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**DEPARTMENT OF BUILDING TECHNOLOGY**

**KNUST**

**FACTORS INFLUENCING THE NON-PARTICIPATION OF INDIGENOUS  
BUILDING CONSTRUCTION FIRMS (IN GHANA) IN INTERNATIONAL  
COMPETITIVE TENDERING (ICT)**

**BY**

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## DECLARATION

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## ABSTRACT

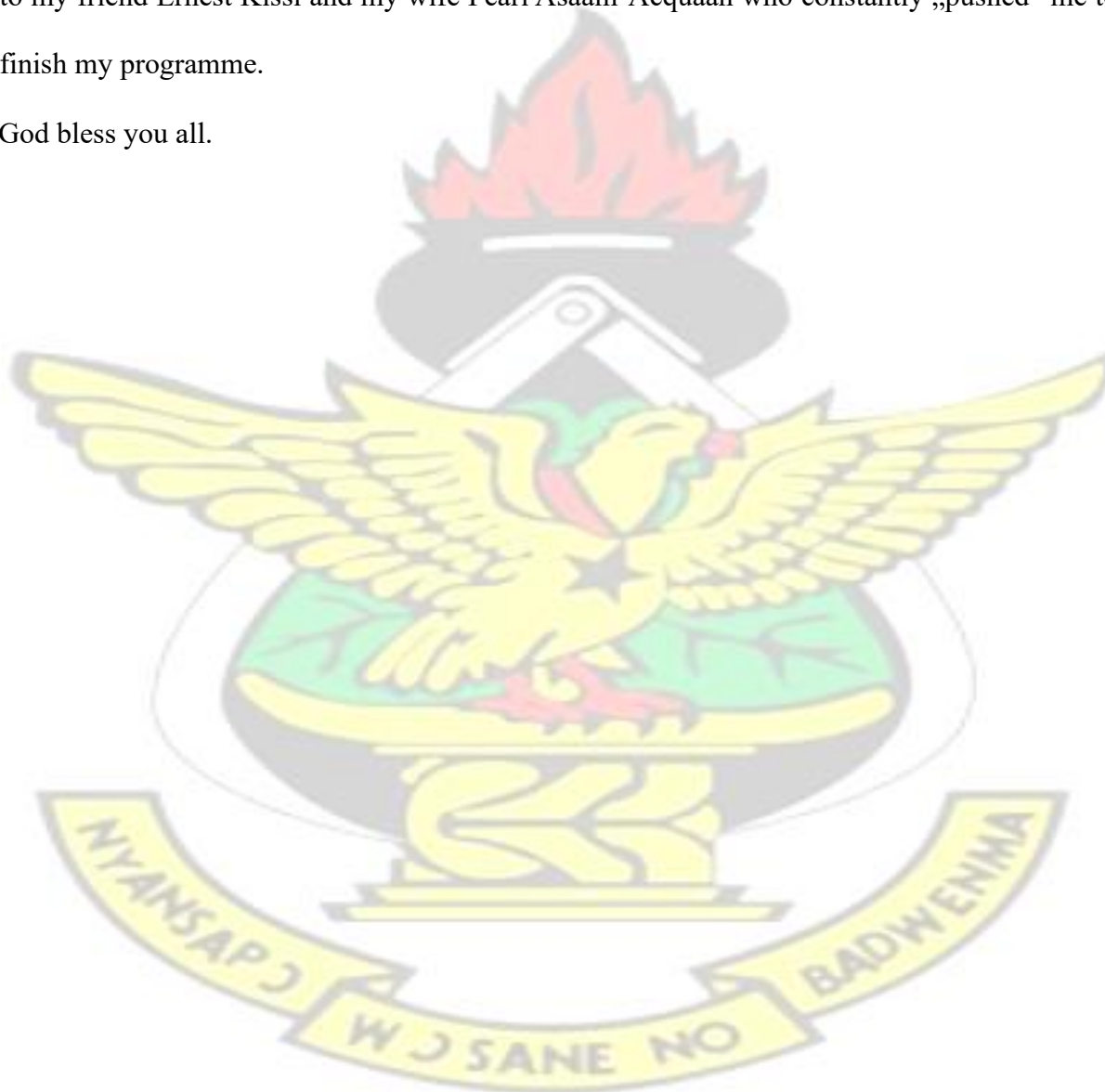
Construction of major projects are mostly awarded to foreign construction companies over the indigenous construction firms in Ghana. The first question that arises is that what are the first class indigenous constructions firms in Ghana doing and the reasons why they are not being awarded such projects. This study attempts look into the factors which influence the non-participation of indigenous building construction firms in Ghana in international competitive tendering. In order to achieve this aim; the specific purposes were set: to identify factors influencing the non-participation of indigenous building construction firms in international competitive tendering; identify the effects of these factors from the nonparticipation of the indigenous building construction firms in international competitive tendering; and identify how these factors could be managed to enhance and develop the interest of the indigenous building construction firms in international competitive tendering. The study adopted quantitative research method and probability sampling approach in selecting its sampling size from a number of populations. Statistical Package for Social Sciences (SPSS) and Microsoft Excel were used in the analysis of the data. The discussion on the analysis was based on the researchers' survey and other relevant literature employed for the study and was analysed using descriptive statistics and diagrams generated using Excel. The rest of the sections were analysed using Relative Importance Index and Mean Score Rankings. The study revealed that the indigenous construction firms in Ghana are not able to compete with international firms due to lack of technical skills, lack of logistics/resources, inability to secure adequate working capital and low productivity. Majority of the respondents proposed entering into joint-ventureships and alliances or partnership. They also wish to participate in workshops/seminars organized for building construction firms to enhance their knowledge and performance in the industry. It is recommended that there should be adequate up to date training for engineers working with indigenous construction firms in advance technology and complex project to upgrade their capacities, since indigenous building construction firms do not undertake or participate in international competitive project. Civil works such as road, complex buildings etc. are to be given out to local contractors other than foreign firms to increase their productivity and enable them secure adequate working capital. Building Construction Firms must seek to understand all Conditions of Contracts for International Competitive Tendering.

**Keywords:** Indigenous Building Construction Firms, Non-participation, Factors, Influence, Ghana, International Competitive Tendering

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God bless you all.





## DEDICATION

Dedicated to my father **Mr. Roland Kweku Abekah** and the three influential people in my life **Rev. Sampson Kissi, Rev. Emmanuel Ankrah** and **Nathaniel Paul Tetteh**

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 BACKGROUND OF THE STUDY**

Tendering is the procedure by which tenders are called from interested contractors or construction firms to execute specific packages of construction works or projects. It should adopt and observe the key values and standards of fairness, clarity, simplicity and accountability, as well as also to reinforce the idea that the apportionment or transfer of risk to the party is best placed to assess it and to manage it are all aiming to the success of the project. Single-Stage Selective Tendering or Two-Stage Selective Tendering has been the two most commonly used methods for tendering of goods and services. It is a process for which proposal of a given amount are transported to a specified construction works founded on a reading of the contract documents (Brett, 1997). CIOB (2009) explained the same process as the procedure of organising and succumbing for approval a compliant proposal to undertake work for a fee within a specific time frame.

According to Ackah (2014), majority of builders continue to obtain most of their projects through the system of tendering and most especially for new projects and projects of some importance as opposed to smaller, minor or repair projects. Tendering for works takes various forms all of which cost money to prepare and yet many tenderers are unsuccessful. Success rates vary according to the firms tendering strategy. Ackah (2014) again stated that the effective means to safeguard that builders receive value for money in the award of contract for projects is by allowing all able and qualified firms to tender for the contract which is termed as competitive tendering. This has also been stated and outlined in section 35(1) of the Public Procurement Act 663 (Act 2003) of the Republic of Ghana. Competitive Tendering has also been described by Lyson and Farrington (2006) as open tendering, equal opportunity given to qualified suppliers to tender for contracts. They usually come in the form of national



competitive tendering (NCT), international competitive tendering (ICT), two stage tendering and restricted tendering. Competitive tendering is being adopted all over the world by various clients and investors for a variety or numerous of public and private services comprising of public transportation, infrastructure and other building projects. It involves and takes into account a mixture of both public and private roles where the public sector chooses what facilities and projects must be competitively tendered and what stipulations must relate to the services (Cox and Love, 1991).

Again, tendering or bidding can be defined as a shared foundation for choosing a builder to perform a building project. Though negotiation can be adopted to choose a builder, either on its own or in combination with competition, the occurrence of rules on required competitive tendering involves the broader usage of tendering in building works (Chinyio, 2011). The process works within from start to completion, generally, a procedure which ensure that a builder gains the right to provide a building project (Connaughton, 1994 and Hoxley, 2000). Though, tendering can also occur amid the border of builder and sub-contractor; builder and provider, employer and advisor, etc. Notwithstanding these definitions, tendering can be defined as a process by which a closed tender or offer document submitted in reply to a demand for tenders and covering meticulous information on necessities as well as relations related with a possible agreement.

In order for a company to take part and participate in the tendering processes for goods and services, be it national competitive or internationally competitive, the firm must be duly registered by the Registrar General's Department of Ghana to undertake and tender for Government contract be it nationally, internationally or any other form of tendering. The company must have been certified and classified by the Ministry of Water Resources Works and Housing of Ghana for either building works under category D or category K for civil works. (Amoah et al., 2011)



The Public Procurement Board of Ghana has prime Standard Tender Document which specifies certain evaluation and qualification criteria that should be met by the construction firms and as a guide to obtaining units in accord with Public Procurement Act, 2003 Act (663) of the Republic of Ghana for the purchasing of goods and services through International Competitive Tendering (ICT). However, (Ackah, 2014) stated that in Ghana, international competitive tendering could be used whenever goods to be purchased are not available locally or cannot be provided on account of technical and other competencies together with financial constraint (Public Procurement Act 2003 (Act 663) of Ghana section 45).

