	RII (%)	RANK
The Commission now lays stronger emphasis on achieving VFM than before	15	4.13	0.64	82.7	1
We have achieved more value for money (VFM)	15	4.13	0.52	82.7	1
Procurement activities in the Commission have been streamlined, resulting in VFM	15	4.07	0.70	81.3	3
Management regularly appraises its procurement activities to ensure VFM	15	3.93	0.59	78.7	4

Indicators	N	MEAN	STD	RII (%)	RANK
The Commission plans annual procurement spending to ensure VFM	15	3.93	0.59	78.7	4
In fact, the Commission now has a policy on VFM for procurement activities	15	3.40	0.91	68.0	6
Average	15	3.93	0.66	78.7	

Source: Field Survey, 2023

4.6.4 Transparency

Transparency is a fundamental principle underpinning the operation of the Procurement Act. Respondents were surveyed to gauge the degree to which the Procurement Act fosters transparency in the implementation process. The data presented in Table 4.11 reveals that the respondents overwhelmingly affirmed that the Procurement Act does indeed ensure a very high level of transparency in its procedures. A mean of 4.01 shows that most of the time, the transparency provision of the Procurement Act has been impacted positively. The results show that respondents have seen improved transparency in the management of public finances, having a mean score of 4.27 and RII of 85.3% in the Fisheries Commission. The next most important transparency item was "the Commission's procurement activities are now established through competitive process and negotiation", which showed a mean score of 4.20 and RII of 84%, followed by "the Commission now applies fair and transparent rules for the selection of tenderers" with a mean score of 4.07 and RII of 81.3%. This supports the claim made by PPA (2007) that transparency facilitates the establishment of open, equitable, and transparent procedures. Additionally, "The procurement entity now liaises with the Public Procurement Authority always for timely and required procurement information" and "procurement activities of the Commission are now evaluated by the Public Procurement Authority" were rated equally as each recorded mean score of 4.00 and 80.0% respectively. The least rated was "procurement officials in the Commission now are professionals and experienced in the field,"

which had a mean score of 3.53 and RII of 70.7%. This means that the procurement officials in the Fisheries Commission are perceived not to be the professionals they ought to be.

Table 4. 11: Transparency

Indicators	N	MEAN	STD	RII (%)	RANK
We have seen improved transparency in the management of public finances	15	4.27	0.46	85.3	1
The Commission's procurement activities are now established through a competitive process and negotiation	15	4.20	0.56	84.0	2
The Commission now applies fair and transparent rules for the selection of tenderers	15	4.07	0.70	81.3	3
The procurement entity now liaises with the Public Procurement Authority for timely and required procurement information	15	4.00	0.85	80.0	4
procurement activities of the Commission are now evaluated by the Public Procurement Authority	15	4.00	0.65	80.0	4
Procurement officials in the Commission now are professionals and experienced in the field	15	3.53	1.06	70.7	6
Average	15	4.01	0.71	80.2	

Source: Field Survey, 2023

4.7 Challenges Facing the Implementation of Public Procurement Laws and Suggest Solutions to Improve Compliance

4.7.1 Relative Importance Index of the Challenges Faced by Respondents

To identify the obstacles encountered during the enforcement of public procurement laws and suggest solutions to improve compliance, the study identified fourteen implementation challenges of public procurement laws from the literature, as listed in Table 4.12. The respondents were asked to indicate the extent to which each of the following challenges interfere with the commission's compliance with procurement regulations and further rank the ones that apply. Analysis of the extent is presented in Table 4.12, while their corresponding

mean rankings are presented in Table 4.13. The results show that low level or absence of capacity building for service providers is the most pressing challenge (Mean of 4.14 and RII of 82.9%) that interferes with the implementation of procurement laws in the institution. The next challenge, which, all the time, interferes with implementation of procurement laws, is "delays in payment of contractors and suppliers," recording a mean of 4.07 and RII of 81.3%. All the other challenges persist most of the time, with "Bureaucratic processes delay the procurement process" recording the highest mean of 3.93 and RII of 78.7%. The data presented in the table above highlights the presence of bureaucratic hurdles within the procurement processes for goods, services, and works, leading to notable delays in these procedures. This observation aligns with the perspective put forth by Van Weele (2018), who contended that procurement processes often grapple with extensive bureaucratic elements, subsequently impeding the overall procurement timeline. In contrast, the challenge perceived as the least urgent, as indicated by the respondents, pertained to the "Inadequate Threshold Limit for entities like the Fisheries Commission in emergency cases." This particular issue garnered a mean score of 3.29, accompanied by a Relative Importance Index (RII) of 65.7%. Furthermore, two additional challenges, namely, "Poor Dissemination of Procurement Law and Information from Policy Makers to Implementers" and "Low Capacity of Procurement Professionals Due to Inadequate Skilled Personnel," were also ranked similarly, both attaining mean scores and RII values of 3.53 and 70.7%, respectively.

