

**KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY,  
KUMASI, GHANA**

**Development of Procurement Function among Construction SMEs in Ghana**

**By**

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**A Thesis submitted to the Department of Building Technology,**

**College of Art and Built Environment**

**in partial fulfilment of the requirements for the degree of**

**MASTER OF SCIENCE IN PROCUREMENT MANAGEMENT**

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## DECLARATION AND CERTIFICATION

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

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Signature

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Date

## ABSTRACT

This research's objective was to determine the contribution of the development of the procurement function towards the realization of SMEs' performance. The researcher employed the survey method and forty owner/managers of SMEs were contacted. The Relative Importance Index (RII) was the main method used in analyzing the data collected. This study found that most of the SMEs appreciate the importance of the procurement function in the realization of their goals even though its adoption and subsequent implementation is fraught with several challenges such as weak managerial ability, lack of access to capital for business expansion; lack of external training on the procurement function for SMEs and the small nature of the SMEs making it difficult for them to compete with larger enterprises and therefore losing out on big contracts. Recommendations made based on the findings of the study included having appropriate procurement implementation plans; having a regular review of the procurement plan and implementation; that SMEs should provide training courses for all staff involved in procurement and also recruit staff with expertise and experience in handling procurement matters.

## TABLE OF CONTENTS

DECLARATION AND CERTIFICATION .....	ii
ABSTRACT .....	iii
TABLE OF CONTENTS .....	iv
LIST OF TABLES.....	vii
LIST OF FIGURES .....	viii
ACKNOWLEDGEMENT.....	xi
LIST OF ABBREVIATIONS AND ACRONYMS .....	xii
<b>CHAPTER ONE .....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>1</b>
1.1 Background of the Study .....	1
1.2 Problem Statement .....	3
1.3 Aim and Objectives of Study .....	5
1.4 Research Questions .....	5
1.5 Significance of the Study .....	5
1.6 Scope and Limitations of the study .....	6
1.7 Organization of the study .....	7
<b>CHAPTER TWO .....</b>	<b>8</b>
<b>LITERATURE REVIEW .....</b>	<b>8</b>
2.1 Introduction .....	8
2.2 Definition and Importance of Small and Medium Enterprises .....	8
2.2.1 General Contracting .....	8
2.2.2 Small Scale Contractors .....	9
2.2.3 The Significance of Small Contractors in Developing Countries .....	10
2.2.4 Characteristics of SMEs .....	11
2.2.4.1 Organization and Management Structure .....	11
2.2.4.2 Resources .....	12

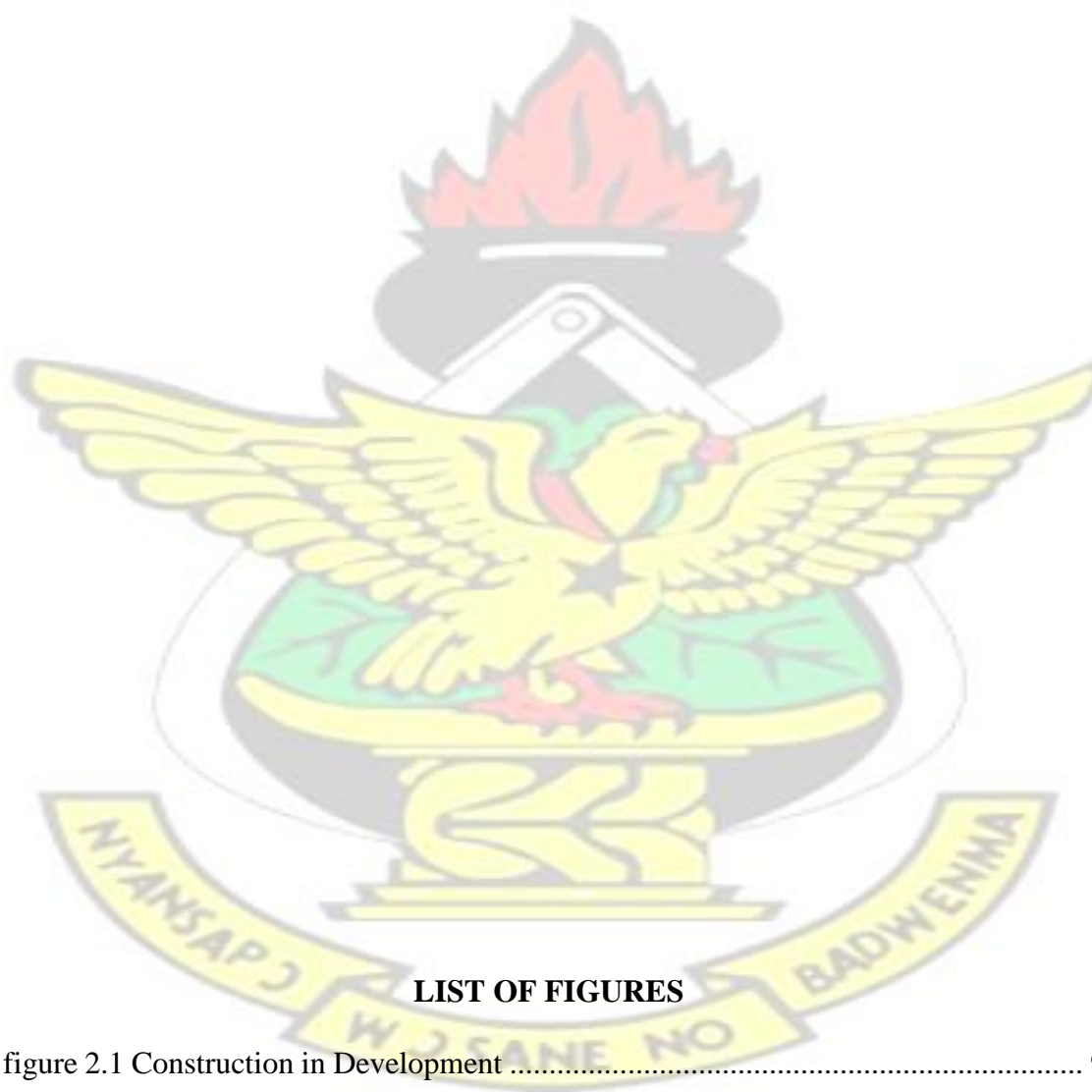
2.2.4.3	Customers and Marketing .....	12
2.2.4.4	Organizational Processes .....	12
2.2.4.5	Culture and behaviour .....	13
2.3	Supply Chain Management (SCM) (Contextual Relationship with Procurement).....	14
2.3.1	The Procurement Function .....	14
2.3.2	Principles of Procurement Function.....	16
2.3.3	Features of the Procurement Function .....	16
2.3.4	The Role of the Procurement Function .....	17
2.4	Procurement Strategy (Making or Buying Decision) .....	17
2.4.1	Strategic Make-or-Buy Decisions .....	18
2.4.2	Tactical Make-or-Buy Decisions .....	19
2.4.3	Component Make-or-Buy Decisions .....	19
2.5	Characteristics of Skills Required for Procurement.....	20
2.5.1	Technical Skills .....	21
2.5.2	Interpersonal skills .....	22
2.5.3	Internal Enterprise Skills.....	22
2.5.4	External Enterprise Skills .....	22
2.5.5	Strategic Business Skills .....	22
2.6	The Challenges of Effective Implementation of the Procurement Function ..	23
2.6.1	Weak National Regulatory Framework .....	24
2.6.2	Poor Accessibility and Inadequate Advertising of Opportunities.....	24
2.6.3	Inadequate Knowledge and Skills amongst SMEs .....	25
2.6.4	Corruption .....	25
2.6.5	Other Challenges .....	26
2.7	Conceptual Framework of the Study .....	27
2.7.1	Economies of Scale and Procurement Function Implementation .....	27
2.7.2	Organizational Structure and Procurement Function Implementation .....	27
2.7.3	Technology Integration and Procurement Function Implementation .....	28
2.7.4	Procurement Function Adoption and Implementation and the Performance of SMEs.....	28
2.8	Summary of the Chapter .....	29



<b>CHAPTER THREE .....</b>	<b>30</b>
<b>DATA PRESENTATION, ANALYSIS AND DISCUSSION .....</b>	<b>30</b>
3.1 Introduction .....	30
3.2 Research Design.....	30
3.3 Research Data Sources .....	31
3.3.1 Secondary Source of Data .....	31
3.3.2 Primary Sources of Data .....	32
3.4 Target Population .....	32
3.5 Population and Census .....	33
3.6 Data Collection Procedures and Tools .....	33
3.7 Research Instrumentation and Procedure.....	33
3.8 Processing and Analysis of Data.....	35
 <b>CHAPTER FOUR .....</b>	 <b>37</b>
<b>ANALYSIS AND DISCUSSION OF FINDNGS .....</b>	<b>37</b>
4.1 Introduction .....	37
4.2 Bio Data .....	37
4.3 The Procurement Function Practices of Constructing SMEs .....	41
4.4 The Effect or Influence of Procurement Function Practice on SMEs Performance.....	43
4.4.1 Cost reduction (RII=0.42) .....	45
4.4.2 Upholding of integrity by ensuring that there are no malpractices or fraudulent behaviours“ from employees (RII=0.42).....	46
4.4.3 Wining of more contracts from the District Assembly (RII=0.42) .....	46
4.4.4 The material and information flows of the department with the other components in the supply link, internal customers and suppliers (RII=0.42) 47	
4.4.5 Accountability in the enterprise (RII=0.41) ..	48
4.5 The Challenges of Effective Implementation of the Procurement Function in Ghanaian SMEs.....	49
4.5.1 Preference for dealing with one large supplier rather than a number of smaller ones (RII=0.385) .....	50
4.5.2 Problems of unclear jargon used in procurement documents (RII=0.375) ....	50

4.5.3	The small size of my enterprise sometimes makes it inadequate in terms of winning big government contracts (RII=0.375).....	51
4.5.4	Weak managerial ability with respect to the understanding of the importance of the procurement function (RII=0.355).....	51
4.5.5	Lack of accessible, timely and comprehensible information available to SMEs, including information gaps concerning rules and tender procedures (RII=0.355) .....	52
4.6	The Relationship between the Procurement Function Practices and the Performances of the Enterprises .....	55
4.7	Suggestions to Enhance SME"s Implementation of the Procurement Function.....	53
<b>CHAPTER FIVE .....</b>		<b>57</b>
<b>SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....</b>		<b>57</b>
5.1	Introduction .....	57
5.2	Summary of the Study .....	57
5.3	Conclusions of the Study .....	58
5.4	Recommendations of the Study .....	59
5.4.1	Having a well-defined procurement plan .....	59
5.4.2	Training and Development .....	60
5.4.3	Being Proactive .....	60
5.4.4	Better Financing Arrangements for SMEs .....	60
5.4.5	Government Intervention/Assistance/Support .....	61
<b>REFERENCES .....</b>		<b>62</b>
<b>APPENDIX "A" RESEARCH QUESTIONNAIRE .....</b>		<b>69</b>
<b>LIST OF TABLES</b>		
Table 4.1 Socio Demographic information of Respondents .....		<b>40</b>
Table 4.2 The Procurement Function Practices of the Enterprises .....		<b>42</b>
Table 4.3 The Effects of Procurement Function Practice on your Enterprises' Performance.....		<b>44</b>
Table 4.4 The Problems/Challenges of Effective Implementation of the Procurement		

Function In Ghanaian SMEs .....	49
Table 4.5 The Relationship between the Procurement Function Practices and the Performance of the Enterprises .....	53
Table 4.6 Suggestions to Enhance Sme's Implementation of the Procurement Function .....	54





by SMEs .....	23
Figure 2.5 Conceptual Framework .....	29

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Finally, I bear responsibility for all weaknesses, which the reader may find in this study.

## **LIST OF ABBREVIATIONS AND ACRONYMS**

BA	Bachelor of Arts
BSc	Bachelor of Science
CIOB	Chartered Institute of Builders
DAs	District Assemblies
GDP	Gross Domestic product
HND	Higher National Diploma
KNUST	Kwame Nkrumah University of Science and Technology
MBA	Master of Business Administration
MPhil	Master of Philosophy
MSc	Master of Science
MDAs	Ministries, Departments and Agencies
NBSSI	National Board for Small Scale Industries
NGO	Non-Governmental Organization
OECD	Organisation for Economic Cooperation and Development
PPA	Public Procurement Authority
RII	Relative Importance Index
SSSCE	Senior Secondary School Certificate Examination
SMEs	Small and Medium Scale Enterprises
SPSS	Statistical Package for Social Science
SCM	Supply Chain Management
UK	United Kingdom
UNCHS	United Nations Centre for Human Settlements
USA	United States of America
VFM	value for money

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

There is no disputing the fact that small and medium scale enterprises (SMEs) play vital roles in the economies of nations (Abor, 2007; Kayanula and Quartey, 2000). The relevance and significance of the SMEs can be seen all spheres of the socioeconomic live of countries such as job employment, revenue mobilization, poverty reduction, grounds for grooming future entrepreneurs and spreading development to all parts of countries (Pressey et al. 2009; Abor, 2007; Kayanula and Quartey, 2000). World-wide SMEs are regarded as been the bed-rock of economies. In Ghana for instance, they account for about 85% of employment in the manufacturing sector; contribute about 70% to the nation's GDP and responsible for over 92% of businesses (Abor and Quartey, 2010). This means that adopting and implementing the procurement function by SMEs is highly significant since it can stimulate growth and therefore ensure the continuation of the significant roles played by the SMEs.