## **1.2 PROBLEM STATEMENT**

The problem of foreign construction companies and industries being most of the times awarded major and International Construction projects such as roads, stadia, building of office complexes, interchanges, shopping malls and many others in the country over the indigenous Ghanaian construction companies is very worrying. Several questions and thoughts such as “what are the first class or D1K1 indigenous constructions firms in Ghana doing and what are the reasons why they are not being awarded such projects?” Also the perception most Ghanaians and other people have about our indigenous building firms in the country that they do not have the capacity and capabilities of undertaking international competitive projects undermines these building firms. They also have the mind-set that the indigenous building firms in Ghana when they are awarded such contracts tend to buy expensive and flashy cars when they are paid mobilisation monies and do not pay much attention to the projects. In the end these projects come to a standstill or abandoned and later leads to termination of contract by the client or consultant on the project.

Some say although the Ministry Of Water Resources Works and Housing has certified our indigenous building firms in the categories of D and K and most invariably they do not have

the requisite means and needed experience to participate and undertake international competitive tendering and contracts.

And as a result of these questions and other several reasons stated in the previous paragraphs of which one cannot think of, most of the indigenous building construction firms would not want to participate in tendering for goods and services which is either Nationally or Internationally Competitive in the country and this study seeks to research into these factors and reasons.

### **1.3 AIM OF THE STUDY**

The aim of this study was to research into the factors which influences the non-participation of indigenous building construction firms in Ghana in international competitive tendering.

### **1.4 OBJECTIVES OF THE STUDY**

The objectives of this study included the following; that is to:

- Identify factors influencing the non-participation of indigenous building construction firms in international competitive tendering;
- Identify the effects of these factors from the non-participation of the indigenous building construction firms in international competitive tendering; and
- Identify how these factors could be managed to enhance and develop the interest of the indigenous building construction firms in international competitive tendering.

### **1.5 SIGNIFICANCE OF STUDY**

This study will enable the Ghanaian Construction Industry to live up to expectation as a whole and the indigenous building construction firms and other construction firms in Ghana to be able to participate not only in international competitive tendering but also in any other type of competitive tendering. The study will point out the factors and effects of the indigenous building construction firms not participating in ICT and also the strategies to enhance their

interest for participation. Government will be the ultimate beneficiary of this study as it will enable her appreciate the relationship that already exist between the construction industry and economic growth of the nation better and thus take the issues of non-performance by the indigenous construction firms more seriously.

## **1.6 RESEARCH METHODOLOGY**

In order to achieve the results of this study, quantitative approach was adopted which focused on both desk and field research. The desk research focused on the review of literature from textbooks and other relevant publications, whilst the field research was used to collect data for analysis in the form of administered questionnaires and Yamane's formula with a five (5) percent error deviation and ninety-five (95) percent confidence level was adopted in selecting the population and sample size for the study. Data collected were analysed using Relative Importance Index (RII) and Mean score analysis.

## **1.7 LIMITATIONS OF THE STUDY**

This study was limited to the first class indigenous building construction firms in Ghana in International Competitive Tendering. First class means larger indigenous building construction firms and companies classified by the Ministry of Water Resources Works and Housing as D1 K1. It covered three (3) major stakeholders that is (clients, contractors and consultants) in the Ghanaian construction industry and focused on the professionals such as engineers, quantity surveyors, projects and construction managers within them to bring their knowledge to bare on the factors influencing the non-participation of the indigenous building construction firms in Ghana in international competitive tendering (ICT).

## **1.8 ORGANISATION OF THE STUDY**

The reading was prearranged into five sections. Chapter one focused on the general introduction of the study. The second chapter looked at the literature review. Chapter three dealt with the

method used in the study while Section four discussed the examination of the results of the study and the last chapter which is chapter five dealt with the conclusions and recommendations of the study.

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## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter presents a literature review for the research. Relevant literature on competitive tendering, concept of international competitive tendering and the types of tendering or methods are discussed. Both the advantages and disadvantages of international competitive tendering,



factors influencing the non-participation of the indigenous building construction firms in Ghana, the effects of these factors which would have been identified from the research and strategies to enhance the interest of these building construction firms in Ghana to participate in international competitive tendering are examined.

## **2.2 OVERVIEW OF INDIGENOUS BUILDING CONSTRUCTION FIRMS IN GHANA**

In Ghana, the Ministry of Water Resources Works and Housing (MWRWH) is the agency which is responsible for the registration of construction companies or contractors (that is either building or civil contractors). The MWRWH does the registration in collaboration with the Registrar General's Department under Act 179 (1963) of the firms' registration code. On registering, builders and companies are categorized founded on a total of rules together with the following: plant and equipment holdings, financial standing, earlier act and technical know-how. The MWRWH has two key classifications for builders, class „D“ for general building works and class „K“ for civil works. (Amoah et al., 2011).

Oppong (2013) gave an insight into the activities of the building construction industry and explained that the Building Construction Firms (BCF) in Ghana undertake several projects in the areas of construction of schools, hospitals, hotels, health centres, office complexes and many others. BCF also undertake external works which sometimes involve “simple” engineering construction such as driveways. The Ghanaian Building firms include of a huge number of enterprises of numerous scopes as recorded and considered by the MWRWH as D1K1, D2K2, D3K3 and D4K4. Founded on influences like annual turnover, equipment property, personnel etc. as stated earlier on by Amoah et al. (2011), the D1K1 class of contractors are termed as large firms whilst D2K2 building firms are medium and D3K3 and D4K4 are small firms (Edmond et al., 1984).



Edmond et al. (2007) again reported that the large and medium Ghanaian Construction Firms forms about 10% of the total number of construction firms registered with the MWRWH. These firms do not have the suitable technical competences, plant and equipment and main staff to supervise projects appropriately and the evidence is shown by the fact that the nation's major construction projects are awarded to very few large foreign contractors in the country. The remaining 90% are small firms or small contractors of which current data as of 2011 at the MWRWH shows that building construction firms categorised under D1K1 stands at 350 whilst that of D2K2 is 548 and that of the smaller firms (D3K3 and D4K4) is 8653 (Edmond et al., 1984).

Similarly, the building construction firms in Queensland State in Australia noted that the Government has been investing greatly in constructions, services, materials and equipment to upkeep its social and financial agendas. The Department of Public Works and Housing for the Queensland Government engage in recreation a vital function in controlling services and constructions for the Queensland Government on behalf of the Queensland Community.

Table 2.1 shows the values of task for the public segment on non-residential structures in Queensland.

**Table 2.1: Value of Public Sector Non-Residential Building (in AUD\$ million)**

Type of Building	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93
Offices	\$92.9	\$58.3	\$48.1	\$67.5	\$95.1	\$84.7
Business	\$50.9	\$65.8	\$83.1	\$63.0	\$43.9	\$56.0

Education	\$104.9	\$94.6	\$131.6	\$108.7	\$201.7	\$134.6
Health	\$20.1	\$29.8	\$47.3	\$28.0	\$54.3	\$41.9
Others	\$75.7	\$145.5	\$159.2	\$134.1	\$129.1	\$125.6
<b>TOTAL</b>	<b>\$344.5</b>	<b>\$394.0</b>	<b>\$469.2</b>	<b>\$401.3</b>	<b>\$524.0</b>	<b>\$442.7</b>

A statement also by the National Public Works Conference and National Building and Construction Council Joint Working Party displayed that in the late 1980's the Australian Building Industry had considerable upsurges in the occurrence of predetermined claims and quarrels linked to the last ten years (Hampson and Kwok, 1997).

### **2.3 OVERVIEW OF COMPETITIVE TENDERING IN THE GHANAIAN CONSTRUCTION INDUSTRY**

The term tender means to formally offer to supply goods and provide services for an agreed price. From another perspective competitive tendering is a procedure by which tenders are called and received from concerned prospective builders to execute particular suites of building work. However, Lysons and Farrington (2006) said in their research that from the purchasing perspective of procurement, it is a procuring method in which different qualified and potential contractors are called to make a firm or strong and unequivocal offer of the cost and statues on which they will supply specified goods and services, which on receipt, will be the foundation of a following agreement.

Cox and Love (1991) explained in their work that competitive tendering is making delivery of a public service done competitive awarded contracts. It includes a production of both public and private responsibilities and it is the government that chooses the services as well as goods to tender for competitively and also chooses the private providers under public scrutiny.

Tenders are most of the time based on a specification of requirements which are put together by the purchaser or client's representatives but then an alternative is to invite suppliers and contractors to provide a solution and a price to a problem stated by the purchaser. It is comprehensible that tendering is based on the principles of competition, fairness and accountability, transparency, openness and probity since the entire process is aimed at ensuring best value for money and not necessarily the lowest price (Lysons and Farrington, 2006). And in response to the above statement made by Lysons and Farrington, Dimitri et al. (2006) said that although it's a competitive procurement (open tendering), it is opened to only qualified potential suppliers and contractors to guarantee good contract execution.