Table 4. 12: Relative Importance of Challenges Interfering with Compliance with Public Procurement Regulations

Challenge	N	MEAN	STD	RII (%)	RANK
Low level or absence of capacity building for service providers	14	4.14	0.77	82.9	1
Delays in payment of contractors and suppliers	15	4.07	0.59	81.3	2

Challenge	N	MEAN	STD	RII (%)	RANK
'Bureaucratic' processes delay the procurement process	15	3.93	1.33	78.7	3
Lack of career development path and low salaries of procurement personnel	14	3.93	0.73	78.6	4
Political interference with the procurement process	15	3.80	0.68	76.0	5
Lack of due diligence by the procurement authority and over-exploitation of sole sourcing provision of the law	13	3.77	0.83	75.4	6
Insufficient technical and managerial skills to be competitive in the tendering process	14	3.71	0.91	74.3	7
Inadequate capacity to appreciate the standard tender documents	14	3.64	0.93	72.9	8
Lack of funding for procurement activities and non-cooperativeness of suppliers	15	3.60	1.12	72.0	9
Poor dissemination of procurement law/information from the policymakers to the implementers	15	3.53	0.83	70.7	10
Inadequate skilled personnel (low capacity of procurement professionals)	15	3.53	0.83	70.7	10
Lack of weak enforcement by policymakers	14	3.50	0.94	70.0	12
Lack of basic knowledge of the law	15	3.33	1.18	66.7	13
The threshold limit is too small for an entity like the Fisheries Commission in case of an emergency	14	3.29	1.38	65.7	14

Source: Field Survey, 2023

4.7.2 Identification and Ranking of the Implementation Challenges of the Public Procurement Regulations

A comprehensive set of fourteen (14) challenges associated with procurement implementation was derived from the existing literature. These challenges were subsequently presented to a group of fifteen respondents, all of whom hold key positions within the Fisheries Commission and are actively engaged in procurement operations on a daily basis. Each challenge was assigned a numerical scale ranging from 1 to 14, with 1 denoting the highest level of

significance and 14 indicating the lowest. The task assigned to the respondents was to rank these fourteen challenges based on their perceived impact on procurement processes within the Commission. In the process of analysis, respondent responses were subjected to averaging to derive the mean rank for each identified challenge, as illustrated in Table 4.13 and Figure 4.3. It is worth noting that, based on the data collection method employed, the challenge characterized by the lowest mean rank was regarded as the most urgent or significant, whereas the highest mean rank indicated the least critical challenge. The degree of agreement or concordance in the ranking of these challenges was quantified using the Kendall Coefficient of Concordance (W), and its statistical significance was assessed through the Chi-square (χ^2) test at a significance level of 0.05, as outlined in Table 4.14.

The F test for the level of agreement or concordance (W) between the rankings of the challenges with regard to the public procurement regulations by the respondent staff is 92.6% (0.926). The Coefficient of Concordance recorded indicates that there is a higher level of agreement between the staff of the Fisheries Commission on the challenges considered to be hindering compliance with the procurement regulations.

From Table 4.13, the most pressing challenge is delays in the payment of contractors and suppliers, with a mean rank of 1.8 and the least challenge being "Threshold limit is too small for an entity like the Fisheries Commission in case of emergency," recorded a mean rank of 13.1. The second, third and fourth positions in the ranking of the challenges were "Bureaucratic processes delay the procurement process" (2.3), "Low level or absence of capacity building for service providers" (3.1) and "Political interference with the procurement process" (3.7), respectively. Other challenges as their level of importance declines are "Lack of career development path and low salaries of procurement personnel" (4.8), "Lack of funding for procurement activities and non-cooperativeness of suppliers" (5.8), "Poor dissemination of procurement law/information from the policy makers to the implementers" (7.1), "Inadequate

skilled personnel (low capacity of procurement professionals)" (7.8), "Insufficient technical and managerial skills to be competitive in the tendering process" (8.7), "Inadequate capacity to appreciate the standard tender documents" (10.2), "Lack of basic knowledge in the law" (11.2), "Lack or weak enforcement by policy makers" (12.3), and "Lack of due diligence by the procurement authority and over exploitation of sole sourcing provision of the law" (13.0) respectively.