Procurement is an important undertaking in Ghana and often accounting for about 24% of total imports. Again, beside payment to public sector employees, public procurement accounts for between 50 to 70% of the countries budget and 14% of GDP (Adjei, 2006). According to Adjei (2006), a sizeable portion of this procurement budget is spent on key Ministries, Departments and Agencies (MDAs) and District Assemblies (DAs) as well as Public Hospitals, Universities, Schools and Colleges which involve procurement of works, goods and general consultancy services.

The reason for spending these huge amounts on procurement is its strategic role in the development of the country. The procurement function has been described as Cox (1996) being a process or method of achieving a sustainable position for a firm within



specific supply and value chains. Jahns (2005) has also defined the procurement function to be an organization-wide process with a special focus on the security and cost aspects of purchasing contains single strategic activities and considers the technical and economical aspects of the supply market. This means that the procurement function is essential in the realization of corporate objectives especially when firms spend as high as 70% of their overall costs of their finished products. This therefore stresses the need to take a critical consideration especially with respect to

SMEs (considering their economic importance to countries). As further pointed out by Quayle (2002), the procurement function is gradually assuming a key strategic position within organizations since its effective implementation or otherwise can make or break an organization.

The need for having a strong and centralized procurement function is critically needed especially in SMEs who typically see the procurement function as a simple clerical function and transactional (Quayle, 2002). According to authors such as Zheng et al. (2007) and Quayle (2002), most SMEs see the procurement function as playing a mere supporting role without having any significance on overall performance. As found by Zheng et al. (2007), the procurement in SMEs is usually fragmented, nonstrategic and is carried out on ad hoc bases. Again, while the procurement function is usually elevated to position equal to key organizational functions such as finance, marketing, human resource and accounting, this is hardly the situation with SMEs who do not have specialized units and also do not have experts to handle the procurement function (Zheng et al. 2007). Considering that taking a strategic view of the procurement function facilitates effective planning in terms of purchasing optimally for critical business categories at the right time (Zheng et al. 2007), a study into the effects of the

procurement function on SMEs' performance is deemed timely and opportune considering their contribution to national development.

## **1.2 Problem Statement**

Despite their contributions to socio-economic development, SMEs face a number of challenges which are likely to explain the performance of their procurement and supply chains and their survival. A study on SMEs in Nigeria by Onugu (2005) found out that less than 5% of the SMEs survive beyond their first year of existence because of the numerous challenges that limit their competitiveness. Constraints faced by SMEs that negatively impact their performance and that of their supply chains include limited access to information, limited information about financing options, inadequate and expensive supply of power and telecommunication, limited experience, limited access to business networks, unprofessional practices, information technology accessibility and collaborative constraints (Hatega, 2007). This position is supported by Onugu (2005) who in his study on SMEs established that some of the problems of SMEs in developing countries include inadequate knowledge and skills in accounting, marketing, information technology, international trade and other areas of management. Little is known about the procurement practices of SMEs in developing countries, specifically Ghana, even though studies have been carried out to assess procurement practices in Saudi Arabia (Giunipero and Flint, 2001), Taiwan (Carr et al., 2000) and United Kingdom (Pittaway and Morrissey (2004). For instance, CIOB (2010) examined the stance of construction industry professionals on the current state of procurement within the sector, with a particular focus on the UK industry. It was found that construction professionals view procurement as absolutely crucial to the delivery of a project on time, on budget and to a high quality, with 87% of respondents of the belief that good procurement is synonymous with a successful project. The findings further

indicated that 77% of respondents believe clients are not sufficiently knowledgeable about procurement in the construction industry, which often leads to poor advice being taken and results in a project coming in over-budget, outside of timeframes, or to a poor standard. In fact, the study further found that 93% of respondents have been involved in projects that overran in terms of cost and that 57% of those who had been involved in those projects believed that the chosen procurement method directly contributed to the cost overruns.

Given that procurement is a vital aspect of supply chains, it is possible that the poor performance of the SMEs is explained by the procurement practices in the SMEs. According to Carr (2000), the components of procurement practices are purchasing risk taking and purchasing knowledge and skills. A number of studies have been undertaken in Ghana on SMEs (Kayanula and Quartey, 2000; Abor, 2007) but none specifically addresses the impact of the procurement function on SME supply chain performance. The question however is, to what extent do the development of procurement function affect or influence the performance of Ghanaian SMEs? Are SME owner/managers aware of the importance of developing procurement functions?

What are the barriers that prevent SMEs from developing the procurement function? This study therefore sought to find some answers to these questions particularly from a Ghanaian perspective and to establish whether the development of procurement function affect or influence the performance of Ghanaian SMEs.

### **1.3 Aim and Objectives of Study**

The purpose of this study was to determine the contribution of the development of the procurement function towards the realization of SMEs' performance. The specific objectives of this study are:

1. To identify procurement function practices of constructing SMEs in the Atiwa District
2. To ascertain the effect or influence of procurement function practices on SMEs performance
3. To find the challenges of effective implementation of the procurement function in Ghanaian SMEs

#### **1.4 Research Questions**

To operationalize the above stated objectives, the following research questions were asked:

1. What are the procurement function practices of constructing SMEs in the Atiwa District?
2. What are the effects of the development of the procurement function on SMEs performance?
3. What are the challenges of effective implementation of the procurement function in Ghanaian SMEs?

#### **1.5 Significance of the Study**

The performance of SME supply chains is an area of concern in any economy because they play a very key role to the economies of most emerging nations from the viewpoint of generating employment and economic growth as well as providing support services to large firms. This study is significant for several reasons. The study will be useful to policy makers because it will help in identifying key performance indicators which might be instrumental in revitalizing the performance of Ghanaian SMEs in the field of procurement and supply chain management. In addition, the study will provide new practical insights useful for planning, assessing, monitoring and evaluating SME procurement practices. Again, it is envisaged that the results of this study will help



improve value for money (VFM) in the procurement processes and practices of SMEs through the recommendations that will be made.

This study will further develop the professionalism in procurement at all levels. It will also enhance the skills and knowledge of officers handling procurement at the district assembly in specific and the whole country in general. Additionally, this study will benefit the researcher since it is undertaken as a requirement for the award of the Master of Science (MSc) from the Kwame Nkrumah University of Science and Technology (KNUST). Lastly, this research can serve as a source of reference to the academia and by so doing contributing to existing research on the subject matter.

#### **1.6 Scope and Limitations of the study**

The focus of this study is solely on the development of procurement practices of SMES based in the Atiwa District Assembly. The Atiwa District Assembly was chosen because of the limited time to conduct this study as well as the lack of adequate financial resources to cover more district assemblies in the country. Again, this district assembly is chosen based on access to information. Focusing only on one district assembly limits the study in terms of generalizing the findings. However, it is the conviction of the researcher that the findings of this study will throw more light on the subject matter of study and therefore serve as a base for future studies given that there is a paucity of empirical studies on the development of the procurement function among Ghanaian SMEs.

#### **1.7 Organization of the study**

The study was organized into five (5) chapters. The first chapter consists of introduction and gives a background to the study. The section also discusses the statement of the problem, objectives and the research questions, significance, scope and delimitation as



well as the limitations of the study. The second chapter focuses on literature on the general organization of procurement and the role of top management competencies and commitment. Chapter three details the methodology adopted for the study. It indicates the population, sample, research design and instrument for data collection and its presentation and how these methods assist in achieving the research objectives. The fourth chapter covers data analysis and presentation of the study. The fifth and final chapter constitutes the conclusions and recommendations based on the findings.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter reviews the literature on procurement function. It particularly reviewed the literature on the importance of the procurement function, the challenges SMEs face in adopting and implementing the procurement function and the development of a conceptual framework for the study.

#### **2.2 Definition and Importance of Small and Medium Enterprises**

SMEs have been variously defined depending on the organization, specific region of the world, institution, number of employees, stated capital and assets (Akorsu and Agyapong, 2012). The World Bank for instance sees an SME as an enterprise that employs up to 300 employees and with US\$15 million in annual revenue, and US\$15 million in assets. The National Board for Small Scale Industries of Ghana (1998) sees an SME as any enterprise that employs up to 29 people. The institution has gone ahead to classify SMEs into micro (employs up to 5 people and with assets not above \$10,000), small (employing between 6 and 29 employees and with assets not above \$100,000); medium enterprises (employing between 30 and 99 employees and with assets up to \$1,000,000) ((Akorsu and Agyapong, 2012).

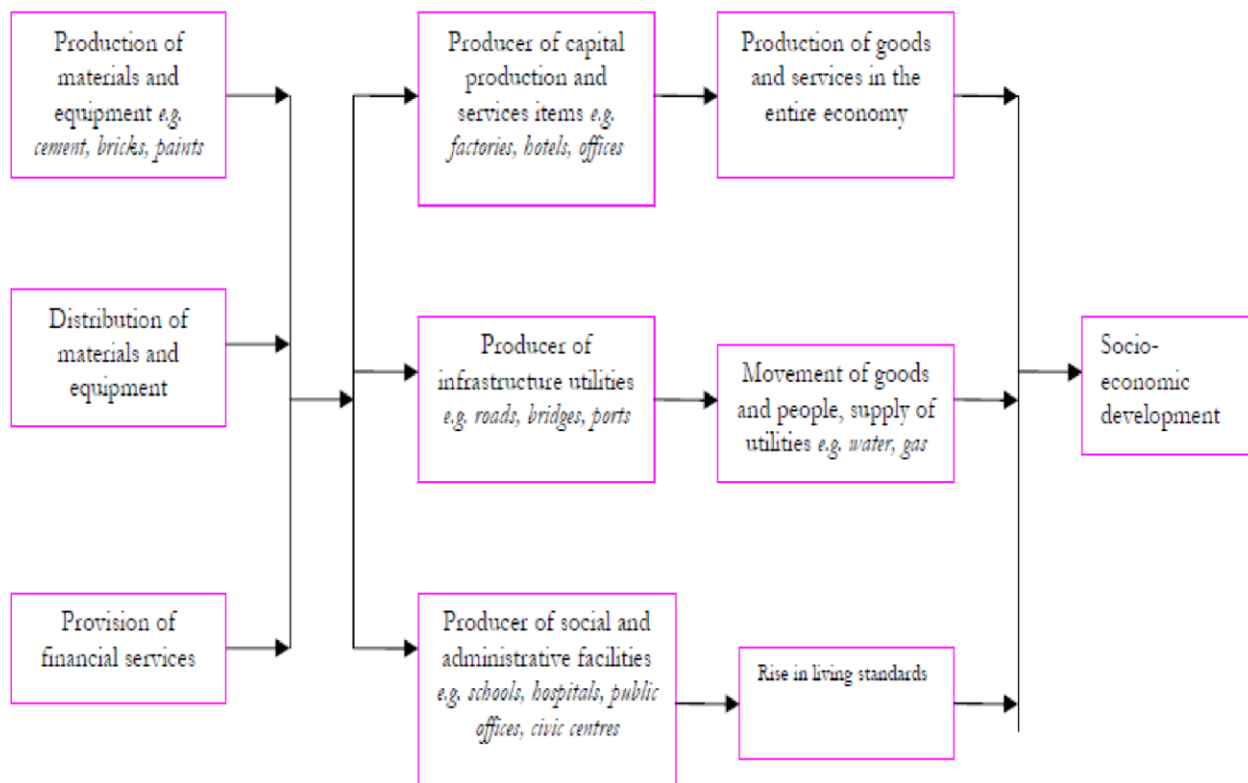
##### **2.2.1 General Contracting**

Murdoch and Hughes (2008) have described general contracting the means by which firms or individuals take responsibility for supplying all the materials, labour, equipment and services necessary for the construction of a project. Murdoch and Hughes (2008) are of the view that operators in this field are usually in charge of the methods and process required to realize the objects of projects and as per the letter of the contract. Again, in the field of general contracting, because general contractors are

not able to handle all tasks, they usually sublet to subcontractors (Gray and Flanagan, 1989).

### 2.2.2 Small Scale Contractors

The small scale contractor according to United Nations Centre for Human Settlements (UNCHS, 1996) is the only firm that is willing and more importantly, able to carry out small, dispersed projects, especially those based in rural areas which are among the key components of development and which are required to satisfy the fundamental requirements of the people such as housing, health facilities, sanitation and geographical mobility. According to the UNCHS (1996), small scale contractors are usually confronted with several challenges even though their contribution to national development is undisputed (Figure 2.1).



**Figure 2.1 Construction in Development**

Source: Ofori (1994)

### **2.2.3 The Significance of Small Contractors in Developing Countries**

Small contractors are responsible for the creation of over 90% of jobs in developing countries and they also contribute to national income through taxation and other means (Abor and Quartey, 2010). In Ghana for instance small scale contractors and other SMEs generally contribute about 75% of the country's GDP as well being responsible for about 92% of registered businesses in Ghana (Abor and Quartey, 2010). The contribution of small scale enterprises in the construction sector is also significant. As pointed out by Ofori (1993), they play a key role through offering employment to all categories of people (from the uneducated to the highly educated, skilled and unskilled personnel). This makes it crucial for these small scale contractors and SMEs to be developed and encouraged to prosper and continue to offer jobs to millions of Ghanaians.