Stanley (2011) as a contribution to Dr Deming's files brought to the limelight that any time the results of competitive tendering goes wrong for the client or buyer, a scapegoat is most often found and someone will definitely claim that the "Statement of Requirements" was written badly. The "statement of requirements" is the document that describes the services or project that is being tendered for which the applicant may contend that the critical information was absent or that the necessities concerning the projects were badly expressed (Stanley, 2011).

### **2.3.1 How Competitive Tendering Works**

The processes with which competitive tendering works in the public sector and any other sectors be they national, international or other form of competitive tendering involves four basic steps as shown below:

- The government or any other clients pursues competitive tenders for distribution of a particular excellence and extent of services for time period;

- A contract is awarded to the lowest accountable and responsive bidder which proves the capability to deliver the necessary excellence and extent of services;
- Contracts that flop to deliver the services as definite are economically penalised or substituted; and
- Fresh Competitive Tenders are required in adequate period to accolade a fresh agreement for service beginning at end of the contract (Cox and Love, 1991).

### **2.3.2 Principles of Competitive Tendering**

Competitive Tendering (National or International) involves two basic principles for the purchasing of goods and services or contracts either in the public services or any other sectors in the country. These principles are that:

- The government or private clients must retain full policy control in the areas of determining or deciding which services are procured and contracted instituting excellence and safety principles, managing of the contract as well as checking the performance of the services;
- The government or private clients to which the contract or project is for should also create the environment of competitive market because the maintenance of this competitive market is crucial or critical to the success of competitive tendering. Private monopoly should not be tolerated further more than public monopoly and ensuring competitive market in tendering for contracts, goods and services require that;
- Extensive contribution and complete revelation of info so that all the latent concerned tenderers have enough info to acquiesce a tender if they are willing to participate;
- Restriction of agreement period (regularly not additional than five years comprising restitution decisions);
- Restriction of tender scope so that smaller firms can have the chance of participation;
- Cost regulator over a condition for fixed-price tender and exclusion of price negotiation after contract execution; and



- No government or client specification of labour arrangement or organising except in accordance with applicable law (Cox and Love, 1991).

In a performance audit report submitted by the auditor general (2013) to parliament house on the building of Achimota – Ofankor road project also recommended that Ghana Highway Authority allows tenderers appropriate time to organise and succumb tenders to develop competitiveness in tendering and confirm that complete information is incorporated in the tender documents.

### **2.3.3 Types of Competitive Tendering**

In accordance with sections 35, 36 and 38 of the Public Procurement Acts 663 (2003) of the Republic of Ghana, various methods of competitive tendering has been outlined or stated be it national competitive tendering, international competitive tendering, two stage tendering and or restricted tendering (Ackah, 2014). However, Aloysius (2014) in his research also pointed out, confirmed and explained further more into some of the methods of competitive tendering stated by Ackah's work in saying that the four main methods of tendering in Ghana are:

(Public Procurement Act. ACT 663, 2003):

- Open Competitive tendering (clause 35-37) ;
- Restricted tendering (Clause 38 – 39) ;
- Single-source procurement (Clause 40- 41); and
- Request for quotations (Clause 42- 43).

### **2.3.4 Open Competitive Tendering**

In this method, tendering is open to all contractors who may be interested in the contract. When this method is agreed several unidentified group scan tender which may position a great possibility to the employer (Smith et al., 2006). This method is usually adopted for public projects which permit an unbiased liability of public reserves to evade likely charges of preference. Open tendering can entice numerous tenders. This process of tendering appears to



be unbiased as any builder can succumb a bid for the job. Different contractors and those keen to increase in scope or expand into new divisions can find open tendering a valuable path for attaining their goals (Kwakye, 1994).

Accordingly, the prices lean towards to be exact competitive as each bidder would require to succumb a lower price that is superior to the other competitors. The inadequacy of this system of tendering is that all bidders have to be examined for technical and fiscal exactness and this can be intimidating. The important quantity of period and work complex in this application is needlessly extravagant to the built environment (Tang et al., 2003). However, this method of tendering can be said to be inefficient of contractor's capitals as numerous may devote time and cash organising bidders to no consequence by deliberate to the fact that their probabilities of winning or attaining the deal are small. Builders may not have the time to pay particular attention to the agreement in factor to see through their lowest price however modestly estimate a price that will be definite to transport them a revenue if they win the contract.

Here the invitation to tender is usually placed in the newspapers and interested contractors who discover the advertisement participate in the tender. This is the most common method of tendering and does not require any prior approval from the Public Procurement Authority. In an open competitive tendering, National Competitive Tendering" (NCT) or International Competitive Tendering" (ICT) may be used.

### **2.3.5 National Competitive Tendering**

This is one of the methods of competitive tendering in which procurement entities makes the decision that only potential interested domestic suppliers or contractors may submit tenders to participate in it. The entity shall then employ national competitive tendering procedures (Public Procurement Act 2003 (Act 663) of Ghana, section 44).

Aloysius (2014) again mentioned that the national competitive tendering is applicable when the value of procurement is relatively low and the nature of procurement is unlikely to attract foreign competition. It is also suitable for goods, works and services whose values are within the thresholds stated in the Schedule 3 of the Act. The most common tendering procedure for competitive tendering is the National Competitive Tendering. In Tanzania, National Competitive Tendering is used when procuring entities does not intend to invite foreign contractors or suppliers to participate in the tendering. Foreign companies wishing to participate are allowed to do so but just that tender documents may be prepared in Kiswahili language and payments for works done will also be made in Tanzanian Shillings and then again estimated cost of the contract package is minimal and does not exceeds the verge for world-wide competitive tender. See table 2.2 below for details.

**Table 2.2 Monetary Procurement Thresholds (Second Schedule)**

<b>Method of Procurement</b>	<b>Goods</b>	<b>Works</b>	<b>Non Consultancy Services</b>	<b>Disposal of Assets</b>
International competitive tendering	No limit	No limit	No limit	No limit
National competitive tendering	Up to Tshs 800,000,000	Up to Tshs 3,000,000,000	Up to Tshs 500,000,000	Up to Tshs 3,000,000,000
Restricted tendering	Up to Tshs 400,000,000	Up to Tshs 1,500,000,000	Up to Tshs 200,000,000	Up to Tshs 1,000,000,000
Competitive quotations	Up to Tshs 80,000,000	Up to Tshs 100,000,000	Up to Tshs 50,000,000	Not applicable
Single source procurement	Up to Tshs 500,000,000	Up to Tshs 800,000,000	Up to Tshs 100,000,000	Not applicable

Minor value procurement	Up to Tshs 10,000,000	Up to Tshs 20,000,000	Up to Tshs 10,000,000	Not applicable
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### **2.3.6 Restricted Tendering**

Again, Ackah (2014) explained by saying that under this method of tendering, an obtaining unit shall for the details of financial and effectiveness as well as focus to the endorsement of the panel involve in procurement by way of delimited tendering quoting from the Public Procurement Act 2003 (Act 663) of the Republic of Ghana which also states that if goods, works and service are obtainable only from partial total of builders. Then also if the period and cost necessary examining and evaluating a large number of tenders is misappropriating to the value of the goods, works and services to be obtained.

## **2.4 THE CONCEPT OF INTERNATIONAL COMPETITIVE TENDERING**

In Ghana, this kind of competitive tendering mentioned above can be adopted whenever open/competitive is applied as well as operative completion cannot be procured if invitation is extended to foreign contractors or companies to participate in the tendering. Then also when items to be procured or bought or used in the construction of the building are not available locally or cannot be provided on account of technical and other competencies together with financial constraints. (Public Procurement Act 2003 (Act 663) of Ghana, section 45).

However in the reports of Project Administration Instructions, it was brought to light that in the packaging of international competitive tendering contracts whenever possible, procurement should be such that each tender package or contract is large enough to be suitable for international competitive tendering. The size and scope of different agreements will be contingent on the extent, nature and position of the project. And Aloysius (2014) again made mentioned that the ICT system is normally used for high value and complex procurement,

particularly when the nature of procurement is such that it is unlikely to attract enough competition locally and the value is also above the threshold stated in Schedule 3 of Act 663.

#### **2.4.1 Advantages of International Competitive Tendering**

In monetary preparations connecting the World Bank, a tendering route that needs the borrower to obtain means sponsored by its loan rendering to a total of stated settings. ICT necessitates World Bank borrowers to globally promote the prerequisite goods or services sponsored by their loans, issue bids for announcement in a satisfactory global language and award contracts to the lowest satisfactory tenderer, subject to assured thoughts for qualitative decision. The objective of commanding a global competitive tendering prerequisite on loans dispensed by the World Bank is to uphold unbiased and strong competition for World Bank financed financial prospects.

Again Cox and Love (1991) echoed that the ultimate benefit of competitive tendering for project co-ordinators, consultants and most clients is that it keeps cash. It brings modest inducements to the manufacture cost of a public service and decreases public cost in three ways:

1. Lesser cost over delivery of services at not many that the competitive rate;
2. It lowers cost from the “ripple effect” as public works and departments expand their cost performance in retort to the modest environs; and
3. It also lowers the net costs as an outcome of tax proceeds, licenses and amounts paid by the private and qualified builder on the public services they function.

He further went on to say that money saved through competitive tendering is not much since the private segment is greater over the public sector but rather competition induces lower cost than monopoly. Competitive access to public contracts for goods and services generates



substantial savings of which there are various estimates of the exact magnitude of this savings but the latest estimate in Padna-Scioppa report puts the savings at up to 25% for large member states, 1-2% of the community's GNP and 2-4 times as much as the member state spend on development aid. (Hebly et al., 2014).