Under the effects of PPA on its procurement activities. This is a disturbing situation because if these challenges are not fixed and managed, the transparency, accountability and value-for-money provisions of the Act will not be achieved.

Table 4.13: Mean Ranking of Implementation Challenges of the Public Procurement Regulations

Challenge	Mean Rank ^a	Rank
Delays in payment of contractors and suppliers	1.8	1
'Bureaucratic' processes delay the procurement process	2.3	2
Low level or absence of capacity building for service providers	3.1	3
Political interference with the procurement process	3.7	4
Lack of career development path and low salaries of procurement personnel	4.8	5
Lack of funding for procurement activities and non-cooperativeness of suppliers	5.8	6
Poor dissemination of procurement law/information from the policymakers to the implementers	7.1	7
Inadequate skilled personnel (low capacity of procurement professionals)	7.8	8
Insufficient technical and managerial skills to be competitive in the tendering process	8.7	9
Inadequate capacity to appreciate the standard tender documents	10.2	10
Lack of basic knowledge of the law	11.2	11

Challenge	Mean Rank ^a	Rank
Lack of weak enforcement by policymakers	12.3	12
Lack of due diligence by the procurement authority and over-exploitation of sole sourcing provision of the law	13.0	13
The threshold limit is too small for an entity like the Fisheries Commission in case of an emergency	13.1	14

a. The results are based on thirteen (13) respondents who fully ranked all the fourteen challenges

Source: Field Survey, 2023

Hypothesis Testing

The null hypothesis (Ho) posits that there exists no agreement in the ranking of challenges encountered by practitioners in the execution of procurement activities within the Fisheries Commission. The study's findings (Table 4.14) demonstrate the results of the Chi-square analysis conducted on the ranking of these challenges. The conducted test reveals a substantial level of agreement, amounting to at least 92.6%. When comparing the computed χ^2 -value (156.55) to the critical χ^2 -value (22.36) at a significance level of 0.05, with degrees of freedom $df = k-1 = 13$, as per the Chi-Square distribution table, it becomes evident that the study's conclusion is justified. Therefore, the study ascertains that there is a significant level of agreement among respondents in their ranking of challenges ($W = 0.926$ or 92.6% agreement in rankings), signifying the rejection of the null hypothesis, which posits the absence of significant agreement in challenge rankings.