As pointed out by UNCHS (1996), SMEs especially those in the construction field play crucial roles in the development of several sectors of economies such as agriculture, manufacturing and this is principally due to their willingness to carry out smaller and easier construction tasks which involves using lots of physical labour. Additionally, Crosswell and McCutcheon (2001) have pointed out that small contractors are also valuable when projects are designed taking their abilities, capacities and experiences into consideration. Thwala and Phaladi (2009) summarize the usefulness of developing the small contractors in the following section:

1. The comparatively low expertise and experience and the resources needed to set up small scale contracting enterprises make it easier for all categories of people to enter and therefore participate in an industry usually reserved for bigger enterprises;

2. Small scale contracting enterprises can further spread out the construction sector and actually reduce the dominance of large and often multinational companies“ overtime;
3. Having several small scale contracting enterprises can facilitate the rapid growth and the reallocation of wealth across the entire country;
4. Small scale contracting enterprises can further serve as avenues through which thousands of jobs can be created and thereby, reducing the spate of unemployment in developing countries;
5. Small scale contracting enterprises have the unique abilities of being able to carry out small projects in different and isolated locations that may not be attractive to larger firms; and
6. The rather small stated capital of the small scale contracting enterprises makes them more competitive for certain government projects.

#### **2.2.4 Characteristics of SMEs**

SMEs have unique characteristics and usually, these features can be addressed from five main areas – organization and management structure; resources; customers and marketing; organization processes, and culture behaviour (Verhees, 2005). Each of these features is as explained below:

##### **2.2.4.1 Organization and Management Structure**

The structure of most SMEs is typically managed and controlled by the ownermanager or when family-owned, make the owner of a family member act as the manager (Verhees, 2005). Again and usually, most SMEs are run based on the ownermanagers“ whims and caprices, their values as well as their ambitions. Moreover, the owner-managers are usually responsible for all key decision-making and are usually not willing to delegate to their employees. In effect, most small enterprises are



characterized by low empowerment, delegation of authority and decision making is centralized.

#### **2.2.4.2 Resources**

One major feature of SMEs is their inability to have access to vital resources such as human, capital and financial (Rothwell and Dodgson, 1994). Unfortunately, these inadequacies prevent them from rapidly expanding their operations and taking advantage of business opportunities. Again, their inability to attract access to finance stems from the challenge of information asymmetry and their inability to provide collateral security in cases where banks are willing to provide them loans (Rothwell and Dodgson, 1994).

#### **2.2.4.3 Customers and Marketing**

The small scale nature of SMEs usually limits them in terms of customers that they deal with and most of them specialize in niche marketing where strong competition is limited (O’Gorman, 2001). The niche marketing strategies of SMEs facilitates the development of closer ties and relationships with customers and this makes it possible for SMEs to respond swiftly to changing needs of their customers and this tends to satisfy their clients and make them more loyal (Carson, 1995; Dallago, 2000).

#### **2.2.4.4 Organizational Processes**

One advantage of the operations of SMEs is their simple organizational set-ups and structures which tend to cut bureaucratic tendencies and therefore being able to respond swiftly on the ground and take advantage of business opportunities compared to large organizations (Tidd et al. 2005).

#### **2.2.4.5 Culture and behaviour**

According to Supyuenyong et al. 2009, the unique features of SMEs make their culture to be recognized as a whole rather than looking at single departments of functions. Specifically, their simple procedures and processes makes a typical SME environment informal, open, and a unified culture that in turn encourages efficiency in terms of communications and the exchange of information and knowledge (Supyuenyong et al. 2009). However, the culture of SMEs makes them vulnerable to external shocks and changing business environment since they have little control. Again, because the decision making is centralized and usually made by ownermanagers, they tend to have a strong influence on employees.

### **2.3 Supply Chain Management (SCM) (Contextual Relationship with Procurement)**

SCM has been defined by Mentzer et al. (2001) as a systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across business within supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole. Again, London and Kenley (2001) have described SCM as a merging of logistics, procurement, marketing and strategy, and industrial organizational economics.

Moreover, Morris and Pinto (2007) have established the relationship between supply chain management and the procurement function and have stated that the procurement function represents a major activity within SCM with which it combines the processes and activities of suppliers, and the customers and the producers is relied to form the firm's strategy so as to establish lasting relationships. Moreover, Battaglia (1994) has concluded that most firms that spearhead the implementation of SCM tend to envisage

the need to go beyond the logistics function and rather focus on conducting their business processes in an effective and efficient manner. According to Battaglia (1994), these business processes entail development, marketing, procurement, production and the delivery of products and services.

### **2.3.1 The Procurement Function**

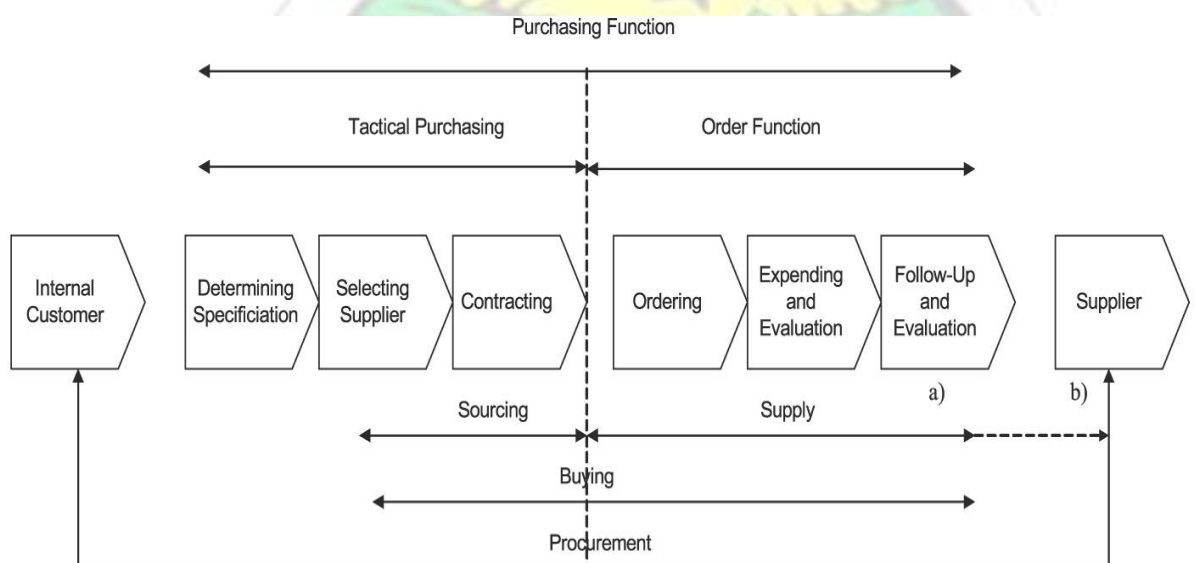
The procurement function has been variously described, defined and explained. For instance, van Weele (2002) sees this function as involving all activities required to get a product from a supplier to its final destination and that these activities are the purchasing function, stores, traffic and transportation, incoming inspection, quality control and assurance, and salvage and environmental issues. The author further sees the procurement function as relating to the activities of purchasing inputs that are used in a firm's value chain. These inputs typically include supplies, raw materials, and firm assets like buildings, office supplies and machinery.

The procurement function has also been defined by Jahns (2005) as an organizationwide process with a special focus on the security and cost aspects of purchasing, contains single strategic activities and considers the technical and economical aspects of the supply market. This definition illustrates how firms are stressing on the protection and cost-efficiency facets of purchasing. Knudsen (1999) has further defined procurement as including all activities required in order to get the product from the supplier to its final destination, whereas purchasing covers all activities for which the firm receives an invoice from outside parties.

From the foregoing, it can be seen that the procurement function covers the entire procedure of obtaining or acquiring products and serviced and that it commences when a firm has determined a need and has also decided on fulfilling this need through

deciding on its procurement requirement. As pointed out by Waters (2004), the procurement function progresses through the procedures of risk assessment, seeking and evaluating alternative solutions, awarding contracts, delivering and paying for products and or serviced and where needed, the continuing management of a contract and consideration of options related to the contract.

Dobler and Burt (1996) have opined that the terms purchasing and procurement are usually used interchangeably. In fact Van Weele (2000) further added the terms supply management and logistics management as being similar to the procurement function. This has led to Lysons (1996) concluding that the definitions of purchasing even though different shows that they have something in common. For instance, receiving external products is something that they all have in common, as is the fact that the procurement function should enable firms to realize their objectives. Figure 2.2 illustrates efforts made by Van Weele (2000) to sort out the misunderstanding by pointing out the differences.



**Note:** a) = USA; b) = UK

**Source:** Van Weele (2000)



## **Figure 2.2 Differences between Procurement and Purchasing**

### **2.3.2 Principles of Procurement Function**

The fundamental principles of effective procurement typically include it being accountable (putting in place structures that ensures that procurement functions are carried out cost effectively); having a clear understanding of being accountable to public entities; supply competitiveness (the need for supplies to be organized on competitive basis as much as possible) and consistency (which stresses on fairness, transparency, equity and devoid of discrimination of all forms and shapes) (Thai, 2001). According to Thai (2001), the procurement function should be carried out in absolute transparency and integrity through the avoidance of all forms of malpractices; informed decision-making which requires public sector entities to make their decisions based on precise information and further ensure that all legal requirements are met. The World Bank (2003) has also insisted that firms must always take into consideration the issue of transparency in order to engender sincerity and clarity with respect to procurement practices and its implementation.

### **2.3.3 Features of the Procurement Function**

According to Morris and Pinto (2007), the procurement function has several features that distinguish it from other similar functions such as supply chain management. For instance, the procurement function involves utilizing the principle of division of labour; specific job tasks and using the expertise and knowledge of procurers. Again, the procurement function can be looked from the perspective of an administrative function where it has its own department or unit, its own rules and regulations, its own team and specific duties that its employees must execute (Morris and Pinto, 2007). Another important feature of the procurement function is the measurement of inputs, output,



transfer function and the environment within which it operates (Morris and Pinto, 2007).

#### **2.3.4 The Role of the Procurement Function**

The procurement function is indispensable in the realization of corporate objectives especially for firms that must purchase products and services on continuous bases (Thai, 2001). According to Dobler and Burt (1996), the main benefits of the procurement function can be seen in these vital areas of a firm's operations:

1. Security of supply;
2. Lowering of cost through efficiency and better management of scarce resources;
3. Reduction of risks associated with procuring products and services from all over the world and under different laws, rules, procedures and transparency;
4. Improvement of quality of products and services since products of high quality are procured and which leads to excellent finished products;
5. Addition of greater value to a firm's operations;
6. Cost cutting
7. Channel partner acceptance and better collaboration.

#### **2.4 Procurement Strategy (Making or Buying Decision)**

The main constructs of procurement practices are strategic purchasing, purchasing risk taking and purchasing knowledge and skills (Carr, 1996). Strategic purchasing includes making critical decisions on planning, evaluation, implementation and the control of key procurement functions in order to achieve stated organizational objectives (Carr and Smelter, 1997).

*Strategic purchasing* is highly significant since its failure can spell doom for firms and its success can lead to enhance performance such as increased profitability, channel partners „satisfaction; and overall growth of the firm (Carr and Smelter, 1997). Moreover, strategic purchasing ensures that firms critically assess their knowledge, skills and experience of procurers and that also takes into consideration the ability of employees to adroitly handle all procurement issues. *Purchasing risk taking* has to do with concentrating on the long term risks/repercussions of the procurement function and determining how to mitigate procurement risks (Beamon, 1999).

According to Beamon (1999), the performance of the procurement function can be evaluated in terms of cost, quality, timeliness and customer responsiveness. *Purchasing knowledge and skills* of people is crucial to effective undertaking or the procurement function in firms (Quayle and Quayle, 2000). This means that when the procurement function is managed by employees who have the requisite skills, knowledge and experience, firms will realize their objectives much quicker and cost effectively.

Firms involved in procurement have several strategies that they use to ensure effective procurement implementation. According to Quayle and Quayle (2000), these strategies can include but not limited to effective negotiation, effective sourcing (inhouse or external), creating and sustaining mutually beneficial relationship with channel partners and cost minimization. Lysons and Gillingham (2003) have proposed three stages of make-or-buy decisions (strategic, tactical and component). Each is as discussed below:

#### **2.4.1 Strategic Make-or-Buy Decisions**

In this stage, the shape and capability of the manufacturing operations of the firm are assessed through the identification of:

1. What products to produce:
2. The kind of investments to make into labour and in producing the products
3. The ability to create new products and processes given that the skill obtained by manufacturing internally may be crucial for potential applications;
4. Selecting suppliers who are more involved in production processes and design;
5. Inappropriate allotment of work to suppliers damaging a firm by creating a new competitor or damaging product quality or performance;
6. Profitability, risk and flexibility.

#### **2.4.2 Tactical Make-or-Buy Decisions**

This phase involves making decisions in relation to short-term discrepancies of a firm's manufacturing capacity such as:

1. Changes in demand that makes it impossible to produce all components internally
2. A reduction in demand that makes a firm to cancel out outsourcing and bring all operations in-house.