Stanley (2011) contributed to the argument indicating that it may be the goals of competitive tendering that price tags submitted by qualified contractors are driven down "At what cost?" Contractors and firms will bump into the reduced charge desires, but if these companies are not expending Deming structure for organisation to do so then they will have to cut angles and cutting angles ultimately grades in extra sufferers.

#### **2.4.2 Disadvantages of International Competitive Tendering**

Stanley (2011) in his contribution to the reasons why competitive tendering fails outlined some disadvantages of competitive tendering which in a way also affects international competitive tendering globally.

The seven (7) drawbacks of competitive tendering are:

- Chief Suppliers or Contractors cannot tender;
- Barriers to communication between supplier and customers;
- The cost-plus phenomenon;
- Usage of inexpensive, poor excellence materials and/or labour;
- Competitive tendering can be extremely slow;
- Safety shortcuts; and
- Inadequate yield to permit for investment in study and expansion, new know-how or equipment.



## **2.5 FACTORS INFLUENCING THE NON-PARTICIPATION OF INDIGENOUS BUILDING CONSTRUCTION FIRMS IN GHANA IN ICT**

Ablordeppey (2011) stated that the Ghanaian Construction Companies or Firms which have proven themselves in the construction industry must seek to remake the image of the local construction which has been touted as being inefficient, without capacity and deliver shoddy works. He then again listed the factors contributing or accounting to the non-performance of the local contracting and construction firms. Below are the factors that he highlighted in his report:

- Lack of innovativeness;
- Less competence;
- Lack of technological skills;
- Lack of management/entrepreneurship; and
- Lack of logistics/resources.

Ofori (2012) in his study also pointed out that the problems highlighted in his report in the preceding paragraph were significant only to the road segment but as challenging contracting, construction and consultancy firms but are also common by the construction division of the business. Conferring to the same story, national road and building suppliers face the succeeding difficulties irrespective of their monetary class:

- Incapability to sheltered satisfactory employed resources;
- Insufficient management;
- Insufficient manufacturing capability; and
- Poor workmanship.

The difficulties faced or encountered by advisors include:

- Insufficient operation cash flow;
- Scanty flow of work;

- Low productivity;
- Lack of means and opportunities for providing training;
- Poor quality of work; and
- Low level of charges, delays the expansion of their official upkeep scheme

However, most Nigerian Indigenous Contractors (NICs) are criticised for poor performance due to management incapacity and their ability to plan projects adequately according to contractual requirements and these problems or factors stated above has prevented the Nigerian Construction Industry (NCI) from meeting construction needs in terms of building and other infrastructures of the country (Inuwa et al., 2014). Inuwa et al. (2014) again highlighted in his report that most studies undertaken and conducted by certain organisations in Nigeria reported that their performance is frequently associated with poor management resulting in poor planning, poor goal commitment, poor team motivation, poor technical competence, poor scope and work definition and poor project control system.

## **2.6 EFFECT OF THESE FACTORS FROM THE NON-PARTICIPATION OF INDIGENOUS BUILDING CONSTRUCTION FIRMS IN GHANA IN ICT**

The Nigerian Construction Industry (NCI) is confronted with numerous of problems and challenges which are coupled with the inability of the indigenous contractors or construction firms in Nigeria (NICs) to provide an enabling environment for sustainable development and the requisite potentials to address the challenges of globalisation. (Inuwa et al., 2014). The consequences of these under performances from the indigenous contractors has contributed or resulted in the inability of the Nigerian Construction Industry to deliver services effectively and efficiently, hence the industry is routinely accused of being wasteful, inefficient, and unsafe, falling short of quality and quantity targets and being late in delivery (Ibrahim and Musa-Haddary, 2010; Omole, 2001).

Ofori (2012) once again said that the nation's ability to attract foreign investment is also being affected by construction and this is in the era world-wide as all nations are contending nations to place to entice distant investment. Hillebrandt (2000) says construction is an important division of the country of each nation and it donates to national socio-economic growth by expending constructions which are castoff in the construction of all goods in the country. Not forgetting the warning of Obianyo (2010) concerning the construction industry of Nigeria, he stated that there is a likelihood of the risk of the industry either lagging behind in the international perspective or it will disappear from the country in the long term run for lack of being innovative and other practices in the industry. He then again said an increase in the economic growth of the nation is likely to be experienced by the contributions from the construction industry of Nigeria if the level of innovativeness increases.

## **2.7 STRATEGIES TO ENHANCE AND DEVELOP THE INTEREST OF INDIGENOUS BUILDING CONSTRUCTION FIRMS IN GHANA IN ICT**

According to Passenheim (2009) Planning is a fundamental tool in project management used in meeting project scope, time and cost. Preparation describes the doings and schedules, period and cost targets and act milestones which will effect in positive project objectives (Ibrahim, 2015). Harris and McCaffer (2005) also stated that in the developed countries, contractors have embraced planning owing because the results of a well-planned, carefully monitored and controlled contract directly impact on performance and profitability of the contract and the company.

Construction companies or firms wanting to participate in international competitive tendering for projects or going internationally must have a definite scope to be capable to deliver essential buildings, chiefly if the development is driven within (Ludovico, 2013). Again, adequate monetary belongings to fixed up infrastructures at dissimilar purposes and competent worker

and a cultured managing is required to manage with information transmission into diverse ethos including many other criteria should be provided by the indigenous construction firms themselves or mien into joint venture to increase their industry worldwide. This strategy stated above rapidly makes project managing competence on a global foundation which is of main significance.

KNUST

The logo of Kenya National University of Science and Technology (KNUST) is centered in the background. It features a red flame above a black shield with a white 'K' and a yellow bird with spread wings. A yellow banner at the bottom contains the text 'WISDOM BEGETS KNOWLEDGE'.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 INTRODUCTION**

Following the review presented in chapter two, this chapter focused on how the data required from stakeholders in the construction industry was gathered and analysed. It focuses on how the questionnaires were developed and distributed, how the sample size were determined and also the constraints and limitations which were encountered during the data collection process. The proposed methodology also provides an understanding of how the study was conducted and organized in order to get information that could be useful.

#### **3.2 RESEARCH APPROACH**

To accomplish the goal and purposes of the research, structured questionnaires were planned based on information obtained from literature review. The questions were planned to collect information shell significant subjects to the purposes of the research. The questionnaire comprises of close ended multiple choice type of questions to enable classification and



examination. Questionnaires consisted of four sections. The first segment contained questions which covered the organisation respondents are working with, status, years of experience and their professional affiliations. The second, third and fourth sections contains well-structured questions which addressed factors influencing the non-participation of indigenous building construction firms in ICT, the effects of their non - participation and strategies to develop or enhance the interest of the indigenous building construction firms to participate in ICT using a Likert scale of 1-5. Data obtained was analysed using the statistical tool (Relative Importance Index) to get the needed results.

### 3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE

Sampling is the method, or procedure of choosing an appropriate sample, or a representative part of a populace for the drive of formative restrictions or features of the whole population (Fugar and Agyakwah-Baah, 2010). To evaluate and assess the important elements that influence the non-participation of the indigenous construction companies in Ghana, members of Association of Building and Civil Engineering Contractors of Ghana (ABCECG) Sunyani, Accra and Kumasi Branches, both the public and private known consultants and some government institutions were targeted. To determine the appropriate sample size for the study, a calculation was made based on the simplified formula to calculate sample sizes by Yamane (1967) with a confidence level of 95 percent assumed to an acceptable margin of

error was used.  $n = \frac{N}{1 + N(e)^2}$

The formula is

$$\frac{N}{1 + N(e)^2}$$

Where:

n = the sample size N = the size of working

population e = confidence interval,

expressed as decimal

A targeted total population size of 134 consisting of registered members of the association, consultants and government institutions were randomly selected and this yielded a sample size of 100 respondents as shown below.

$$\text{Sample size} = 134 / 1 + 134(0.05)^2 = 100.37$$

Approximated sample size of 100

### **3.4 DATA COLLECTION**

Data collection is a term used to designate a method of formulating and gathering information. The drive of this process is to get information to possess on record, to make discussions about imperative concerns and to pass info to others. The questionnaires was distributed to and retrieved from various construction sites and offices in person and also both the private and public consultants registered in Ghana. The process of distribution and retrieving questionnaires in person was taken for two reasons as suggested by Ahadzie (2007):

- To make sure that the questionnaires get to the intended recipients; and
- To help improve the response rate.

The major designed data collection method was applied:

#### **3.4.1 Primary Data Collection**

The primary data for the study was attained from distribution of questionnaire as well as direct personal interviews with people involved in construction projects. This type of interviews explored the topic and explains other findings about factors that influence the nonparticipation

of the indigenous building contractors or companies in Ghana especially those in the first category of D1/K1 under the Ministry of Water Resources Works and Housing.

### 3.4.2 Secondary Data Collection

In order to enrich the questionnaire for the research, a review of text books and journals were used to identify the various efforts that have been made in the past to identify factors which influence the non-participation of the indigenous building contractors in Sunyani, Accra and Kumasi Metropolis as well as the evaluation criteria for selection of building contractors and suppliers which intends to undertake projects in the Ghanaian construction industry. Secondary sources of data were obtained from relevant literature that covered research and publication on the subject matter.