Table 4. 14: Test Statistic for the Ranking of the Procurement Challenges

N	13
Kendall's W ^a	0.926
Chi-Square	156.552
df	13
Asymp. Sig.	0.000

a. Kendall's Coefficient of Concordance

Source: Field Survey, 2023

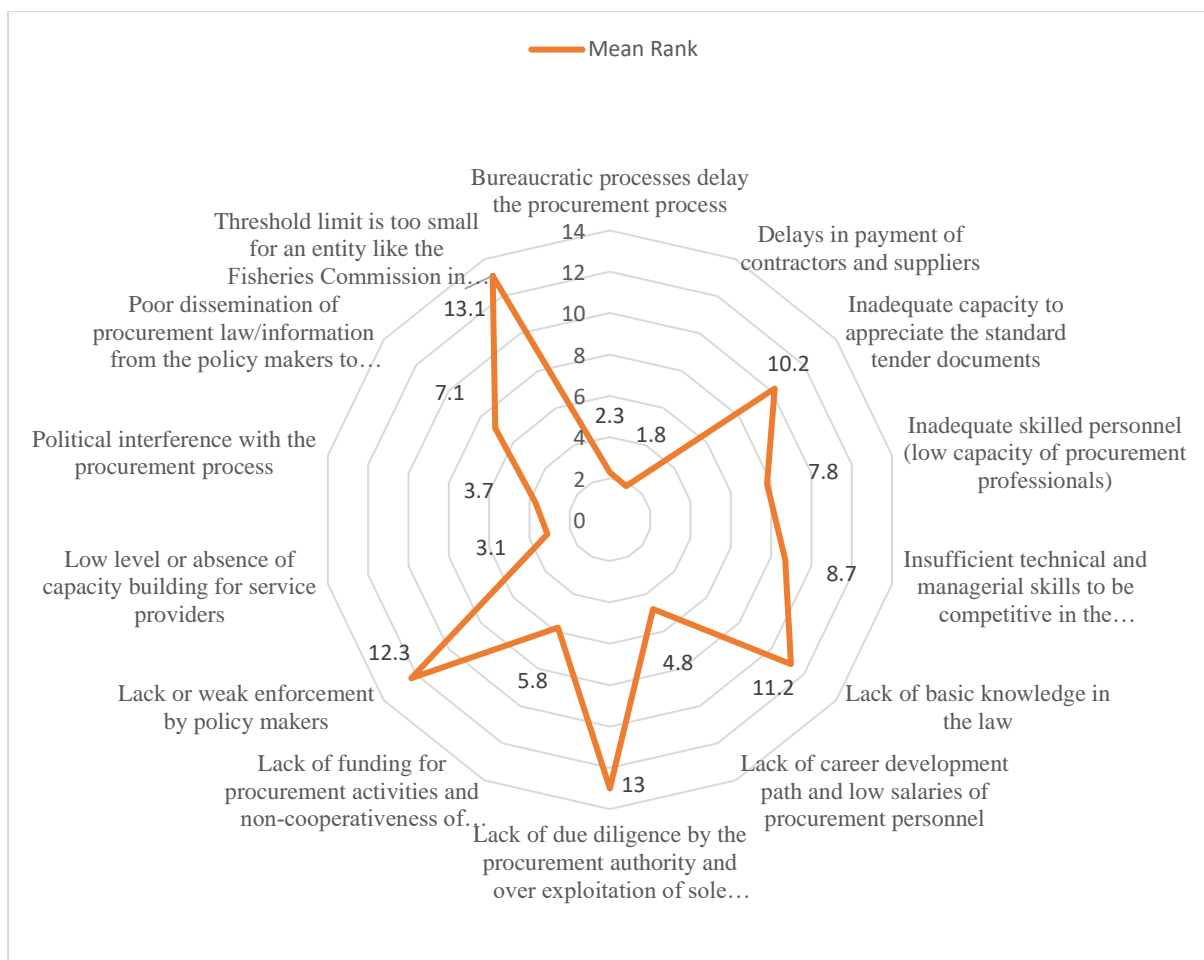


Figure 4. 3: Mean Ranking of Implementation Challenges of the Public Procurement Regulations

4.8 Extent to which the Challenges of Procurement Compliance are Prevalent in each of the Following Procurement Processes at the Fisheries Commission

The study aimed to create the degree to which challenges of procurement compliance are prevalent in specific stages of the procurement processes. From Table 4.15, it is evident that "Choice of the most suitable procurement method" is the stage in the procurement process that respondents face as a challenge most of the time, with a mean score of 3.29 and RII of 65.7%. The stage which poses the least challenge to respondents is "Opening and evaluation of tenders", which had a mean score of 2.57 and RII of 51.4%. "Valuation and classification of procurement contract" and "Publication of procurement contract in a suitable media and in good time" were equally rated by respondents, having mean scores of 3.20 and RIIs of 64% respectively. Next was the planning stage, which recorded a mean score of 3.13 and RII of

62.7%. Respondents also indicated that the following three stages “Contract administration” (Mean: 2.93; RII: 58.7%), “Evaluation of tender documents” (Mean: 2.93; and RII: 58.6%) and “Awarding of procurement contracts” (Mean: 2.79; RII: 55.7%) pose challenge in the procurement processes some of the times and were ranked fifth, sixth and seventh. Table 4.15 further shows that only fourteen (14) respondents indicated that the following four stages of the procurement processes “Choice of the most suitable procurement method”, “Evaluation of tender documents”, “Awarding of procurement contracts” and “Opening and evaluation of tenders” pose a challenge. This implies that a respondent did not see those stages as a challenge at all.

Table 4. 15: Summary Statistics of the Extent of Challenge with Stages in the Procurement Process

PARAMETER	N	MEAN	STD	RII (%)	RANK
Choice of the most suitable procurement method	14	3.29	1.07	65.7	1
Valuation and classification of procurement contract	15	3.20	1.15	64.0	2
Publication of procurement contract in a suitable media and in good time	15	3.20	1.26	64.0	2
Procurement planning	15	3.13	1.30	62.7	4
Contract administration	15	2.93	1.39	58.7	5
Evaluation of tender documents	14	2.93	1.21	58.6	6
Awarding of procurement contracts	14	2.79	1.25	55.7	7
Opening and evaluation of tenders	14	2.57	1.50	51.4	8

Source: Field Survey, 2023

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides an overview of the research process, highlights the key findings obtained, and offers conclusions and recommendations obtained from the study's results. Finally, the chapter makes recommendations for further research in some areas.