#### **2.4.3 Component Make-or-Buy Decisions**

This level comes at the stage of designing the procurement function and has to do with deciding whether to buy certain components from the outside or produce inhouse. According to Lysons and Gillingham (2003), several factors usually are taken into consideration when deciding whether to make or buy. Spray (2009) has developed a model that can help firms decide on how to collaborate with external service providers. Spray (2009) identified four main sourcing alternatives that firms can pick from:

1. *In-sourcing* which describes that tasks that are core to the organization are produced in-house and there should be little deployment of external resources;

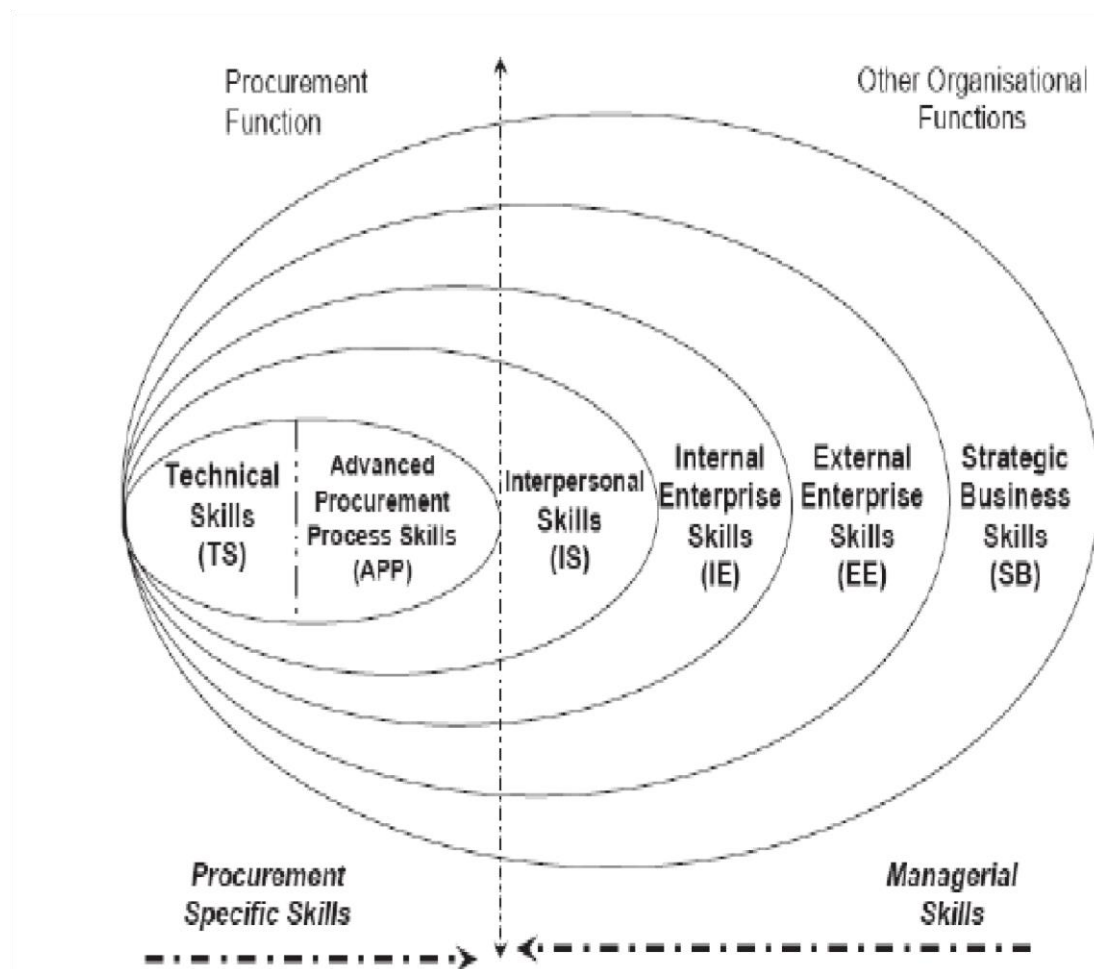
2. *Buy in* is where core business functions are made in-house but deploying external resources such as consulting, auctioning, HR etc;
3. *Contract out* which involves outsourcing non-core business functions to a procurement centre that still belongs to the firm; and
4. *Outsourcing*: Sharpe (1997) has defined outsourcing as a form of predetermined external provision with another enterprise for the delivery of goods and/or services that could previously have been offered in-house. Rajabzadeh et al. (2008) also defined outsourcing as the procurement of products or services from sources that are external to the organization.

According to Lankford & Parsa (1999), in service organizations, outsourcing normally includes the transfer of operational control to the suppliers. According to Kremic et al. (2006), there are three main reasons why a firm would outsource some of its business functions and these are - cost, strategy and politics. According to Kakabadse and Kakabadse (2000a), the private sector undertakes outsourcing largely due to cost and strategy while political agendas frequently drive outsourcing by public sector organizations. The following subsection therefore discusses into detail of the three reasons for outsourcing.

## **2.5 Characteristics of Skills Required for Procurement**

The procurement function is vital for the realization of organizational objectives. However, its implementation requires adequate knowledge, skills and experience. This section of the chapter therefore identified the requisite skills needed for effective implementation of the procurement function. According to Tassabehji and Moorhouse (2008), there are five types of skills that procurement experts must possess if they are to be effective in managing the procurement function in their organizations (Figure





2.3).

**Figure 2.3 New Categorization of Skills Types Required for Procurement** Source: Tassabehji and Moorhouse (2008) Each of the five skills is presented below:

### 2.5.1 Technical Skills

Technical skills essentially are the fundamental and rudimentary skills that all procurement specialists must possess. These fundamental skills typically include adequate product knowledge, being computer literate, broad view on total quality management and proficient knowledge in government procurement procedure, rules and regulations (Tassabehji and Moorhouse, 2008). Additionally, technical skills as pointed out by Tassabehji and Moorhouse (2008) include category management, global

sourcing development, and detailed cost driver analysis calling for advanced analytical capabilities needed to generate value.

### **2.5.2 Interpersonal skills**

Having the right internal personal skills is indispensable in the field of procurement management since the field involves interacting with several categories of people from suppliers, government procurers, customers, top management etc. According to Tassabehji and Moorhouse (2008), interpersonal skills includes both written and oral communication, ability to resolve conflicts amicably, how to persuade and influence decisions, lead procurement teams, skillfully resolve procurement bottlenecks and being culturally aware.

### **2.5.3 Internal Enterprise Skills**

Internal enterprise skills entails being able to coordinate all different functions of firm including units such as human resource, marketing, finance, control and auditing etc. According to Tassabehji and Moorhouse (2008), being able to coordinate all these functions and collaborate with all these units will facilitate effective implementation of the procurement function as well as ensuring the ability to move swiftly to take advantage of opportunities especially when bidding for public contracts.

### **2.5.4 External Enterprise Skills**

According to Tassabehji and Moorhouse (2008), these skills relate to the supply chain/network and its shareholders. This skill area is very critical since it involves forging closer relationships with external partners and stakeholders.

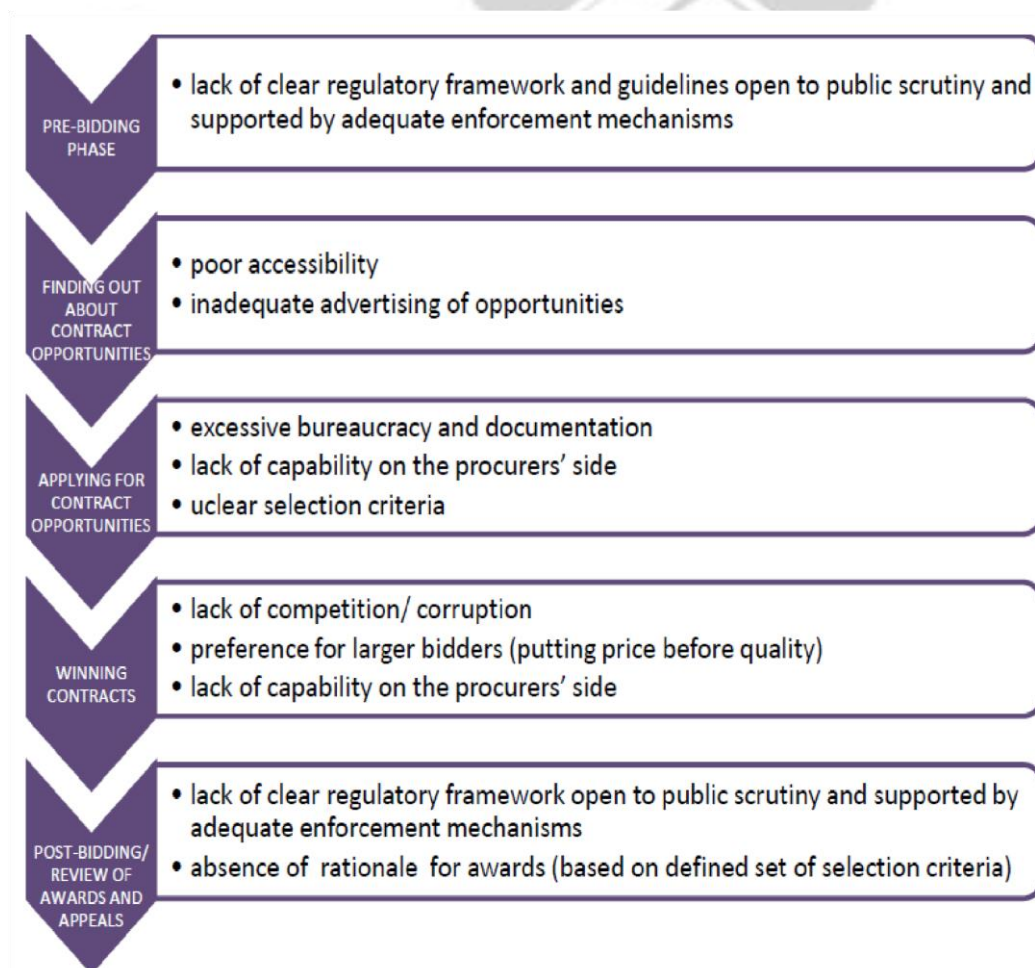
### **2.5.5 Strategic Business Skills**

This final skill set involves having extensive understanding of the role of the procurement function in the realization of corporate objectives and this typically

includes the ability to plan and manage strategic partnerships and alliances, risk management as well as enhancing the value of the firm.

## 2.6 The Challenges of Effective Implementation of the Procurement Function

Implementing the procurement function especially by SMEs is a daunting task obviously because of the unique characteristics and features of SMEs. These challenges of SMEs in implementing the procurement function typically comes in the form of unclear and vague tendering processes, poor decision-making on the part of owner/managers; lack of the requisite expertise, and others. See Figure 2.4 for a summary of the challenges of implementing the procurement (Robredo, 2006). This section of the chapter presents in detail the several bottlenecks that impede the smooth implementation of the procurement function by SMEs.



## **Figure 2.4 The Challenges of Effective Implementation of the Procurement Function by SMEs**

Source: Robredo (2006)

### **2.6.1 Weak National Regulatory Framework**

Most nations especially in developing countries do not have strong regulatory framework that facilitates transparent, fair and unbiased public procurement processes and this tends to impact negatively on the ability of SMEs to participate and win public contracts (Wittig, 1999). As pointed out by Wittig (1999), failure to have a strong regulatory framework makes it tough for SMEs to participate in government contracts since their capacity to lobby, influence decisions and more importantly compete with large scale firms becomes very challenging. However, having a framework and public procurement rules and regulations simplifies procedures, makes it clearer, transparent and more importantly, evens the playing field for all participants in bidding and tendering processes. Robredo (2006) calls for the establishment of quota systems in developing countries for SMEs to ensure they have fair access to public contracts.

Unfortunately, Ghana's procurement Act 663 does not explicitly talk about having a quota system that ensures that SMEs have fair access to contracts from the central government. However, the Act calls for equity, fairness and transparency in providing contracts to indigenous Ghanaian firms.

### **2.6.2 Poor Accessibility and Inadequate Advertising of Opportunities**

Another challenge of SMEs willing to participate in bidding for public contracts is poor access and insufficient adverts of opportunities of public contracts (MacManus, 1991). This challenge is especially pronounced in developing countries where SMEs based in rural areas and away from the administrative and capital cities fail to hear of government contracts on time. This means that most SMEs get to know of public contracts very late and this put so much pressure on them during the proposal and bidding processes and



this eventually leads to making several fundamental errors that therefore make them fail in their bids.

Similarly, undue bureaucracy and red tape make is another challenge of SMEs in their bid to win public contracts. According to MacManus (1991), excessive requirements, documentations and procedures make bidding for government contracts expensive, frustrating and time consuming. This situation is even more difficult for SMEs who typically do not have procurement units, skills and the expertise to handle this situation and therefore failing to win big contracts from governments.