### 3.5 DATA ANALYSIS

The results was analysed in percentages and figures using descriptive statistics and presented in the form of pie charts and tables. The Importance Index was also used to rank the factors influencing the non – participation of the indigenous building firms in Ghana in ICT. In order to generate the result, the researcher used the Statistical Package for Social Sciences (SPSS) version 16.0 for the analysis. The Relative Importance Indices (RII) of determination of significance of factors was adopted because Danso (2010) asserted that to analyse data on ordinal scale (eg. Likert scale 1 – 5), the application of Relative Importance Index is also suitable. The Index is computed in Adnan et al. (2007) as cited in Danso (2010) as: **Importance**

$$\text{Index} = \frac{\sum (1n_1 + 2n_2 + 3n_3 + 4n_4 + 5n_5)}{5(n_1 + n_2 + n_3 + n_4 + n_5)}$$

Where:

- n1 - number of respondents who answered “strongly disagree”
- n2 - number of respondents who answered “disagree”
- n3 - number of respondents who answered “disagree”
- n4 - number of respondents who answered “disagree”
- n5 - number of respondents who answered “disagree”

“neutral” n4- number of respondents who answered “agree”

n5- number of respondents who answered “strongly agree”

## **CHAPTER FOUR**

### **DATA ANALYSIS AND DISCUSSION**

#### **4.1 INTRODUCTION**

Chapter four is focused on the analysis and discussion of the data that was gathered from the survey undertaken using structured questionnaires. Questionnaires were administered to 100 sampled from 135 .Statistical Package for Social Sciences (SPSS) and Microsoft Excel were used in the analysis of the data. The discussion on the analysis was based on the researchers’ survey and other relevant literature employed for the study. The first section of the analysis was the demographics and this was analyzed using descriptive statistics and diagrams generated using Excel. The rest of the sections were analyzed using Relative Importance Index and Mean Score Rankings. The data presented in this section of the study was obtained from the responses of the fore mentioned respondents to the questionnaires.

#### **4.2 RESPONSE RATE**

One Hundred and Thirty-three (133) questionnaires were issued in total. One hundred (100) were retrieved from the one hundred and thirty-three (133). All were self-administered by hand and through electronic mail (e-mail) in all one hundred (100) were received. The response rate through the self-administration was 75.2% representing more than half of the total questionnaires.

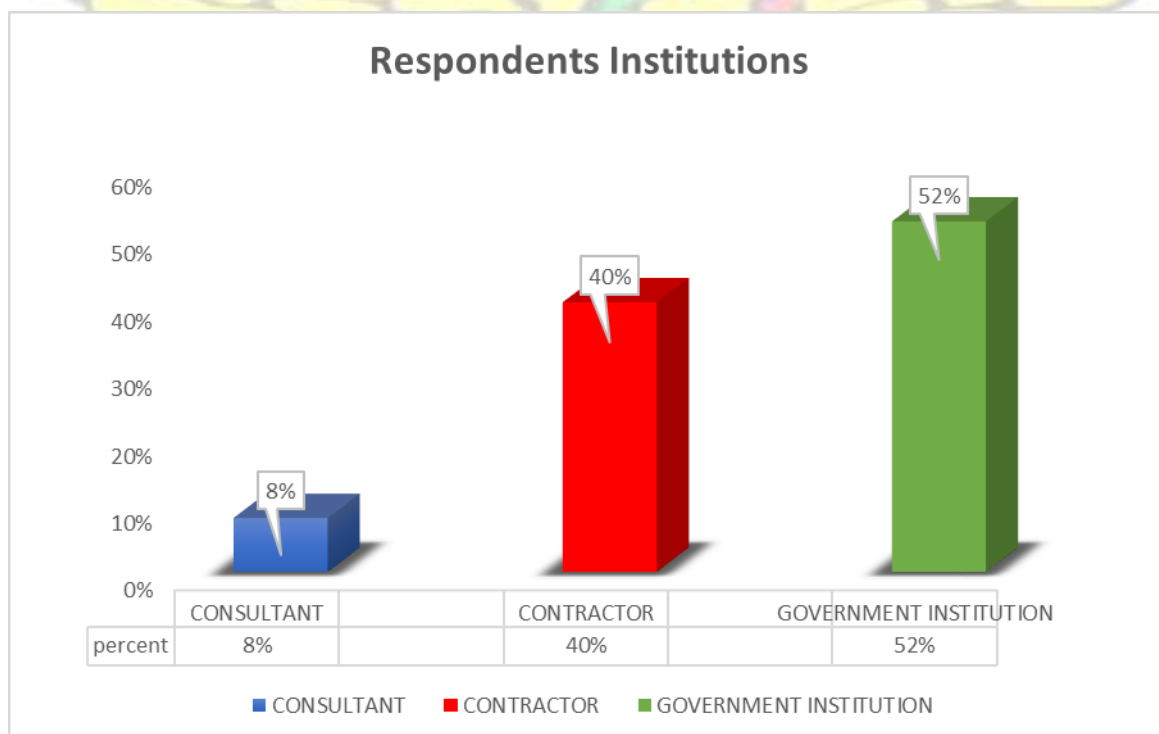


### 4.3 PRESENTATION AND DESCRIPTIVE ANALYSIS OF DATA (DEMOGRAPHIC)

The first section deals with the profiles of respondents and the influence such attributes have on the research. The other part also details out the analysis of the specific objectives of the study in relation to the factors influencing the non-participation of indigenous building construction firms in Ghana in international Competitive tendering (ICT).

#### 4.3.1 Respondents Institution

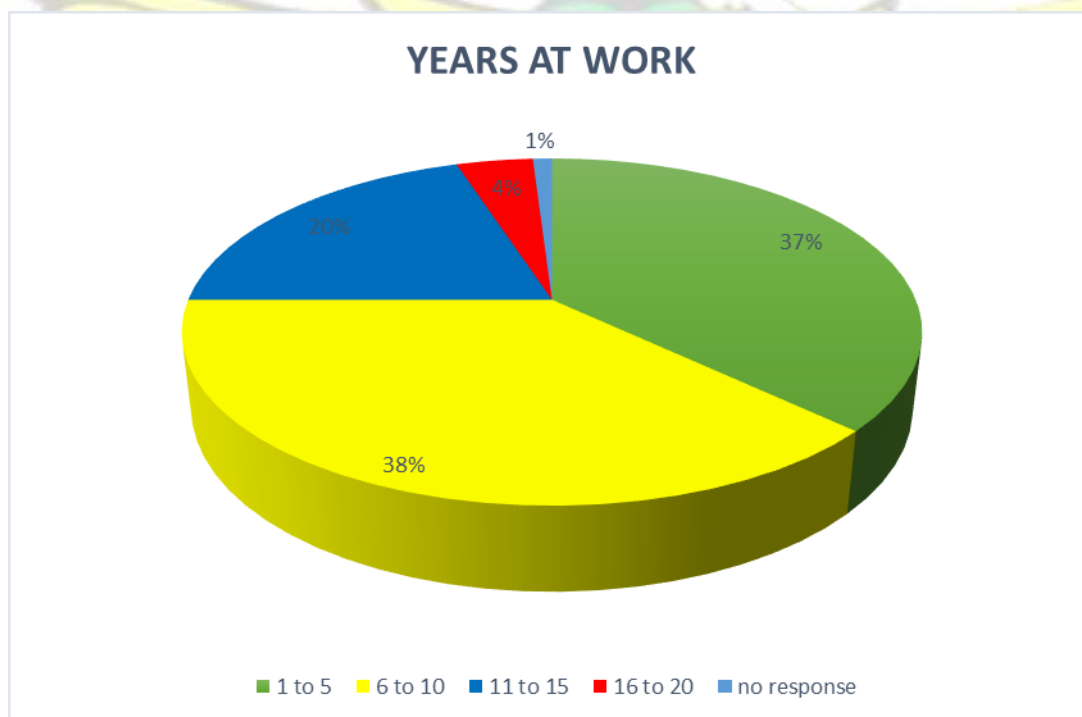
Respondents were asked to indicate which type of institutions they belonged to in the construction industry. However, majority of respondents representing 52% indicated they were working with Government Institutions whilst 40% indicated working with Contractors. The Institution that recorded the least number of the respondents was the Consultancy firms which recorded just 8% constituting 8 of the respondents. From Fig. 4.1, it is seen that the Government Institutions employs more people in the field of construction works.