5.2 Summary of Findings

The research aimed to determine the degree to which the Fisheries Commission adheres to the procedures and guidelines outlined in the Public Procurement Act, 2003 (Act 663) and its 2016 Amendment (Act 914), and how this compliance impacts financial management. The study, therefore, focused on the subsequent interrelated specific objectives: (i) to assess the level of adherence of the Fisheries Commission to the procurement policies and practices delineated in the Public Procurement Act, 2003 (Act 663) and its 2016 Amendment (Act 914); (ii) to determine the effect of compliance with public procurement policies and practices on financial management in the Fisheries Commission and (iii) to identify the hurdles encountered during the execution of public procurement laws and make necessary recommendations to improve compliance.

The summary of the key findings is as follows:

- A majority of the participants possessed a professional background spanning six (6) years or more in the field of procurement activities.
- It was evident that every respondent exhibited a strong understanding of the legal and regulatory frameworks and documents governing public procurement, with Standard Tender Documents being the well-known legal and regulatory framework or document.

- Overall, the level of compliance is high. Procurement processes recorded the highest level of compliance, followed by Management systems. The next is Information and communication, and Contract management, on the other hand, records the lowest level of compliance.
- Despite the high level of adherence of the four key compliance sections, some of the vital compliance indicators, however, recorded lower levels of compliance with a relative importance index of sixty per cent or less. These are: engagement of staff with professional procurement qualification; evaluation of performance of procurement staff on a regular basis; notification of all losers of bid professionally; utilisation of acceptable stock control record system; organization of regular project progress meetings; preparation of project completion or delivery reports; preparation of timely project monitoring reports; preparation of timely handing over certificates; and comparison and analysis of planned progress against actual implementation of activities.
- The area of financial management most impacted by compliance with public procurement policies and practices is transparency. The other areas impacted in descending order of importance are value for money, budgetary controls and expenditure controls.
- The F-tests evaluating the level of agreement in rankings regarding issues related to public procurement regulations among the respondents demonstrate a notably high degree of consensus. The most pressing challenge is the prolonged payment of contractors and suppliers while the least ranked challenge is that the "Threshold limit is too small for an entity like the Fisheries Commission in case of emergency".
- "Selection of the most appropriate procurement approach" is the stage in the procurement sequence that respondents face as an obstacle most of the time, while the

stage which poses the least challenge to respondents is "Opening and evaluation of tenders".

- Other key observation made by the researcher during discussions with the respondents is that it appears section 43(i) of the Procurement Act, 2003 (Act 663), which stipulates that "the procurement body must solicit quotes from at least three different suppliers or contractors, but as many as is practical." is being abused by procurement practitioners. It has become a canker, where procurement practitioners not only award contracts to their favourites among the three sources of suppliers but generally inflate prices and, however, manage to maintain the cost of provision of service by the favourites relatively lower.

5.3 Conclusions

The study's results will prove valuable for public institutions in Ghana as they endeavour to raise awareness and gauge compliance among their ranks. Moreover, these findings will hold significant relevance for policymakers and stakeholders engaged in public procurement, logistics, and supply chain management in Ghana, as they seek effective solutions to address the challenges posed by the Procurement Act.

The subsequent conclusions are drawn from the study's findings, which were acquired while addressing the research questions:

- The study's findings result to the conclusion that there is a substantial degree of adherence to the Procurement Act when employing the Public Procurement Model of Excellence (PPME) Tool since the study revealed high relative importance of the following key compliance indicators: "notifies all winners of contract according to procurement regulations", "state date, time and venue for bid submission", "practice good record keeping" and "utilize Standard Tender Documents (STD) and Manuals",

“keep minutes of all meetings of Board of survey”, “keep records of all items disposed” and “effectively use the procurement information dissemination systems”.

- The study further determines that the participants possess a relatively strong understanding of the statutory and regulatory frameworks and documents governing public procurement since, except for the Unit Cost of Infrastructure (UCOI) User Guide, which the participants indicated that their level of knowledge is good, all the others were rated very good. This phenomenon could be ascribed to the substantial years of experience amassed by the respondents in the realm of procurement activities.
- Moreover, within the realm of financial management, it is established that adherence to the Procurement Act has consistently led to enhanced transparency, value for money, strengthened budgetary controls, and improved expenditure management. It is evident from the study that the Fisheries Commission now lays stronger emphasis on achieving VFM than. Furthermore, the commission has implemented a meticulously prepared annual procurement plan, which is regularly updated and made accessible through the Public Procurement Authority's e-procurement planning website.
- The enforcement of the Procurement Act and its associated regulatory structures has ushered in a new era of transparency in the utilization of public resources. The study highlights enhanced transparency in the oversight of public finances. Additionally, procurement procedures are now founded on competitive processes and bargaining. Furthermore, equitable and fairness criteria govern the selection of tenderers.
- Lastly, the study's conclusion underscores a noteworthy consensus among the respondents in the ranking of challenges, leading to the refutation of the null hypothesis asserting the absence of significant agreement in challenge ranking. The top five most pressing challenges identified and ranked by respondents encompass "payment delays for contractors and suppliers," "procurement process hindered by bureaucratic

procedures," "limited capacity-building opportunities for service providers," "political interference in procurement processes," and "scarce career development prospects and low salaries for procurement personnel."