### **2.6.3 Inadequate Knowledge and Skills amongst SMEs**

Having the requisite skill and knowledge is fundamental to the successful implementation of the procurement function. However, for most SMEs in the construction sector, there is inadequate knowledge and skills in the subject area and this therefore limits their ability to effectively implement the procurement function (Obanda, 2012). The OECD (2012) has found that most SMEs especially in developing countries do not have procurement departments, tendering units and also do not have resident specialists with the experience to enable them take advantage of bidding processes.

### **2.6.4 Corruption**

Another disturbing but important challenge of SMEs having access to public contracts is corruption (OECD, 2012). Corruption has been described as the abuse of public office for private gains by the OECD (2012). Government contracts can be very huge and this unfortunately attracts very high incidence of corrupt practices when not checked (Transparency International, 2006). According to Transparency International (2006), all the various procedures, steps or phases of the public procurement function is ladened with opportunities for corruption and unfortunately, these corrupt practices

of government procurers impede the ability of SMEs to win public contracts. The small size of SMEs and their limited financials might mean that they are unable to compete evenly for government business due to vested interests and the influence of large and established companies (Linarelli, 1998).

### **2.6.5 Other Challenges**

In addition to the above challenges, Robredo has identified additional challenges that preclude SMEs from adopting and implementing the procurement function. These are:

1. *Inadequate Awareness amongst SMEs:* The peculiar features of SMEs especially being controlled by owner/managers who often lack the required skills and expertise in the area of procurement management makes it difficult for them to know about the opportunities and significance of implementing the procurement.
2. *Inadequate accessibility, timely and clear information available to SMEs* such as information on bidding and tendering procedures, potential contracts available, requirements of SMEs, financial ability/might and language barriers.
3. The small size and insufficient capacities of SMEs area is a major hindrance since this prevents them from taking advantage of public contracts
4. High transactional cost of bidding and tendering for public contracts and
5. Insufficient time to prepare and bid for public contracts because SMEs get to know about these contracts on short notices.

### **2.7 Conceptual Framework of the Study**

This study adopted Dublihlela and Omoruyi's (2014) model to operationalize the objectives. The authors model as shown in Figure 2.5 comprises five variables -

economies of scale, organizational structure, technological advancement, procurement implementation and SME business performance. According to the authors and as illustrated in the model, adopting and implementing the procurement function affects the performance of SMEs in the areas of economies of scale, organizational structure, and technological advancement. Each of the three main constructs are as briefly explained below:

**2.7.1 Economies of Scale and Procurement Function Implementation** According to Ferguson and Hansson (2013), firms achieve economies of scale when they expand their operations and become more efficient. This is because expansion in key areas leads to increases in units of production and this facilitates the realization of competitive advantage through higher efficiency and costs cutting (Verhoef and Lemon, 2013). However, SMEs usually because of their limited financial ability and skills in business especially in procurement management are unable to expand their operation and take advantage of economies of scale (Dublihlela and Omoruyi, 2014).

**2.7.2 Organizational Structure and Procurement Function Implementation** The structure of firms and how they are set up to a great extent determines their success or otherwise. The situation is no different from SMEs (Nicolescu, 2009). This means that how SMEs are set up determines how they adopt and implement the procurement function. Considering that SMEs are typically controlled and managed by owners, adopting and implementing the procurement function becomes highly problematic. As pointed out by Dublihlela and Omoruyi (2014), SMEs are usually constrained by internal issues such as inadequate skilled employees, poor administrative abilities and low professionalism and these tend to affect the smooth implementation of the procurement function.

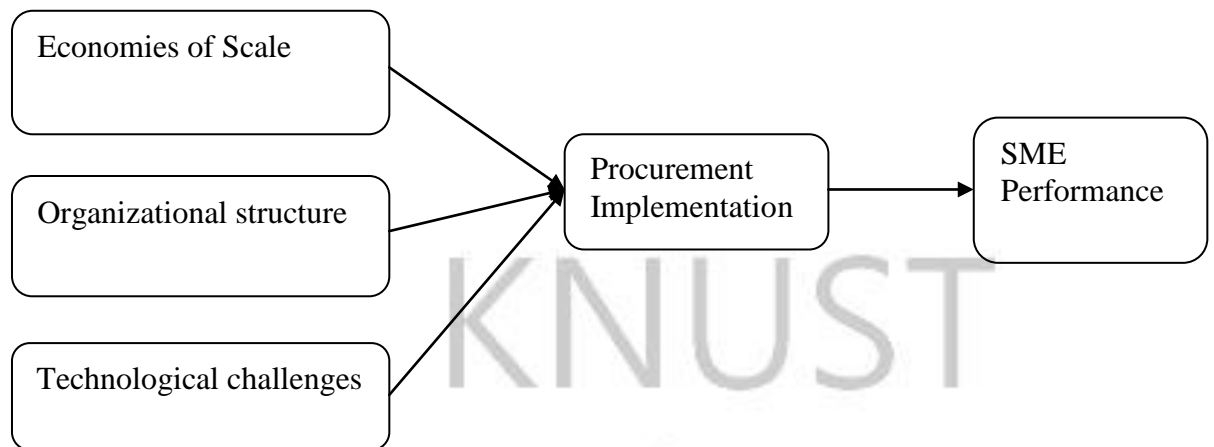
### **2.7.3 Technology Integration and Procurement Function Implementation**

Technology has been described by Tschirky (2003) as constituting specific knowledge, abilities, methods and equipment which facilitates the deployment of scientific and engineering knowledge. According to both Rogers (2003) and Tschirky (2003), to stay competitive and survive, most firms manage technologies having four principal objectives in mind. These four objectives are (1) facilitating the creation and development of new products and services; (2) allowing and improving the performance of specific functions of products and service; (3) serving manufacturing entities and producing products and services and (4) ensuring that firms' administrative processes are made more efficient and streamlined. However, SMEs are constrained in their ability to adopt the technology pertinent to the procurement function and this tends to affect their overall ability to be efficient in the management of the procurement functions (Madria, 2001).

### **2.7.4 Procurement Function Adoption and Implementation and the Performance of SMEs**

According to Wright et al. (1998), adopting, planning and implementing the procurement function entails streamlining growth strategies, logistics strategies, turnaround strategies and divestment strategies. This therefore means that adopting the procurement function can enhance the performance of SMEs but must first think through effectively how to implement the procurement function. This again means that SMEs should not blindly implement the procurement function but must strategically identify how the function can facilitate and enhance their operations and then implement it accordingly. As pointed out by Rwigema (2006), SMEs must as a matter of necessity have a recognized and formal procurement function that will enable them make strategic choices through business processes and operational activities and more importantly, ensure their sustainability and continued growth.





**Figure 2.5 Conceptual Framework**  
Source: Dubihlela and Omoruyi (2014)

## 2.8 Summary of the Chapter

This section of the chapter presented different aspects of the procurement function such as its definitions, importance, characteristics and the challenges of implementing the procurement function.

## CHAPTER THREE

### DATA PRESENTATION, ANALYSIS AND DISCUSSION

#### 3.1 Introduction

This chapter consists of the research methodology and approach. It discusses among other things the research design, sources of data, sampling technique, target population, data collection instrument and data analysis.

#### 3.2 Research Design

Research can be said to be very essential and key to the development of all sectors of societies; especially in business and academic (Amaratunga et al, 2002). However, and in spite of all its importance, there is no agreement on its definition. According to (Amaratunga et al, 2002), the disagreement stems from the fact that every research has

a different meaning to the researcher involved, as well as meaning differently to different people, institutions, agencies etc. According to (Amaratunga et al, 2002), however, from the various definitions available they all essentially agree that research is regarded as a process of enquiry and investigation, that it is systematic and methodological; and finally that research leads to an expansion of knowledge. Research should always be conducted within the ambit of inquiry which depends on experience, hard facts, principles, laws, hypothesis, concepts, constructs etc (Amaratunga et al, 2002). According to the researchers, the above concepts of research when brought together, forms a symbolic and rational system of inquiry. Moreover, they form the language of research which engenders precision in the diction or jargon among those in the field of research.

The focus of this study is to assess the development of the procurement function among construction SMEs in the Atiwa District. In order to operationalize this objective, the survey approach was used to collect data from SME contractors in the Atiwa District. The survey method was used because the research demanded information from the relevant divisions and departments of the SMEs contacted. The essence of deploying the survey method in this research is to make sure that any later research or analysis of the attributes of the population sampled will be precise and also the findings and results being able to be generalized everywhere in the world. Thus data was collected from all relevant sources, secondary (journals, periodicals, textbooks, websites, etc) and primary (questionnaires). Another reason is because it is easier to administer and analyzed since the data collected involved asking SMEs structured and predefined questions.

### **3.3 Research Data Sources**

The study used both primary and secondary sources of data to enable useful information for this study to be obtained.

### **3.3.1 Secondary Source of Data**

For secondary data the researcher aims at finding out other studies related to the topic area such as journals, books, newspapers and any other document which allowed the study to gather relevant data for this study. Neuman (2007) argued that using secondary sources of data has an advantage, for example it is less expensive compared to primary sources of data. Additionally, the author emphasized that it helps the researcher to make a comparative analysis between the new data and the previous data whereby differences can be examined.

### **3.3.2 Primary Sources of Data**

The essence of any data collection method is the ability to unambiguously answer the research questions (Yin, 2003). The data collected for this study used the survey method in order to aid in the interpretation. This is to say, data was collected directly from owner/managers of SMEs as well as their employees. Most of the questions asked in the study were closed ended. However, some of the information collected was via opened ended questions. Closed ended questions were used because it allowed answers within a limited set and it was used essentially to gather factual data such as gender, age, as well as information on attitudes and opinions.

This actually enables the researcher to have a high degree of control over the questionnaire (Neuman, 2007). In fact, the control is very important in that it facilitates the analysis of the data since there is consistency across all responses. It further makes it easier to key in the data into a software package and thus reducing errors (Newell, 1995). Moreover, it has been observed that the closed ended questions reduce fatigues on the part of respondents when answering them. This engenders a higher response rate.

### **3.4 Target Population**

Representativeness and reliability of results as well as time and resource restraints were considered in determining the sample. The target population of this study was the owners and employees of SMEs operating in the Atiwa District who have been involved in procurement relationship with the District Assembly for at least, a year. The reason for setting a threshold of one year is to ensure that information gotten was collected from SMEs who have had a considerable relationship with the District Assembly and therefore being able to give accurate and reliable information.

### **3.5 Population and Census**

A sample is referred to as the percentage or fraction of the population that answers the research question (Neuman, 2007). It can be said the reasons for undertaking surveys is to enable the researcher generalize from the sample to the population that the hypothesis regarding attitudes, behaviour among others can be made (Neuman, 2007). A census sampling technique was adopted for the study because of the limited population. This study contacted all the forty SMEs operating with the District Assembly.

### **3.6 Data Collection Procedures and Tools**

The researcher personally administered the questionnaire to the respondents. This was after permission has been sort and given by the District Assembly for the researcher to use its list of SMEs it deals with. The research questionnaire was the main data collection instrument for the study. The questionnaire is appropriate because it is assumed that the respondents are literate and for that matter they could be able to respond to the questions unaided. A research questionnaire facilitates the collection of data that ensures the best matching of concepts with reality; it provides the same responses from a given set of respondents and helps reduce inconvenience caused by unfavourable interview times and busy schedules.



### **3.7 Research Instrumentation and Procedure**

There are three ways to collecting data – observation, direct communication (through interviews and questionnaires), and the thirdly through using secondary data (Pizam, 1999). Two of three categories (direct communication and use of secondary data) were used for this project. The question of getting the necessary co-operation for the purpose of data collection has been fraught with a lot of problems; especially with regard to error free responses and the number of returned and completed questionnaires. To avoid this, the researcher personally administered the questionnaires on the employees of the company. The researcher used a non– probability sampling technique in order to ensure a fair and accurate sampling procedure. Fieldwork to collect the data for this study took two weeks. After the explanation of the relevance and objectives of the study, the respondents were then given the questionnaires and given a week to complete.

A likert scale (of 4 point) was also deployed since it was deemed to be an excellent means of measuring the attitude of respondents towards an attribute. According to (Neuman, 2007), the likert scale is user friendly and reduces uncertainty, confusion and misunderstanding. The advantage here is that it helps to reduce non response by eliminating respondent fatigue (high response rate is very critical for every research because it makes it more credible. The relevance and importance of the likert scale also lies in the unequivocal ordinality of response ratings such as “1=Definite Yes; 2= Partial yes; 3=Unsure; 4= Definite No”.

Prior to the survey, the questionnaires were developed and pre-tested on five respondents in Atiwa that the District Assembly has been dealing with for over a decade. The choice of these five enterprises was based on their long relationship with the District Assembly as well as their availability and willingness to participate in the pre-test. The essence of the pretesting was to examine how the questionnaire is to be

framed and to also identify any misunderstanding over terms and questions. In gathering the data, the researcher initially contacted the management of the District Assembly to seek permission to collect data from their customers.