**Figure 4.1: Respondents Institution**

#### 4.3.2 Years Spent at Current Work

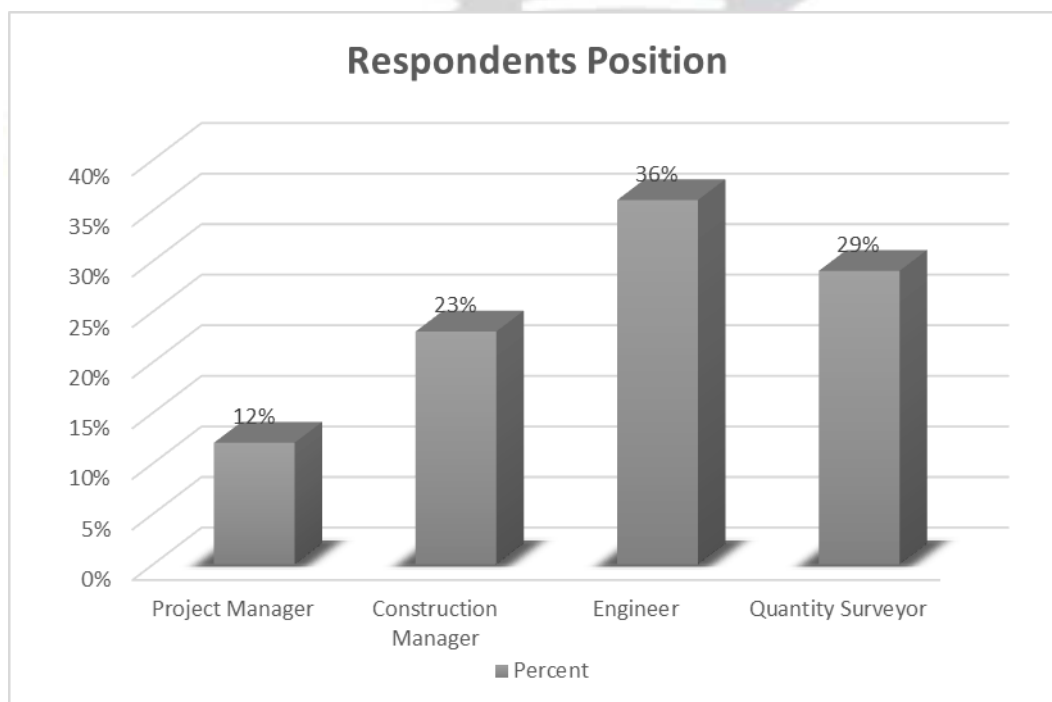
Figure 4.2 shows the total number of years respondents have been working with their current institutions. From the data obtained it is shown that thirty-seven (37) respondents constituting 37% of the total responses have been with their institutions for five years or less. 38 (i.e. 38%) of the respondents have been practicing actively in their institutions from six (6) to ten (10) years whiles 20 (20%) have also been practicing with their institutions from 11 to 15 years. The study recorded 4 respondents who have actually been with their various institutions from 16 to 20 years. One of the respondents did not respond to this item. Hence the study shows the experience and viability of the responses given. They would have enough and great knowledge on the factors influencing the non-participation of indigenous building construction firms in Ghana in International Competitive Tendering (ICT).



**Figure 4.2: Years spent with Institution**

### 4.3.3 Position held in Company

Based on the purpose and scope of the study, the researcher provided four positions out of several which were relevant to the Construction Industry. Respondents were to select amongst these professions the roles they played in their respective institutions. The four positions provided were; Project Manager, Construction Manager, Engineer and Quantity Surveyor. Majority of the respondents were Engineers. From the figure below this item (engineers) scored a percentage of 36. Twenty-Nine (29) of the respondents (29.0%) were Quantity Surveyors. Project Managers and Construction Managers were 12 and 23 respectively.



**Figure 4.3: Respondents position at work**

### 4.3.4 Professional Affiliation

Respondents were asked to indicate which professional bodies they were affiliated to in the construction industry. However, majority of respondents representing 46% indicated they were

affiliated to GhIS whilst 28.0% indicated GhIE. The Ghana Institution of Managers (GIM) recorded 5.0%. 13 of the respondents constituting 13.0% belonged to the Ghana Institute of Architect whilst 4% of respondents also indicated they were affiliated to IET and the remaining 4% did not respond to show their professional affiliations.

**Table 4.1: Professional Affiliation**

<i>Professional Affiliation</i>	<i>Frequency</i>	<i>Percentage</i>	<i>Valid percent</i>	<i>Cumulative Percentage</i>
<i>GHIS</i>	46	46.0	47.9	47.9
<i>GHIE</i>	28	28.0	29.2	77.1
<i>GHIA</i>	13	13.0	13.5	90.6
<i>GIM</i>	5	5.0	5.2	95.8
<i>IET</i>	4	4.0	4.2	100.0
<b>Total</b>	96	96.0	100.0	
<i>No response</i>	4	4.0		
<b>Total</b>	100	100.0		

#### 4.3.5 Years of Professional Practice

Figure 4.4 below shows the total number of year's respondents have been practicing as professionals. From the data obtained it is shown that fifty-two (52) respondents constituting 52.0% of the total responses have been in professional practice for five years or less, 36 (i.e. 36.0%) of the respondents have been practicing actively as professionals for six (6) to ten (10) years, 8 (8%) have also been practicing for 11 to 15 years and 4 have been in the industry sixteen to twenty years. None of the respondents have been in active practice for more than twenty years. This shows that the professionals are in better positions to access the factors influencing the non-participation of indigenous building construction firms in International Competitive Tendering (ICT).





**Figure 4.4: Years of Professional Practice**

#### **4.4 FACTORS INFLUENCING THE NON-PARTICIPATION OF INDIGENOUS BUILDING CONSTRUCTION FIRMS IN INTERNATIONAL COMPETITIVE TENDERING (ICT)**

From **Table 4.2**, it can clearly be seen that there were six (6) factors that affects contractors' performance the most. They certainly confirms what others or previous researchers sorted to find and these factors identified are as follows:

**Lack of Logistics/Resources:** the overall management of the way resources are obtained, stored and moved to the locations where they are required. The inadequate logistics infrastructure coupled with lack of skilled workers and management are blamed for the high levels of loss, damage and deterioration of stocks experienced, especially for perishable goods (Dolven, 2002; Kerr, 2005). These challenges, however, also generate opportunities for companies with advanced logistics systems and skilled people to grow their market.

**Inability to secure adequate working capital:** Not having enough capital is the cause of many small business failures. Adequate capital is needed to start up the business, operate through

hard times, and provide a good chance to become a profitable enterprise. The business cash flow can be disrupted due to various unforeseen reasons.

Payment of debts, purchases of new equipment or payment to creditors for the supply of raw materials can cause additional disruption of cash flow particularly of a small business. There are plenty of options for choosing the right service to acquire working capital. The mode of financing is an important element that determines the success of the Organization. Jones et al. (2007) outlines these various ways of acquiring working capital. When working capital is inadequate, fixed assets cannot efficiently and effectively be utilized on account of lack of sufficient working capital.

**Lack of technical skills:** The lack of construction education appears to be one of the major hurdles for small enterprises. Many of the new entrants into the construction sector, have little construction related education and/or poor English skills but these individual are still allowed to set up construction companies. Employee training benefits are much underestimated. Jordan (2006) noted that according to the US Department of Labour, apprenticeship training provides a \$54 return for every dollar invested. Despite this large return on investment local contractors in Ghana are hesitant to pull their workers off the job to allocate time for proper training. In addition, contractors are averse to spending money on training. This is not so with the foreign construction firms that invests in improving the skills of their employees and workers.

**Lack of Innovativeness:** The industry is evolving changing and seeking more integration, innovation and simply better schemes for providing public services and products. Dodgson et al. (1996) defined innovation as the process through which firms seek to acquire and build upon their distributive technological competence, understood as the set of resources a firm possesses and the way in which these are transformed by innovative capabilities. The need for innovation in the construction industry cannot be underestimated. Innovation needs to be at the heart of the construction industry's efforts to improve productivity and develop new capabilities,

business and markets, and also contribute to enhancing the standard of living as well as creating new opportunities. Obianyo (2010) warned that should the industry fail to be innovative, there is a risk that it either will lag behind in the international perspective or that the whole industry will disappear from the country. It is evident that the clamour for innovation and innovative incentives in the construction industry is not just for competitiveness of firms, improved productivity or technology, or enhancing the living standards, also the issue of sustainability of environment seems to be top on agenda for the recent clamour for innovation.

**Low productivity:** In order to survive in such an industry, decision makers and project managers need to be able to ensure that their projects are being completed as productively as possible. In order for this to take place a new tool needs to be developed to ensure maximum productivity from the beginning to the end of each project. Productivity serves as a source of competitive advantage. Increasing productivity will increase output or the quality of output and if at a faster rate than competition, benefits will be achieved through the value-added through the products (McTague, & Jergeas, 2002). Increased productivity in the construction industry can be viewed from two perspectives, the consumer and the contractor. From the consumer's perspective, increased productivity lowers costs, shortens construction schedules, offers more value for the money, and achieves better returns on investments. From the contractor's perspective, increased productivity leads to a more satisfied customer, while also providing a competitive advantage, and in return leading to faster turnover and increased profits Horner (2001). The definition for productivity with regards to construction is the measurement of the output of construction goods and services per unit of labour (McTague, & Jergeas, 2002).

**Fear of going Bankrupt:** Readings have also been complete in this part as well as previous studies on the influence of fiscal influences to the disappointment of building firms recognised monetary mishandling, and inadequate resources as the chief factors of disappointment (Kangari, 1988).



Monetary difficulties confronted by builders are as a result of little income precincts from developments. Usually builders continuously need to deliver task at inexpensive as of the open tender arrangement. Though the scheme is the top method to safeguard the accomplishment of different scheme at the bottommost fee, it is the greatest problematic difficulty many builders would be required to obstacle in this actual modest world. As advocated by Edum-Fotwe (1996), building firms must assume even presentation assessment to safeguard the acceptance of opportune as well as suitable approaches to withstand the industry.