5.4 Recommendations

This study offers recommendations for those responsible for enforcing procurement regulations, logistics and supply chain managers, as well as policymakers. These suggestions aim to enhance procurement processes and align them with the overarching goal of enhancing public financial management. It also makes recommendations for future research.

- First and foremost, procurement entities should put measures in place to control their expenditure in the procurement implementation processes since it was lowly rated by respondents as an impact of compliance with the Procurement Act, 2003 (Act 663).
- Although overall compliance with the Procurement Act is commendable, room for improvement remains. Significant areas for enhancement in contract management include adopting suitable stock control record systems, scheduling routine project progress meetings, generating project completion or delivery reports promptly, preparing timely project monitoring reports, issuing timely handing over certificates, and conducting thorough comparisons and analyses of planned progress versus actual outcomes. For procurement processes compliance area, there is the need to always notify all losers of bids professionally. Within management systems, procurement entities must establish appropriate payment systems for each contract, engage staff with professional procurement qualifications and evaluate the performance of procurement staff on a regular basis.
- While the study indicated that participant possess a relatively solid understanding of the legal and regulatory frameworks associated with public procurement, there remains

an opportunity for enhancement. The Public Procurement Authority should strengthen its efforts in educating stakeholders about the Act and other relevant regulatory frameworks and documents.

- Procurement entities must adhere to section 43 of the Procurement Act in an equitable and transparent manner. Electronic procurement should also be adopted as the standard within the Public Sector to improve transparency.
- To address the difficulties linked to the enforcement of the Public Procurement Act, 2003 (Act 663) and its Amendment Act, 2016 (Act 914):
 - ✓ Procurement entities must adhere to the terms of the contractual agreement with contractors and suppliers, ensuring prompt payments upon the successful completion of contracts or projects, thereby facilitating the timely execution of such projects and contracts.
 - ✓ The government should implement measures to minimize bureaucratic processes within the system, as these often lead to delays in the procurement process and increased costs for both contractors and the government. Procurement professionals should be conscious of the time and resources necessary to initiate procurement procedures promptly and conclude them in a timely manner.
 - ✓ Government, as well as public institutions, should endeavour to engage procurement practitioners with professional procurement qualifications, provide an enabling environment for procurement staff without procurement qualifications to acquire the same, and/or offer timely and continuous in-service training for them. Efforts should also be directed towards enhancing the capabilities of service providers to better understand the procurement processes and subsequently improve compliance. This would promote

responsibility, openness, and cost-effectiveness in public procurement.

Research by Gelderman et al. (2006) suggests that educating and training public purchasers can be an effective method for improving compliance.

- ✓ Persons with a high profile should refrain from any form of political interference in the discharge of duties of procurement functions of entities since that impedes performance negatively. Political influence could lead to poor execution of contracts, increased cost, and delayed completion of projects; hence, the Public Procurement Authority should occasionally scrutinise the selection, contract awarding and contract administration processes for irregularities and culprits brought to book.
- Additional research should be conducted regarding the subsequent topics:
 - ✓ Influence of procurement methods in Public Institutions.
 - ✓ The range of future research can be expanded to encompass all public institutions in a cross-sectional survey, facilitating more meaningful generalizations.

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APPENDICES

APPENDIX 1 QUESTIONNAIRE

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY INSTITUTE OF DISTANCE LEARNING SCHOOL OF GRADUATE STUDIES

This questionnaire is administered to collect data for a master's thesis on "Compliance with Public Procurement Regulations and its Effect on Financial Management among Public Institutions in Ghana: the case of Fisheries Commission". I will be grateful if you could answer the following questions. The questionnaire is in various parts: Compliance with procurement policies and practices, effect of compliance with public procurement policies and practices on financial management and challenges facing the implementation of public procurement laws and solutions to improve compliance. Please note that all information provided will be strictly treated as highly confidential to preserve your anonymity. This work is for academic purposes and all responses will be pooled in the analysis. Thank you.

SECTION A: BACKGROUND INFORMATION OF THE RESPONDENTS.