### **3.8 Processing and Analysis of Data**

Analyzing and interpreting research data forms a key part of any research. Defining the analytical method is vital to any research strategy (Neuman, 2007). Different approaches actually can be used in investigating, categorizing, tabulating and or having a combination of the facts to deal with the research questions. Given the varied sources of data gathered for the study, the researcher had to address how the data would be processed and analyzed. This section discusses the manner in which the data so collected were treated (processed and analyzed). This was done to allow for as much comparability as possible between the data sets and the survey data before discussing the way in which the data was analyzed. The essence of analyzing the information from the research questions is to summarize the data in such a way that it both answers the stated research questions and as well as meet the research objectives. The data was analyzed in both descriptive and quantitative forms such as using frequency tables, percentages etc. The datasets so collected was then coded and translated to an SPSS (Statistical Package for Social Science) and Microsoft Excel. SPSS especially is a versatile computer package that has the ability to perform a wide variety of statistical procedures (Yin, 2003).

The Relative Importance Index (RII) method was used to determine the relative importance of the various procurement function practices of SMEs as well as other factors. The four-point scale ranged from 1 (definite yes) to 4 (definite no) was adopted and transformed to Relative Importance Indices (RII) for each factor as follows:

$$RII = \Sigma W \div (A * N)$$

where **W** is the weighting given to each factor by the respondents (ranging from 1 to 4), **A** is the highest weight and **N** is the total number of respondents. The RII value had a range from 0 to 1 (0 not inclusive), the higher the value of RII, the greater the procurement function practiced by the SMEs on the factor. The RII was used to rank (R) the different procurement function practice of SMEs. These rankings made it possible to cross-compare the relative importance of the factors in each group of impacts.



## CHAPTER FOUR

### ANALYSIS AND DISCUSSION OF FINDINGS

#### 4.1 Introduction

This chapter presents and discusses the result of the study in an effort to address the specific objectives of the study. The major areas the chapter discusses, include respondents' ages, positions in their enterprises, length of service of the respondents in their enterprises, classification categories of the enterprises, the procurement function practices of constructing SMEs, the effect or influence of procurement function practice on SMEs performance, the challenges of effective implementation of the procurement function in Ghanaian SMEs and suggestions to enhance SME's implementation of the procurement function.

#### 4.2 Bio Data

This section of the study focused on identifying the background information of the respondents. It was found as illustrated in Table 4.1 thirty two respondents (80.0%) were managing directors, five (12.5%) were project engineers, two (5.0%) were procurement managers and the remaining one respondent (2.5%) was a site foreman. This finding implies that the study sampled the views and opinions of key and relevant personnel of the various enterprises contacted and therefore suggesting that accurate and factual information which was needed to draw valid and reliable conclusion was obtained all things being equal.

It was also found that twenty respondents (50.0%) were within 45 – 54 years old, ten (25.0%) were within 55 – 64 years old and seven (17.5%) and three (7.5%) were about 35 – 44 year and 25 – 34 years old respectively. This finding shows that most of the respondents were quite elderly. It was again found as shown in Table 4.1 that twenty seven respondents (67.5%) were D3/K3 enterprises, four (10.0%) were D4/K4



enterprises and seven respondents (17.5%) were from D2/K2 enterprises. The remaining two respondents (5.0%) were from D1/K1 enterprises. This finding suggest that the study rightly contacted small and low capital enterprises.

As can also be seen in Table 4.1, eighteen respondents (45.0%) had served for about 6 – 10 years, seven (17.5%) have served for about 11 – 15 years and six respondents (15.0%) each have served for about 0 – 5 years and 16 – 20 years respectively. The remaining three respondents (7.5%) have served for more than 20 years. The fact that most (45.0%) of the respondents have been with their firms for between 6 – 10 years implies that they have the requisite experience and knowledge about their enterprises procurement function policies, issues and challenges and therefore well qualified to provide accurate and reliable information necessary for the drawing of a valid conclusion.

It was again found that twenty two respondents (55.0%) were BSc/BA/HND holders, fifteen (37.5%) were holding SSSCE and below and three respondents (7.5%) were holding MSc/MBA/MPhil. This finding shows that most of the respondents are well educated and also implying that more and more educated Ghanaians are setting up their own enterprises and not relying on the state to provide them with jobs. Again, the fact that most of the respondents are well educated implies that they can apply their knowledge and training in ensuring that they manage their enterprises effectively. As concluded by Dobbs and Hamilton (2007), education helps entrepreneurs to better manage their businesses and take better decisions than uneducated entrepreneurs.

This study moreover found as depicted in Table 4.1 that fifteen respondents (37.5%) have between 11 – 15 employees; ten (25.0%) have between 11 – 15 employees. It was again found that nine (22.5%) have under 5 employees while three respondents (7.5%) have between 16 – 20 employees. The remaining one respondent (2.5) had more than

20 employees. There were two missing responses. This finding shows that about 50% of the respondents have more than 10 employees and technically speaking do not qualify to be classified as SMEs as per Ghana Statistical Service (GSS) definition of SMEs. However, it must be pointed out that this study considered people on secondment and part time employees as employees and therefore increasing the apparent number of employees working with the enterprises contacted.

It was further found that as many as thirty three respondents (82.5%) established their businesses themselves; five (12.5%) had business being independently owned while two respondents (5.0%) inherited their businesses. This finding echoes what Verhees (2005) found to the effect that most small businesses are set by individuals and this tends to leave full control and management to these individuals. See Table 4.1 for details. Additionally, it was found as depicted in Table 4.1 that as many as thirty nine respondents (97.5%) had their initial capital from personal savings while only one respondent (2.5%) had his from family/relatives. This finding resonate what Krasniqi (2007) and Ayyagari et al. (2006) found to the effect that most SMEs used their own savings to set up their enterprises since most financial institutions refuse to lend them a helping hand because of their notoriously high start-up failure rate.

**Table 4.1 Socio demographic information of respondents**

Socio demographics	Frequency	Percent
<b>The Position of the Respondents in their Enterprises</b>		
Managing Director	32	80.0
Project Engineers	5	12.5

Procurement Managers	2	5.0
Site Foreman	1	2.5

#### **Age distribution of the respondents**

25 – 34 years	3	7.5
35 – 44 years	7	17.5
45 – 54 years	20	50.0
55 – 64 years	10	25.0

#### **The classification categories of the enterprises**

D1/K1 enterprises	2	5.0
D2/K2 enterprises	7	17.5
D3/K3	27	67.5
D4/K4 enterprises	4	10.0

#### **The length of service of the respondents in their enterprises**

0 – 5 years	6	15.0
6 – 10 years	18	45.0
11 – 15 years	7	17.5
16 – 20 years	6	15.0
Above 20 years	3	7.5

#### **Academic & Professional qualifications**

SSSCE and below	15	37.5
BSc/BA/HND	22	55.0
MSc/MBA/MPhil	3	7.5

#### **Staff strength of the enterprises**

Under 5 employees	9	22.5
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6 to 10 employees	10	25.0
11 to 15 employees	15	37.5
16 to 20 employees	3	7.5
20 or higher	1	2.5
Non response	2	5.0

#### **The ownership types of the companies**

Established by you	33	82.5
Independently owned	5	12.5
Inherited	2	5.0

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#### **The sources of initial capital for the companies**

Personal savings	39	97.5
Family/relatives	1	2.5

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Source: Field Survey, 2015

### **4.3 The Procurement Function Practices of Constructing SMEs**

In relation to the first objective of the study, it was found that most of the SMEs appreciate the importance of the procurement function in the realization of their goals, see the procurement function as absolutely crucial to the delivery of a project on time, on budget and to a high quality and that the procurement function as one of the main determinants of both competitiveness in the construction industry and profitability. The result of the Relative Importance Index (RII) in Table 4.2 indicates that the five most important practices of the procurement function by the SMEs are (1) having a specialized department charged with the sole responsibility of handling procurement activities (RII=0.72); (2) having a strategic procurement plan and reviewing this plan in order to take into account changes in the strategic plan of the firm (RII=0.68); (3)



employing procurement specialists (RII=0.46); (4) exhibiting high purchasing knowledge and (RII=0.41) and (5) understanding that poorly chosen procurement methods directly contributes to the cost overruns and delays of construction projects (RII=0.36).

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**Table 4.2 The procurement function practices of the enterprises**

The procurement function practices of the enterprises	RII	Rank
My enterprise has a specialized department charged with the sole responsibility of handling procurement activities	0.72	1st
My enterprise has a strategic procurement plan and this plan is often reviewed in order to take into account changes in the strategic plan of the firm	0.68	2nd
My enterprise has employed procurement specialists to handle the procurement function	0.46	3rd
Persons handling the procurement function exhibit high purchasing knowledge and skills	0.41	4th
My enterprise understands that poorly chosen procurement methods directly contributes to the cost overruns and delays of construction projects	0.36	5th
My enterprise regards procurement function as the main driver of growth and survival in the Ghanaian construction industry	0.32	6th

Top management of my enterprise understands and appreciates the importance of the procurement function	0.27	7th
My enterprise regards procurement function as one of the main determinants of both competitiveness in the construction industry and profitability	0.27	8th
Top management sees the procurement function as absolutely crucial to the delivery of a project on time, on budget and to a high quality	0.26	9th

Source: Field Survey, 2015

This finding implies that most of the procurement activities of the SMEs contacted are done based on “as” and “when” needed bases and this can rather be more expensive and costly to their operations. As pointed out by Carr et al. (2000), a thought –through and executed procurement plan inures to the enterprise in terms of regularity of supply, getting value for money and also aiding in attainment of enterprise objective such as completing projects within time and budget.

These findings support what Onugu (2005) and Hatega (2007) found to the effect that SMEs are usually constrained in ability to survive, grow and sustain their operations because they often fail to invest in the requisite personnel with the usual excuse that “they are too expensive”. This finding further confirms the study in the United Kingdom by CIOB (2010) that most SMEs do not perform well because of their limited knowledge of procurement dynamics peculiar to the construction sector.

The above findings are quite worrying because having a specialized unit responsible for handling procurement activities can facilitate the completion of projects on time, within specification and within budget (Dobler and Burt, 1996). In fact this finding is

consistent with what previous studies (Pittaway and Morrissey, 2004; Guinipero and Flint, 2001 and Carr et al. 2000) reported to the effect that even though most SMEs regard the procurement function as being crucial to their operations, they do not invest in establishing specialized departments, do not have detailed procurement plans and often fail to employ the right personnel to handle the procurement function. These findings therefore suggest strongly that more has to be done in terms of the adoption and implementation of the procurement function by SMEs in the construction sector.

#### **4.4 The Effect or Influence of Procurement Function Practice on SMEs Performance**

In relation to the second objective of the study, it was found that when effectively implemented, the procurement function can improve upon the performance of the SMEs. It must be mentioned that even though the procurement function appeared not to be fully implemented as found in section 4.3, it was found that its implementation in the disorderly fashion still inures positively to the SMEs such as completing projects within budget, schedule and to specifications.

The result of the Relative Importance Index (RII) in Table 4.3 indicates that the five most important effects of the procurement function practice on the performance of the SMEs are (1) cost reduction (RII=0.43); (2) upholding of integrity by ensuring that there are no malpractices or fraudulent behaviours from employees (RII=0.43); (3) winning of more contracts from the district assembly (RII=0.42); (4) the material and information flows of the department with the other components in the supply link, internal customers and suppliers (RII=0.42) and (5) accountability in the enterprise (RII=0.41).

**Table 4.3 The effects of procurement function practice on your enterprises' performance**

<b>The effects of procurement function practice on your enterprises' performance</b>	<b>RII</b>	<b>Rank</b>
The implementation of the procurement function in my enterprise has led to cost reduction	0.43	1st
The procurement function has led to upholding of integrity by ensuring that there are no malpractices or fraudulent behaviours" from employees	0.43	2nd
The effective implementation of procurement function has enabled my enterprise win more contracts from the district assembly	0.42	3rd
The material and information flows of the department with the other components in the supply link, internal customers and suppliers	0.42	4th
The procurement function has led to accountability in the enterprise	0.41	5th
The implementation of the procurement function in my enterprise has led to the completion of projects within schedule	0.40	6th
The implementation of the procurement function in my enterprise has led to the completion of projects within budget and to specification	0.40	7th
The implementation of the procurement function in my enterprise has led to achieving economies of scale	0.40	8th
My enterprise"s purchasing activities are more streamlined and efficient because of the procurement function	0.38	9th
The implementation of the procurement function in my enterprise has led to winning more contracts from the district assembly	0.35	10 <sup>th</sup>



Source: Field Survey, 2015

#### **4.4.1 Cost reduction (RII=0.42)**

Cost reduction and revenue improvement is a major outcome of supply chain collaboration. This is because a close collaboration and relationship helps participating firms to realize reductions in their costs and by extension, improving their revenues (Horvath, 2001). According to Mentzer et al., (2000), the cost reduction and financial benefits of supply chain collaboration includes reduction in supply chain and operations costs; increase profit margins; reduced total inventory and working capital requirements; improved forecast accuracy and forecast error; decreased customer waiting time; increased customer service levels and fewer stock-outs and backorders.

The fact that cost reduction is the number one effect of the procurement function on the performance of the SMEs accentuates the fact that the procurement function is central to the operations of firms and that its effective utilization brings about much needed discipline and professionalism within the procurement process and by so doing, eliminating several bottlenecks and redundant practices (Jahn, 2005; Cox, 1996). This finding actually confirms what Jahns (2005) concluded to the effect that the procurement function is a strategic one and that it leads to cost reductions and by so doing, engendering higher profitability, growth and sustainability. Again, considering the fact that as high as 70% of the total expenditure incurred on finished products goes into procurement, the procurement function can be a serious drain of firms resources if not effectively implemented.