**Table 4.2: Factors Influencing Non-Participation in ICT**

FACTORS INFLUENCING NON-PARTICIPATION IN ICT	RATING						$\Sigma W$	Mean	RII	Rank
	1	2	3	4	5	Total				
Lack of Logistics/Resources	0	16	4	32	48	100	412	4.12	0.824	1st
Inability to secure adequate working capital	0	8	4	64	24	100	404	4.04	0.808	2nd
Lack of Technical Skills	4	4	16	40	36	100	400	4.00	0.800	3rd
Lack of Innovativeness	0	12	16	44	28	100	388	3.88	0.776	4th
Low productivity	4	8	24	56	8	100	356	3.56	0.712	5th
Fear of going bankrupt	8	20	12	32	27	99	347	3.51	0.694	6th
Insufficient engineering capacity	16	16	16	24	28	100	332	3.32	0.664	7th
Lack of means and opportunity for providing training	4	16	36	36	8	100	328	3.28	0.656	8th
Lack of management /entrepreneurship skills	4	32	12	44	8	100	320	3.20	0.640	9th
Inadequate management	12	20	24	36	8	100	308	3.08	0.616	10th
Legislation	12	20	32	24	12	100	304	3.04	0.608	11th
Insufficient time to prepare for tender	28	28	8	16	20	100	272	2.72	0.544	12th
Eligibility	40	36	12	4	8	100	204	2.04	0.408	13th

The study sought to find out from respondents factors influencing non-participation in ICT.

Table 4.2 shows the various factors used as the basis of the factors influencing nonparticipation of construction firms in Ghana in ICT. From the analysis of the results, it can be seen that the item where majority of respondents ranked first is lack of logistics/resources. Inability to secure adequate working capital was ranked 2<sup>nd</sup> as a factor influence nonparticipation of local



contractors in ICT. The major source of capital in Ghana is the contracting of loans from the banks to undertake projects which also come with its own attending problems. Lack of Technical skills is evident in the advancement of technology in most developed countries than the developing ones. The lack of construction education in the Ghanaian Construction Industry appears to be one of the major hurdles for indigenous building construction firms.

#### **4.5 THE KEY EFFECTS OF THE FACTORS INFLUENCING NON-PARTICIPATION OF THE INDIGENOUS BUILDING CONSTRUCTION FIRMS IN INTERNATIONAL COMPETITIVE TENDERING**

Table 4.3 indicates the critical success factors (26 factors) in terms of mean responses to a range „strongly disagree“ (1) to „strongly agree“ (5).

**Table 4.3: Effects of the factors influencing non-participation in ICT**

<b>EFFECTS</b>	<b>MEAN</b>	<b>STANDARD DEVIATION</b>	<b>RANK</b>
GDP in the country is affected	4.44	0.499	1st
Improvement of the GCI is affected	4.32	0.548	2nd
Performance is not improved due to the losing of major projects	4.10	0.835	3rd
Economic situations and financial standings are affected	3.97	0.481	4th
Losing a contract due to inexperience	3.80	0.985	5th
Nations economy is affected	3.76	0.986	6th
Construction firms are unable to meet increasing demands	3.75	1.250	7th
Attraction of foreign investments are affected	3.41	1.093	8th
Collapse or closing down of firms	3.30	1.299	9th
Ineffective and inefficient delivery of service	3.06	1.309	10th

From Table 4.3, “GDP in the country is affected” had a mean of 4.44 and standard deviation of 0.499 and was ranked 1<sup>st</sup>, “Improvement of the GCI is affected” had a mean of 4.32 and a standard deviation of 0.548 and was ranked 2<sup>nd</sup> “Performance is not improved due to the losing of major projects” had a mean of 4.10 and a standard deviation of 0.835 and was ranked 3<sup>rd</sup>, “Economic situations and financial standings are affected” had a mean of 3.97 and a standard deviation of 0.481 and was ranked 4<sup>th</sup>, “Losing a contract due to inexperience” had a mean of 3.80

and a standard deviation of 0.985 and was ranked 5<sup>th</sup>, “Nations economy is affected” had a mean of 3.76 and a standard deviation of 0.986 and was ranked 6<sup>th</sup>, “Construction firms are unable to meet increasing demands” had a mean of 3.75 and a standard deviation of 1.250 and was ranked 7<sup>th</sup>, “Attraction of foreign investments are affected” had a mean of 3.41 and a standard deviation of 1.093 and was ranked 8<sup>th</sup>, “Collapse or closing down of firms” had a mean of 3.30 and a standard deviation of 1.299 and was ranked 9<sup>th</sup> and “Ineffective and inefficient delivery of service” had a mean of 3.06 and a standard deviation of 1.309 and was ranked 10<sup>th</sup>. From Table 4.3 it can be reckoned though these companies are categorised as small, in economic terms, they jointly add considerably to general building GDP, particularly in the expansion of devolved and native administration zones (Amoah et al., 2011)

Below are some of the effects of the factors influencing the non-participation of indigenous firms in ICT respondents stated that:

- It affects construction personnel by not exposing them to high class technological skills which required during construction of major projects;
- It also contributes to unemployment in the country;
- Inadequate up to date experience for trainee engineers in advance technology and complex project, since locals don’t undertake international project;
- It affects the stability of our local currency which leads it to depreciate; and
- The Ghanaian construction industry do not have certain expertise when it comes to some specialist works, but it would interest you to know that even localized works such as road, complex buildings etc. are being given out to foreign contractors. The tendering processes used in Ghana are also questionable and lacks total transparency.

#### 4.6 STRATEGIES TO ENHANCE THE INTEREST OF THE INDIGENOUS BUILDING CONSTRUCTION FIRMS IN GHANA IN ICT

**Table 4.4** displays certain strategies that would enhance the interest of the indigenous building construction firms in Ghana in International Competitive Tendering. Using a Likert scale of 1 to 5, where 1=strongly disagree, 2= Disagree, 3=Neutral, 4=Agree, 5=strongly agree. Any ranking that has its strategy having a mean of 2.5 or above is identified as agreed and mean below 2.5 is marked as a factor respondents do not agree with.

From the **Table 4.4**, all 10 strategies were identified to be relevant in the interest of the indigenous building construction firms in Ghana to partake in International Competitive Tendering. The ten (10) strategies as identified from the table due to the responses of professionals in order of most relevant to the least relevant are:

- Enter into inter-organizational relationship such as joint-ventures, alliances, partnership etc;
- Workshops/Seminars are organized for Building Construction Firms to enhance their knowledge and performance in the industry;
- Building Construction Firms must be encouraged to have sufficient financial asset;
- Conditions of Contracts for International Competitive Tendering must be well understood by Building Construction Firms; and
- Introduction of more efficient building industry practices in Ghana by the Association of Building Construction Firms.

**Table 4.4: Strategies for encouraging local firms to participate in ICT**

STRATEGIES	MEAN	STANDARD DEVIATION	RANK
Enter into inter-organizational relationship such as joint-ventures, alliances, partnership etc.	4.65	0.539	1st
Workshops/Seminars be organized for Building Construction Firms to enhance their knowledge and performance in the industry.	4.50	0.689	2nd
Building Construction Firms must be encouraged to have sufficient financial asset	4.34	0.639	3rd

Conditions of Contracts for International Competitive Tendering must be well understood by Building Construction Firms	4.32	0.530	4th
Introduction of more efficient building industry practices in Ghana by the Association of Building Construction Firms.	4.20	0.636	5th
Building Construction Firms in the Ghana must grow and improve upon their competitiveness over other firms.	4.17	0.877	6th
Building Construction Firms must internationalize the construction industry by thinking globally and action locally.	4.08	0.825	7th
Building Construction Firms must have specialized offers. (specializing their tasks)	3.84	0.801	8th
Allow contracting firms to sublet part or even most of the works that they themselves have contracted to carry out.	3.72	0.792	9th
Building Construction Firms should be encouraged to have a sophisticated management to cope with knowledge transfer into different cultures	3.68	0.909	10th

Respondents indicated that Government must also assist local firms to participate in international tendering.





## **CHAPTER FIVE**

### **RECOMMENDATIONS AND CONCLUSION**

#### **5.1 INTRODUCTION**

The study carried out is brought to an end in this Chapter. Recommendations to the study is discussed and concluded. Also the data and analysis at the chapter 4 that is being referred to the objectives of the study is concluded in Chapter five. The objectives of the study were:

- To identify factors influencing the non-participation of indigenous building construction firms in international competitive tendering;
- To identify the effects of these factors from the non-participation of the indigenous building construction firms in international competitive tendering; and
- To identify how these factors could be managed to enhance and develop the interest of the indigenous building construction firms in international competitive tendering.

A total of 133 questionnaires were administered to a number of professionals working with indigenous building construction firms, consultants and government institutions in Ghana. 100 out of them responded. The section shadows the following organization: a summary of how the main purposes were pleased as well as deliberations on the attainment of the study purposes are delivered to climax the assistances of the study. The section accomplishes with commendations for additional study which can be directed dependent on the deductions and boundaries of the reading.

#### **5.2 REFLECTIONS ON THE RESEARCH OBJECTIVES**

The goal of this study is to research into the factors which influences the non-participation of indigenous building construction firms in Ghana in international competitive tendering. In order to accomplish the specified objective, three objectives were set in the same segment.

Objective 1 was attained mostly from the review. Literature review and study questionnaires were directed to achieve Objective 2 and Objective 3.

#### **5.2.1 Objective 1:**

***The objective was to identify factors influencing the non-participation of indigenous building construction firms in international competitive tendering.***

To this effect, literature on these factors was reviewed. The review observed that, the Ghanaian Construction Companies or Firms which have proven themselves in the construction industry must seek to remake the image of the local construction which has been touted as being inefficient, without capacity and deliver shoddy works. Literature has also pointed out that the problems highlighted in his report in the preceding paragraph were relevant only to the road sector but as confronting contracting, construction and consultancy companies but are also shared by the building segment of the industry. The factors identified from literature are; Lack of logistics/resources, inability to secure adequate working capital, lack of technical skills, lack of innovativeness, legislation, insufficient engineering capacity, lack of means and opportunity for providing training, lack of management staff, entrepreneurship skills and low productivity.