1. Sex of respondent *Male* [] *Female* []
2. What is your educational level? *Postgraduate* [] *Graduate* [] *Diploma* [] *Certificate* [] *Others* []
3. Do have any qualification related procurement? *Yes* [] *No* []
4. What is your role in the organization? *Procurement Officer* [] *Stores/Supply Officer* [] *Finance officer* [] *M&E Officer* [] *Planning/Budgeting Officer* [] *Head of the Institution* [] *Dep. Head of the Institution* [] *Supplier* [] *Other (specify):*
5. Which level of procurement structure do you belong? *Procurement Unit* [] *Evaluation Panel* [] *Entity Tender committee* [] *Review Board* [] *Service provider* []
6. Please indicate your years of experience in procurement practices and processes.
Less than 3 years [] *between 3 and 5 years* [] *between 5 and 10 years* [] *More than 10 years* []

SECTION B: AWARENESS AND COMPLIANCE

Indicate your understanding and competence about the following legal frameworks/documents:	Rating				
	Very Good	Good	Fair	Poor	Very Poor
Public Procurement Act 2003 ACT 663					
Public Procurement (Amendment) Act 2016 ACT 914					
Regulations (Unit cost of Infrastructure (UCOI) User Guide)					
Regulation (PPA Regulations 2022)					
Procurement Manual					
Standard Tender Documents					

Scale: 0 = Not at all; 1 = rarely; 2 = just a few times; 3 = some of the times; 4 = most of the times; 5 = All the time

← Not at all		→All the time				
0		1	2	3	4	5
Key Compliance Indicator	For each of the following statement, kindly rate the extent to which they are true in you organisation.					
	The procurement unit of the Ghana Fisheries Commission, in the conduct of procurement: ...					
Management Systems						
Effective Leadership	seek technical support from the body with oversight role					
	carry out internal procurement auditing					
	practice good record keeping					
Human Resources Development	engage staff with professional procurement qualification					
	put internal auditors in place and giving them procurement training					
	evaluate performance of procurement staff on a regular basis					
Monitoring and Control Systems	put proper payment systems in place for every contract					
	capture procurement transactions in Cash budgets					
	put in place quality control mechanisms for contracts					
	effectively use of available procurement information dissemination mediums					
Compliance with ethics and regulatory framework	appropriately use of procurement plans and contract documents					
	utilize of Standard Tender Documents (STD) and Manuals					
	utilize of right procurement methods					
Complaints system, structure and sequence	ensure fairness and transparency in resolution of cases within the terms established in the legal framework					
Information and Communication						
Procurement Information searching and Dissemination	maximise the use of procurement website, procurement internal notice boards and newspapers					
	effectively use the procurement information dissemination systems					
Interaction with the marketplace	demonstrate knowledge of and interacting with the marketplace					
	interact with all procurement stakeholders					
Procurement processes						
	use an adequately defined procurement plan					

Key Compliance Indicator	For each of the following statement, kindly rate the extent to which they are true in you organisation. <i>The procurement unit of the Ghana Fisheries Commission, in the conduct of procurement: ...</i>	<div> <div>←</div> <div>Not at all</div> <div>→ All the time</div> </div>					
		0	1	2	3	4	5
Procurement Planning	post plan on the net						
Procurement Publicity	advertise tender invitations						
	disseminate information for placement in procurement bulletin						
	use internal notice boards to display procurement information						
Bid Preparation and Invitation	utilizes Standard Tender Documents						
	ensure that all bid documents containing same evaluation criteria						
	Stating reasonable date and time for bid opening						
Submission, opening and evaluation of bids	Stating date, time and venue for bid submission						
	unambiguously state the date, time and venue for bid opening						
	have a secured tender box in place						
	have in place tender opening register						
	keep minutes of all bid opening including all opening records						
	evaluate all tenders in accordance with tendering requirements						
Award of Contract	notifies all winner of contract according to procurement regulations						
	publicize all contract awards according to procurement regulations						
	notifies all losers of bid professionally						
Contract Management							
Project Planning and Mobilisation	take Works Programme from executers						
	take advance payment guarantees for advance payments made						
Project Implementation and Supervision	prepares timely project monitoring reports						
	organizes regular project progress meetings						
	compare and analyse planned progress against actual						
Inspection and Inventory control	prepare project completion or delivery reports						
	prepare, timely, handing over certificates						
	utilizes appropriate stock control record system						
Disposal	form the required membership of Board of survey						
	keep minutes of all meetings of Board of survey						
	keep records of all items disposed						

Effect of Compliance with Public Procurement Policies and Practices on Financial Management

Scale: 0 = Not at all; 1 = rarely; 2 = just a few times; 3 = some of the times; 4 = most of the times; 5 = All the time