Thus, keenly improving their supply chain management will help these firms to improve their flow of materials and information towards the final consumer and at the same time, their operating costs can be at a minimum (Handfield and Nichols, 2002). Based on this finding therefore, there is no gainsaying the fact that SMEs must adopt and

implement the procurement function since it has a direct impact on profitability through higher efficiency and cost reductions.

#### **4.4.2 Upholding of integrity by ensuring that there are no malpractices or fraudulent behaviours' from employees (RII=0.42)**

Upholding of integrity by ensuring that there are no malpractices or fraudulent behaviours" from employees is a critical function of procurement since it facilitates information sharing (Whipple et al., 2002). Information sharing in this sense means capturing and disseminating timely and relevant information to help decision makers to plan and control supply chain operations. When information is effectively shared along the supply channel, it provides a shared basis for determined actions by different functions across interdependent firms (Whipple et al., 2002). Again, sharing information facilitates clarity about demand, the fulfillment process and common performance and therefore eliminating any malpractices or fraudulent behaviours" of employees.

#### **4.4.3 Wining of more contracts from the District Assembly (RII=0.42)**

This finding implies that the enterprises are able to win more contracts from the district assembly because they are able to complete constructions to designs, specifications and general satisfaction of stakeholders. This finding implies that when effectively done, the procurement function can help SMEs manage their operations better and by so doing winning more government contracts projects. This finding resonates with what Carr (2000) found to the effect that the procurement function is a vital component in the purchasing and supply activities of firms and neglecting it can be detrimental to the survival of firms. What makes this finding more important is because of the peculiar nature and characteristics of the operations of SMEs. Their small sizes and scale of operations makes it imperative that the procurement function is well structured and well

implemented to forestall hiccups in the procurement of supplies needed to complete contracts.

#### **4.4.4 The material and information flows of the department with the other components in the supply link, internal customers and suppliers (RII=0.42)**

This finding implies that the procurement function serves as the link between procurers and suppliers and it actually facilitates the exchange of information on items to be procured and by so doing, leading to better decision making and planning. The significance of managing the material flow across the supply chain is principally due to the potential for a firm to attain growth and generate financial returns by minimizing the costs associated with the supply chain (Handfield and Nichols, 2002). In fact this finding echoes what Quayle (2002) concluded to the effect that the procurement function is steadily assuming a central strategic position within firms since its effective implementation or otherwise can make or break an organization.

As pointed out by Mentzer et al. (2001), the fundamental function of procurement is managing and coordinating all of the activities necessary to support the organization's strategy of getting the right quantity of the product to the right place at the right time and that the key to successful procurement management is attaining effective integration of the business functions and channel members such that all processes were aligned to achieve the overall system objectives. As further pointed out by Ireland and Crun (2005), the procurement function also includes coordination and collaboration with channel partners, which can be funders, suppliers, intermediaries, third party service providers, and customers.

#### **4.4.5 Accountability in the enterprise (RII=0.41)**

These findings mean that the procurement function has brought about more discipline and control on the utilization of resources in the enterprises of the SMEs. These findings

are therefore consistent with what Thai (2001) pointed out to the effect that an effective procurement function must lead to control and accountability in such a manner that scarce resources are carefully used and all fraudulent behaviours“ curbed. As further pointed out by Thai (2001), the procurement function further enables firms to know the actual costs of items or services being procured because it leaves an audit trail for easy verification and this tends to control acts of collusion between procurers and suppliers and by so doing, saving firms money that otherwise would have been lost. As pointed out by Blanchard (2007), the collaborative nature of the procurement function support an overall balance of goals that can help to reconcile conflicts and misunderstandings that prevent effective and profitable business practices.

Considering the small scale nature of SMEs, any cedi saved is highly significant and affects the bottom-line. This finding further underscores and corroborates what Dobler and Burt (1996) opined to the effect that the procurement function is central to the attainment of corporate objectives especially for firms that must purchase products and services on a regular bases.

#### **4.5 The Challenges of Effective Implementation of the Procurement Function in Ghanaian SMEs**

With respect to the third objective of the study, it was found that there are several challenges that impede the effective implementation of the procurement function among the SMEs sampled. The result of the Relative Importance Index (RII) in Table 4.4 indicates that the five most important problems/challenges of effective implementation of the procurement function in Ghanaian SMEs are (1) preference for dealing with one large supplier rather than a number of smaller ones (RII=0.385); (2) problems of unclear jargon used in procurement documents (RII=0.375); (3) the small size of my enterprise sometimes makes it inadequate in terms of winning big



government contracts (RII=0.375); (4) weak managerial ability with respect to the understanding of the importance of the procurement function (RII=0.355); (5) lack of accessible, timely and comprehensible information available to SMEs, including information gaps concerning rules and tender procedures (RII=0.355).

**Table 4.4 The problems/challenges of effective implementation of the procurement function in Ghanaian SMEs**

<b>The problems/challenges of effective implementation of the procurement function in Ghanaian SMEs</b>	<b>RII</b>	<b>Rank</b>
Preference for dealing with one large supplier rather than a number of smaller ones	0.385	1st
Problems of unclear jargon used in procurement documents	0.375	2nd
The small size of my enterprise sometimes makes it inadequate in terms of winning big government contracts	0.375	3rd
Weak managerial ability with respect to the understanding of the importance of the procurement function	0.355	4th
Lack of accessible, timely and comprehensible information available to SMEs, including information gaps concerning rules and tender procedures	0.355	5th
Top management is not sufficiently knowledgeable about procurement in the construction industry	0.315	6th
SMEs are not always aware of the opportunities and importance of implementing the procurement function	0.300	7th
Lack of external training programmes on the procurement function tailored to the specific needs of SMEs in the construction industry	0.290	8th
The qualification levels and certification requirements for financial guarantees are often high and may exclude SMEs from winning government contracts	0.280	9th
The costs of preparing public procurement proposals are high	0.280	10th
Difficulty in having access to capital for business expansion	0.230	11th

Source: Field Survey, 2015

#### **4.5.1 Preference for dealing with one large supplier rather than a number of smaller ones (RII=0.385)**

This finding implies that SMEs due to their fragmented nature and often small operational sizes (as well as small capitalization) are not taken seriously when procurement contracts are being awarded. This finding actually confirms what Robredo (2006) observed to the effect that bigger and higher capitalized firms tend to have advantage of small enterprises when procurement contracts are being awarded.

#### **4.5.2 Problems of unclear jargon used in procurement documents (RII=0.375)**

This finding suggest that because some SME owner/managers are not highly educated, they find it difficult deciphering and decoding technical jargons that certain procurement bidding documentations may contain and this unfortunately therefore prevents SMEs from competing and bidding for certain public contracts. This finding further underscores the need for SME owner/managers to educate themselves in order not to put themselves at a disadvantage simply because of their inability to understand technical specifications of contracts.

#### **4.5.3 The small size of my enterprise sometimes makes it inadequate in terms of winning big government contracts (RII=0.375)**

These findings are unsurprising considering that SMEs are known to have serious financing issues essentially due to the problem of information asymmetry and the lack of collateral security (Green, 2003). As pointed out by Green (2003), banks find it difficult financing the activities of SMEs because they are largely controlled by owner/managers who quite often do not keep proper records, lack audited financial statements and notoriously known for defaulting on loan repayment. As pointed out by Kumar et al., (2005), the procurement function comprises several activities and it also consists of many materials and information flows.

This tends to make its implementation by a small firm quite daunting and costly. For instance, the cost of tendering, bidding and making proposals for public contracts can be lengthy, cumbersome and expensive and this tends to place SMEs at a disadvantage since they are not able to compete with large enterprises who are more organized and do have well-functioning procurement units/departments (Robredo, 2006).

#### **4.5.4 Weak managerial ability with respect to the understanding of the importance of the procurement function (RII=0.355)**

The above findings are quite worrying because most SMEs are managed by their owners and these owner/managers typically do not possess enough knowledge about the essence of the procurement and this tends to affect its proper application during construction projects. This finding confirms what Tassabehji and Moorhouse (2008) pointed out to the effect that having the requisite procurement skills is vital to success. This finding further echoes what Obanda (2012) and the OECD (2012) found that SMEs typically do not have vital departments and units of procurement management because of the lack of skills and knowledge needed to handle these units. For instance, the lack of skills and knowledge may hamper bidding processes and this may affect the ability of SMEs to win huge government contracts.

#### **4.5.5 Lack of accessible, timely and comprehensible information available to SMEs, including information gaps concerning rules and tender procedures (RII=0.355)**

This finding points to the need for all stakeholders (including the government, awarding agencies, MDAs and the SME owner/managers) to concentrate on building the capacity of SMEs in the sector since their success can go a long way in pushing forward the developmental agenda of the state.

Throughout this study, the dominant theme that kept rising was the obvious limited knowledge of owner/managers on the principles of the procurement function and

therefore feeding into the limited implementation of same. In effect, the lack of avenues through which SMEs are trained on the dictates of the procurement function is having a telling effect on the implementation of the procurement function by the SMEs. This finding resonates with what Robredo (2006) concluded to the effect that the lack of awareness on the importance of the procurement function is a major impediment on the effective implementation of the procurement function by SMEs. This finding therefore reveals the urgency at which stakeholders must provide avenues where SMEs in the construction field are trained on effective practices of the procurement function in particular and other important issues (records keeping, marketing, tendering and bidding etc) in general.

#### **4.6 The Relationship between the Procurement Function Practices and the Performances of the Enterprises**

From the chi square distribution table (Table 4. 5), the value at  $\alpha = 5$ ;  $df = 4$  is 9.490. This implies that when the null hypothesis of no relationship between the procurement function practices and the performances of the enterprises is true, a chi square value greater or equal to 9.490 would be obtained only 5% of the time. Because the obtained chi square value from the system is 20.511, this study failed to accept the null hypothesis that is the relationship between the procurement function practices and the performances of the enterprises and concluded that there is an association between the procurement function practices and the performances of the SMEs in Ghana. Since the p-value for this result is 0.011, it means the probability that the results will occur by chance or due to sampling bias is 0.011. This study therefore concluded that the result is statistically significant and could not have occurred due to chance or sampling bias.



**Table 4.5 The relationship between the procurement function practices and the performance of the enterprises**

Pearson chi square	Df	p-value
13.067	4	0.011

Source: Field Survey, 2015

#### **4.7 Suggestions to Enhance SME's Implementation of the Procurement Function**

The result of the Relative Importance Index (RII) in Table 4.6 indicates that the five most important suggestions to enhance SME's implementation of the procurement function are (1) Recruiting supply chain and procurement specialists (RII=0.44); (2) Registering and checking tenders for opportunities, signing up for appropriate alerts (RII=0.42); (3) Identifying and pursuing opportunities for sub-contracting on larger contracts (RII=0.42); (4) Request debriefing on outcome of tendering procedures (RII=0.34) and (5) Getting top management support.

**Table 4.6 Suggestions to enhance SME's Implementation of the Procurement Function**

<b>Suggestions to Enhance SME's Implementation of the Procurement Function</b>	<b>RII</b>	<b>Rank</b>
Recruiting supply chain and procurement specialists	0.44	1st
Registering and checking tenders for opportunities, signing up for appropriate alerts	0.42	2nd
Identifying and pursuing opportunities for sub-contracting on larger contracts	0.42	3rd
Request debriefing on outcome of tendering procedures	0.42	4th
Getting top management support	0.34	5th

Checking for published prior information notices or contact procurement personnel in public bodies and obtain information about upcoming contracts and / or purchasing and tendering policy	0.31	6th
Training of employees	0.28	7th
Forming consortia /group together, where appropriate, to tender for contracts that one enterprise might have difficulty in fulfilling	0.27	8th
Asking to be put on tender lists of government	0.26	9th

Source: Field Survey, 2015

The above findings main suggestions underscore the need for SMEs in the construction sector to invest in recruiting and training employees so as to make them, highly efficient in executing the procurement function. This training of employees as well as owner/managers has a direct bearing on other aspects of their operations such as registering and checking tenders for opportunities, signing up for appropriate alerts and identifying and pursuing opportunities for sub-contracting on larger contracts (Zheng et al., 2007). These suggestions further underscore the strategic role of top management in the implementation of the procurement function.

For instance, top management support has been identified as critical in any major move of a firm since they consist of individuals with power and authority to make strategic decisions (Blanchard, 2007). Top management can thus develop clear-cut procurement function while at the same time sending signals to different parts of the firm about the importance of the procurement function. Given the limited nature of resources and the many competing projects, top management support ensures that the procurement function gets the necessary resources and capabilities (Blanchard, 2007). It is therefore recommended that Ghanaian SMEs in the construction sector should make efforts to

not only understand issues of procurement management but also create and support the department to ensure better delivery through the implementation of collaborative relationship with channel partners. Executive support can be in the form of time, fast improvement and release of funds. It can also include training employees/channel partners on the latest trends of supply chain management, especially when the sector constantly sees new technology evolving.