Those that were identified from the analysis of data collected according to the order of rank are; fear of going bankrupt, inadequate management, insufficient time to prepare for tender and the least being eligibility.

#### **5.2.2 Objective 2:**

***To identify the effects of these factors from the non-participation of the indigenous building construction firms in international competitive tendering.***

From the data analysis, the effects of the factors influencing firms non-participation were identified from literature and respondents were asked to rank using a likert scale on the basis of respondents strongly agreeing to its severity or strongly disagreeing to it severity. The ten

(10) effects that were identified to be the results from the factors influencing nonparticipation of indigenous construction firms in ICT in order of severity are; Gross Domestic Product in the country, poor industry performance, contractor inability to win major project, the economic situations and financial standings or position of the building construction firm are affected, little chance of winning a contract due to inexperience, negative impact on the nation's economy, inability of construction industry to meet increasing demands, nation's inability to attract foreign investments, building construction firm's inability to survive for continuous operation over some years and ineffective and inefficient delivery of services in terms of the effect.

### 5.2.3 Objective 3:

***Objective 3 was to identify how these factors could be managed to enhance and develop the interest of the indigenous building construction firms in international competitive tendering.***

Objective 3 was examined by use of structured questionnaire. Ten (10) strategies adopted from reviewed literature were indicated in the questionnaire. The success factors were obtained from relevant literature from previous studies. After the data analysis, the following strategies were identified:

- Entering into inter-organizational relationship such as joint-ventures, alliances, partnership etc;
- Organizing workshops and seminars for Building Construction Firms to enhance their knowledge and performance in the industry;
- Building Construction Firms must be encouraged to have sufficient financial asset;
- Conditions of Contracts for International Competitive Tendering must be well understood by Building Construction Firms;
- Introduction of more efficient building industry practices in Ghana by the association of building construction firms;

- Building Construction Firms in Ghana must grow and improve upon their competitiveness over other firms;
- Building Construction Firms must internationalize the construction industry by thinking globally and acting locally;
- Building Construction Firms must have specialized offers thus specializing their tasks;
- Contracting Firms must be allowed to sublet part or even most of the works that they themselves have contracted to others to carry out; and
- Building Construction Firms should be encouraged to have a sophisticated management to cope with knowledge transfer into different cultures emerged as the top 10 critical success factors to enhance contractor performance.

### **5.3 CONCLUSION**

This research work aimed to determine the factors which influence the non-participation of indigenous building construction firms in Ghana in international competitive tendering. In conclusion, the research findings seek to directly address the objectives of the study. The study identifies that the indigenous construction firms in Ghana are not able to compete with International firms due to lack of technical skills, lack of logistics/resources, inability to secure adequate working capital and low productivity. Majority of the respondents proposed entering into inter-organizational relationship such as joint-ventures, alliances or partnership and workshops/seminars should be organized for building construction firms to enhance their knowledge and performance in the industry.

### **5.4 RECOMMENDATIONS**

With reference to the above conclusion and findings from the Chapter four, the following recommendations are proposed for review and improvement:



- There should be adequate training for engineers in advanced technology and complex project since indigenous construction firms do not undertake international project;
- The Ghanaian construction industry must develop expertise in specialist works to encourage contractors tender for projects requiring high level skills and technology;
- Civil works such as road, complex buildings etc. should be subcontracted to capable indigenous contractors other than foreign firms to increase their productivity, experience and enable them to have good financial positions;
- Building Construction Firms must understand the Conditions of Contracts for International Competitive Tendering; and
- Local indigenous construction firms also need to acquire all certification required of international projects to make them competitive. An example of such certification is the ISO 9000.

## **5.5 LIMITATIONS OF STUDY**

Time available for this research was not enough to adequately exhaust all issues available. This was so because the study was an academic study. The study is still constrained all though lots of efforts have gone into its planning and execution.

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## APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF ART AND BUILT ENVIRONMENT

DEPARTMENT OF BUILDING TECHNOLOGY

SURVEY QUESTIONNAIRES

### **FACTORS INFLUENCING THE NON-PARTICIPATION OF INDIGENOUS BUILDING CONSTRUCTION FIRMS IN GHANA IN INTERNATIONAL COMPETITIVE TENDERING (ICT)**

Dear Sir/Madam

This questionnaire forms part of an MSc. research project which aims to identify the **factors influencing the non-participation of indigenous building construction firms in Ghana in International Competitive Tendering**. Over the years, the Ghanaian construction industry has been engaged in competitive tendering especially in national and international projects, but sadly, there is no scientific data or precise records showing the number of our indigenous building contractors participating and eventually being awarded the contract. The results of this study will identify significant factors that influence the non-participation of our indigenous building construction in such major projects in Ghana and identify appropriate strategies to develop the interest of the construction firms to participate in ICT.

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

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

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

Yours faithfully,

ABEKAH DERICK

MSc Researcher

Email – [derrickabekah@rocketmail.com](mailto:derrickabekah@rocketmail.com)

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KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

**PROJECT TOPIC –FACTORS INFLUENCING THE NON-PARTICIPATION OF  
INDIGENOUS BUILDING CONSTRUCTION FIRMS IN GHANA IN  
INTERNATIONAL COMPETITIVE TENDERING (ICT)**

**QUESTIONNAIRE**

**Section 1. Demography of Respondent 1.**

Which one of these are you working with?

- a) Consultant ☐
- b) Contractor ☐
- c) Government Institution ☐

2. How many years have you been working with your employer? a)

- 1 – 5yrs ☐
- b) 6 – 10yrs ☐
- c) 11 – 15yrs ☐
- d) 16 – 20yrs ☐
- e) Above 20yrs ☐

3. What position do you hold in the company?

- a) Project Manager ☐
- b) Construction Manager ☐
- c) Managing Director ☐
- d) Engineer ☐
- e) Quantity Surveyor ☐

4. What is your professional affiliation?

- a) GHIS ☐
- b) GHIE ☐
- c) GHIA ☐

d) State  
others.....  
.....

5. How many years have you been practicing your profession?

- a) 1 – 5yrs ☐
- b) 6 – 10yrs ☐
- c) 11 – 15yrs ☐
- d) 16 – 20yrs ☐
- e) Above 20yrs ☐

KNUST

**Section 2: factors Influencing the non-participation of indigenous building construction firms in Ghana in International Competitive Tendering**

6. Rank on the Likert scale of 1 to 5 the level of agreement on the factors that influences the non-participation of the indigenous building construction firms in Ghana in International Competitive Tendering for major projects.

**1. Strongly Disagree   2. Disagree   3. Neutral   4. Agree   5. Strongly Agree**

<b>Factors</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Eligibility (eg. Tender Document not signed)					
Lack of Innovativeness					
Lack of Logistics / Resources					
Lack of Technological Skills					
Lack of Management / Entrepreneurship Skills					
Fear of going Bankrupt					
Insufficient Engineering Capacity					
Inability to secure adequate working Capital					
Low Productivity					
Insufficient Time to Prepare for Tender					



Inadequate Management					
Lack of means and opportunity for providing Training					
Legislation					

### **Section 3: Effects of the factors identified above**

7. Rank on the Likert scale of 1 to 5 the level of agreement on the effects of these factors identified for non-participation of the indigenous building construction firms in Ghana in International Competitive Tendering for major projects.

**1. Strongly Disagree 2. Disagree 3. Neutral 4. Agree 5. Strongly Agree**

Effects	1	2	3	4	5
Affects the Gross Domestic Product in the country.					
Affects the Ghanaian Construction Industry not to improve.					
Affects the building construction industry in Ghana not to win major contracts to improve their performances.					
Affects the economic situations and financial standings of the building construction firms					
Affects the building construction firm's survival for continuous operation over some years to come.(i.e. Collapse or closing down)					
Building Construction Firm's chances of winning a contract is minimised due to inexperience					

Ghanaian Construction Industry wouldn't be able to deliver service effectively and efficiently.					
Negative Impact on the development of the nation's economy					
Affects nation's ability to attract foreign investments.					
Affects the ability of the construction industry to meet increasing demands.					

Please if there are other effects which have not been listed or stated above, you can list them in the space provided below.

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

**Section 4: Strategies to enhance the interest of the indigenous building construction firms in Ghana in ICT**

8. Rank on the Likert scale of 1 to 5 the level of agreement on the strategies to enhance the interest of the indigenous building construction firms in Ghana to participate in International Competitive Tendering for major projects.

**1. Strongly Disagree   2. Disagree   3. Neutral   4. Agree   5. Strongly Agree**

<b>Strategies for enhancement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Enter into inter-organisational relationship such as joint-ventures, alliances, partnership etc.					
Allow contracting firms to sublet part or even most of the works that they themselves have contracted to carry out.					
Introduction of more efficient building industry practices in Ghana by the					

Association of Building Construction Firms.					
Building Construction Firms in the Ghana must grow and improve upon their competitiveness over other firms.					
Building Construction Firms must internationalise the construction industry by thinking globally and action locally.					
Building Construction Firms must have specialised offers. (specializing their tasks)					
Building Construction Firms must be encouraged to have sufficient financial asset					
Building Construction Firms should be encouraged to have a sophisticated management to cope with knowledge transfer into different cultures					
Workshops/Seminars be organised for Building Construction Firms to enhance their knowledge and performance in the industry.					
Conditions of Contracts for International Competitive Tendering must be well understood by Building Construction Firms					

Please if there are other strategies which have not been listed above, you write below

**THANK YOU ONCE AGAIN**