<i>Evaluate the extent to which procurement has impacted your organisation in the following areas of financial management using the scale provided.</i>	<div> <div>←</div> <div>→ All the time</div> </div>					
<i>Ever since the commission undertook to comply with the procurement regulations, ...</i>	Not at all					
	0	1	2	3	4	5
Budgetary controls						
we have experienced increased budgets supervision and control						
procurement plans are now recorded against budget to identify anomalies in recorded expenditure						
the commission now has in place a well-prepared annual procurement plan and this plan is annually updated and posted using the e-procurement planning site of PPA.						
Expenditure controls						
the procurement unit regularly conduct market surveys to update its knowledge of prevailing prices for goods and works.						
periodic review and analysis of expenditure is now conducted.						
there has been massive reduction in costs of services and products						
there has significant reduction in waste in procurement processes.						
we have seen has significant reduction in fraud and corruption in procurement processes.						
delays in the procurement of goods and service have reduced significantly						
<i>Evaluate the extent to which procurement has impacted your organisation in the following areas of financial management using the scale: 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5 = strongly agree</i>	<div> <div>←</div> <div>→</div> </div>					
<i>Ever since the commission undertook to comply with the procurement regulations, ...</i>	Strongly disagree					Strongly agree
	1	2	3	4	5	
Value for money (VFM)						
the Commission now lays stronger emphasis on achieving VFM that before we have achieved more value for money (VFM).						
management regularly appraise its procurement activities to ensure VFM						
in fact, the Commission now has a policy on VFM for procurement activities.						
The Commission plans annual procurement spending to ensure VFM.						
Procurement activities in the Commission have been streamlined, resulting in VFM.						
Transparency						
we have seen improved transparency in the management of public finances has increased						
procurement officials in the Commission now are professionals and experienced in the field.						
the procurement entity now liaises with the Public Procurement Authority always for timely and required procurement information.						
procurement activities of the Commission are now evaluated by the Public Procurement Authority.						
the Commission now applies fair and transparent rules for the selection of tenderers.						
the Commission's procurement activities are now established through competitive process and negotiation.						

CHALLENGES FACING THE SUCCESSFUL IMPLEMENTATION OF PUBLIC PROCUREMENT LAWS AND SOLUTIONS TO IMPROVE COMPLIANCE

Challenges

Identify and rank the following challenges that prevents smooth implementation of public procurement laws and regulations in Ghana. **Rank using numbers 1 to 14, where 1 is the most pressing and 14 is the least pressing challenge.**

In your professional experience at the fisheries commission, to what extent does each of the following challenges interfere with the commission's compliance to procurement regulations?	← Not at all		→ All the time				
	0	1	2	3	4	5	
1. Political interference with the procurement process.							
2. Poor dissemination of procurement law/information from the policy makers to the implementers.							
3. Lack of career development path and low salaries of procurement personnel.							
4. Low level or absence of capacity building for service providers.							
5. Inadequate skilled personnel (low capacity of procurement professionals).							
6. Lack of basic knowledge in the law.							
7. Inadequate capacity to appreciate the standard tender documents.							
8. Insufficient technical and managerial skills to be competitive in the tendering process.							
9. Delays in payment of contractors and suppliers.							
10. Lack or weak enforcement by policy makers.							
11. Lack of due diligence by the procurement authority and over exploitation of sole sourcing provision of the law.							
12. Threshold limit is too small for an entity like the Fisheries Commission in case of emergency.							
13. 'Bureaucratic' processes delay the procurement process.							
14. Lack of funding for procurement activities and non-cooperativeness of suppliers.							

In your opinion, if there is any other challenge which is not mentioned above, kindly indicate it and rank.

.....

Rank []

Kingly rate the extent to which the challenges of procurement compliance are prevalent in each of the following procurement processes at the Fisheries Commission:	← Not at all		→ All the time				
	0	1	2	3	4	5	
Procurement planning							

Kingly rate the extent to which the challenges of procurement compliance are prevalent in each of the following procurement processes at the Fisheries Commission:	<div> <div>←</div> <div>Not at all</div> <div>→ All the time</div> </div>					
	0	1	2	3	4	5
Valuation and classification of procurement contract						
Choice of the most suitable procurement method						
Evaluation of tender documents						
Publication of procurement contract in a suitable media and in good time						
Opening and evaluation of tenders						
Awarding of procurement contracts						
Contract administration						

In your own professional/experience at the commission, what are some to the proposition that can help improve procurement regulation compliance at the fisheries commission of Ghana?

.....

THANK YOU