1. Training of employees is one of the ways of enhancing the implementation of the procurement function by SMEs
2. Recruiting supply chain and procurement specialists is one of the ways of enhancing the implementation of the procurement function by SMEs
3. Getting top management support is one of the ways of enhancing the implementation of the procurement function by SMEs
4. Registering and checking tenders for opportunities, signing up for appropriate alerts is one of the ways of enhancing the implementation of the procurement function by SMEs
5. Checking for published prior information notices or contact procurement personnel in public bodies and obtaining information about upcoming contracts and / or purchasing and tendering policy is one of the ways of enhancing the implementation of the procurement function by SMEs
6. Forming consortia / group together, where appropriate, to tender for contracts that one enterprise might have difficulty in fulfilling is one of the ways of enhancing the implementation of the procurement function by SMEs
7. Identifying and pursuing opportunities for sub-contracting on larger contracts is one of the ways of enhancing the implementation of the procurement function by SMEs

8. Request debriefing on outcome of tendering procedures is one of the ways of enhancing the implementation of the procurement function by SMEs

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## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter finalizes the thesis and it comprises the conclusions and recommendations of the study.

#### 5.2 Summary of the Study

The summary of the findings of this study were as presented below:

In relation to the first objective of the study, it was found that most of the SMEs appreciate the importance of the procurement function in the realization of their goals, see the procurement function as absolutely crucial to the delivery of a project on time, on budget and to a high quality and that the procurement function is one of the main determinants of both competitiveness in the construction industry and profitability.

In relation to the second objective of the study, it was found that when effectively implemented, the procurement function can improve upon the performance of the SMEs. It was found that the implementation of the procurement function has led to achieving economies of scale; the completion of projects within schedule, budget and to specification; that the procurement function has led to the upholding of integrity by ensuring that there are no malpractices or fraudulent behaviours" from employees and that the effective implementation of the procurement function has enabled their enterprises to win more contracts from the district assembly.

With respect to the third objective of the study, it was found that there are several challenges that impede the effective implementation of the procurement function among the SMEs sampled. The main challenges were found to be weak managerial ability in terms of having a firm grasp of the importance of the procurement function in

the construction sector; lack of accessible, timely and comprehensible information on rules and tendering processes available to SMEs; lack of access to capital for business expansion; high cost of preparing public procurement proposals; qualification levels and certification requirements for financial guarantees are usually high and this tends to exclude SMEs from winning public contracts; lack of external training on the procurement function for SMEs operating in the construction industry and the small nature of the SMEs making it difficult for them to compete with larger enterprises and therefore losing out on big contracts.

### **5.3 Conclusions of the Study**

The procurement function is an indispensable tool that when effectively implemented can make the difference between success and failure especially for SMEs due to their peculiar characteristics of inadequate resources (especially finance), low managerial ability and poor record keeping. This study therefore provides a unique finding on the relationship between the adoption of the procurement function, its effect on the performance of the SMEs survey and more importantly, identified the challenges that make the implementation of the procurement function such a daunting task. While the adoption and subsequent implementation of the procurement function was seen as vital to the overall performance of the SMEs contacted, this study found that due to the limited knowledge of owner/managers and their inability to employ the services of qualified procurement specialists, most of the SMEs contacted do not have specialized procurement departments and therefore implying that procurement activities are not streamlined and organized.

This study therefore concludes that given the procurement risk taking, knowledge and skills are crucial determinants of SME contractors, therefore maximum efforts should be made towards improving them in order to improve the performance of SMEs in the

construction sector. It is also recommended that management of SMEs should concentrate on developing procurement function abilities through the acquisition of knowledge and skills pertinent to effective deployment of the procurement function in their enterprises. As suggested by Ammer (1989), it is crucial that SMEs first learn the rudiments of the procurement function and how they can implement it to suit their unique situation and operations.

This study further concludes that to survive and grow requires requisite capacity of SMEs to effectively implement the procurement function and this can be developed through meaningful partnership with key stakeholder such as banks (having access to finance to finance training and other procurement activities); the National Board for Small Scale Industries (NBSSI) (to facilitate training on the procurement function in particular and other business related skills such as record keeping, cash flow management, marketing etc); the PPA, the state and other partners. This study finally concludes the fact to survive; SMEs also require external support in the form of government support, infusion of capital in order to sustain their operations.

#### **5.4 Recommendations of the Study**

Based on the findings of this study especially with respect to the challenges of implementing the procurement function among the SMEs, the following recommendations are made.

##### **5.4.1 Having a well-defined procurement plan**

It is recommended that first and foremost, the smooth and efficient procurement of construction equipment and other accoutrements should be made based on having a well-defined procurement plan; appropriate procurement implementation plan since not

only having a plan but more importantly, implementing it effectively is critical; having a regular review of the procurement plan and implementation.

#### **5.4.2 Training and Development**

This study again recommends that SMEs can surmount the challenges of adopting and implementing the procurement function if they provide training courses for all staff involved in procurement and also recruit staff with expertise and experience in handling procurement matters. It is also critical that SMEs must make certain that there is a balance between risks and rewards in the adoption and implementation of the procurement function. It is also recommended that there should be collaboration with key players such as suppliers and potential suppliers as well as academic institutions with a view to promoting the utilization of the procurement function by the SMEs.

#### **5.4.3 Being Proactive**

Moreover, it is suggested that in order for SMEs to win government contacts, they should register and check regularly for opportunities, sign up for suitable alerts; that they should check regularly for published prior information notices or contact purchasing personnel in public bodies and get information about upcoming contracts and or purchasing and tendering policy and also request debriefing on outcome of tendering procedures to forestall future tendering failures.

#### **5.4.4 Better Financing Arrangements for SMEs**

This study also found that access to finance impedes the capacity of the SMEs to invest in the implementation of the procurement function. It is therefore recommended that banks and other credit giving financial institutions should come up with creative policies that make it easy for the SMEs to access financing. Again, various interventionist institutions should be effectively monitored to make available funds for



financing entrepreneurial development including the adoption and implementation of the procurement function.

#### **5.4.5 Government Intervention/Assistance/Support**

Additionally, the government should improve SMEs' access to financing by deepening the reforms of the banking system such as reforming of interest rates, collateral requirements and the credit registration system as SMEs continuously complain bitterly about high interest rates and the high collateral requirement for bank loans. Moreover, the government can facilitate the development, expansion and the promotion of a range of financial instruments for SMEs since these diversified financial instruments such as leasing and credit guarantees can help SMEs survive and grow.

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## **APPENDIX “A” RESEARCH QUESTIONNAIRE**

### **MASTERS OF SCIENCE IN PROCUREMENT MANAGEMENT (KNUST)**

**Dear Sir/Madam,**

#### **DEVELOPMENT OF PROCUREMENT FUNCTION AMONG CONSTRUCTION SMEs IN GHANA**

Your kind co-operation is sought for the completion of this questionnaire, which is a survey being conducted to collect data for an academic exercise towards the award of master degree from the above mentioned University. Your willingness to complete the questionnaire will be much appreciated. All information will be treated as strictly confidential.

#### **SECTION I (BACKGROUND OF RESPONDENTS) (Tick appropriate box) 1.**

##### **Position in company/firm**

Managing Director ☐

Project Engineer ☐

Procurement Manager ☐

Others \_\_\_\_\_

##### **2. Age (years)**



- 16-24 ☐
- 25-34 ☐
- 35-44 ☐
- 45-54 ☐
- 55-64 ☐
- 65+ ☐

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**3. What is the classification category of your company/firm?**

- D4/K4 ☐
- D3/K3 ☐
- D2/K2 ☐
- D1/K1 ☐

**4. Total numbers of years in your business.**

- 0 - 5 ☐
- 6-10 ☐
- 11-15 ☐
- 16-20 ☐
- 21+ ☐

**5. Academic qualifications**

- SSCE and below ☐
- B.Sc./BA/HND ☐
- M.Sc./MBA/MPhil ☐
- PhD/DBA ☐

**6. What is the number of employees in your business (including yourself)?**

- Below 5 ☐
- 6 to 10 ☐
- 11 to 15 ☐
- 16 to 20 ☐
- 20 or higher ☐

### 7. Type of Business Ownership

- Established by you ☐
- Bought from another Owner ☐
- Inherited ☐
- Independently owned ☐
- Owned in Partnership ☐
- Other(s), please specify \_\_\_\_\_

### 8. Which of the following were your sources of initial capital?

- Personal savings ☐
- Family/Relatives ☐
- Grants from NGOs/ Government agencies ☐
- Other(s), please specify \_\_\_\_\_

## SECTION II (THE PROCUREMENT FUNCTION PRACTICES OF CONSTRUCTING SMEs)

9. To what extent do you agree with the following statements as being the procurement function practices of your enterprise? (Where 1 = Definite Yes; 2 = Partial Yes; 3 = Unsure; 4 = Definite No)

S/N	Variables	1	2	3	4
i.	My enterprise has a specialized department charged with the sole responsibility of handling procurement activities				

ii.	My enterprise has a strategic procurement plan and this plan is often reviewed in order to take into account changes in the strategic plan of the firm				
iii.	Persons handling the procurement function exhibit high purchasing knowledge and skills				
iv.	My enterprise has employed procurement specialists to handle the procurement function				
v.	Top management of my enterprise understand and appreciate the importance of the procurement function				
vi.	Top management of my enterprise see the procurement function as absolutely crucial to the delivery of a project on time, on budget and to a high quality				
vii.	My enterprise regard the procurement function as one of the main determinants of both competitiveness in the construction industry and profitability				
viii.	My enterprise regard the procurement function as a main driver of growth and survival in the Ghanaian construction industry				
ix.	My enterprise understands that poor chosen procurement methods directly contributes to the cost overruns and delays of construction projects				

### SECTION III (THE EFFECT OR INFLUENCE OF PROCUREMENT FUNCTION PRACTICE ON SMEs PERFORMANCE)

**10. To what extent do you agree with the following statements as being effects of procurement function practice on your enterprises' performance? (Where 1 = Definite Yes; 2 = Partial Yes; 3 = Unsure; 4 = Definite No)**

S/N	Variables	1	2	3	4
i.	The implementation of the procurement function in my enterprise has led to achieving economies of scale				
ii.	The implementation of the procurement function in my enterprise has led to the completion of projects within schedule				
iii.	The implementation of the procurement function in my enterprise has led to the completion of projects within budget and to specification				
iv.	The implementation of the procurement function in my enterprise has led to cost reduction				
v.	The implementation of the procurement function in my enterprise has led to winning more contracts from the district assembly				
vi.	The procurement function has led to accountability in my enterprise (effective mechanisms have been put in place in order to enable procuring entities spend the limited resources carefully)				
vii.	The procurement function has led to the upholding of integrity by ensuring that there are no malpractices or fraudulent behaviours from employees				
viii.	The material and information flows of the department with the other components in the supply link, internal customers and suppliers				
ix.	The effective implementation of the procurement function has enabled my enterprise win more contracts from the district assembly				

x.	My enterprise's purchasing activities are more streamlined and efficient because of the procurement function				
xi.	Other(s), please specify				

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#### SECTION IV (THE CHALLENGES OF EFFECTIVE IMPLEMENTATION OF THE PROCUREMENT FUNCTION IN GHANAIAN SMEs)

11. To what extent do you agree with the following statements as being the problems/challenges of effective implementation of the procurement function in Ghanaian SMEs? (Where 1 = Definite Yes; 2 = Partial Yes; 3 = Unsure; 4 = Definite No)

S/N	Variables	1	2	3	4
i.	Weak managerial ability with respect to the understanding of the importance of the procurement function				
ii.	Lack of external training programmes on the procurement function tailored to the specific needs of SMEs in the construction industry				
iii.	Top management is not sufficiently knowledgeable about procurement in the construction industry,				
iv.	Difficulty in having access to capital for business expansion				
v.	SMEs are not always aware of the opportunities and importance of implementing the procurement function				
vi.	Lack of accessible, timely and comprehensible information available to SMEs, including information gaps concerning rules and tender procedures				
vii.	Problems of unclear jargon used in procurement documents				
viii.	The small size of my enterprise sometimes makes it inadequate in terms of winning big government contracts				
ix.	The qualification levels and certification requirements for financial guarantees are often high and may exclude SMEs from winning government contracts				
x.	The costs of preparing public procurement proposals are high				
xi.	Preference for dealing with one large supplier rather than a number of smaller ones				

#### SECTION V (SUGGESTIONS TO ENHANCE SME's IMPLEMENTATION OF THE PROCUREMENT FUNCTION)

12. What do you think can be done to enhance SME's implementation of the procurement function? (Where 1 = Definite Yes; 2 = Partial Yes; 3 = Unsure; 4 = Definite No)

S/N	Variables	1	2	3	4
i	Training of employees				
i.	Recruiting supply chain and procurement specialists				
ii.	Getting top management support				
iii.	Registering and checking tenders for opportunities, signing up for appropriate alerts				
iv.	Checking for published prior information notices or contact procurement personnel in public bodies and obtain information about upcoming contracts and / or purchasing and tendering policy				
v.	Asking to be put on tender lists of government				
vi.	Forming consortia /group together, where appropriate, to tender for contracts that one enterprise might have difficulty in fulfilling				

vii.	Identifying and pursuing opportunities for sub-contracting on larger contracts				
viii.	Request debriefing on outcome of tendering procedures				

**Thank you for your cooperation and participation!!!!!!**

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