UNIVERSITY OF EDUCATION, WINNEBA

COLLEGE OF TECHNOLOGY EDUCATION, KUMASI

CONTEMPORARY CHALLENGES FACING SMALL AND MEDIUM SCALE BUILDING CONSTRUCTION FIRMS IN GHANA.

(A CASE STUDY OF SOME SMALL AND MEDIUM SCALE BUILDING CONSTRUCTION FIRMS IN KINTAMPO SOUTH AND NORTH ASSEMBLIES)

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DECEMBER, 2014

DECLARATION

STUDENT'S DECLARATION

I Patrick Osarfo, declare that this Dissertation, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work and it has not been submitted, either in part or whole, for another degree elsewhere.

....

SIGNATURE DATE

SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of Dissertation as laid down by the University of Education, Winneba.

Supervisor ..... Date.....

Dr. William Gyadu-Asiedu

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DEDICATION

This work is dedicated to my Mum, Gladys Osarfo.

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LIST OF ABREVIATION

ADB- Agric Development Bank

BCCA- British Columbia Construction Association

CI- Construction Industry

DMJM- Daniel, Mann, Johnson and Meadelall (Combined architect)

DVLA- Driver and Vehicular Licensing Authority

ETA- Employment and Training Administration

EU- European Union

FINSAP-Financial Sector Adjustment Programme

GATS- General Agreement and Trade in Services

GDP- Gross Domestic Product

GIS- Ghana Institute of Surveyors

GRADA- Ghana Real Estate Developers Association

HDLS- Historically Disadvantaged Individuals

IECDM- Integrated Emerging Contractor Development Model

ITTUs- Intermediate Technology Transfer Units

MRT- Ministry of Road and Transport

MWRWH- Ministry of Water Resources Works and Housing

UNCHS- United Nations Centre for Human Settlement (Habit)

WTO- World Trade Organization

ABSTRACT

The building construction industry provides employment to the citizenry in Ghana, as they employ both skilled and unskilled labour in their operations, thereby reducing the unemployment situation facing this country. Most of the Contractors in the industry are Small and Medium Scale Building Construction Firms whose impact in the nation's development cannot be underestimated. The main aim of this research was to identify the contemporary challenges facing small and medium scale building construction firms in Ghana. The methodology used included an extensive literature review and field survey conducted on ninety-seven (97) small and medium scale firms in the Kintampo South and North Municipal Assemblies. The field survey used the questionnaire instrument and random sampling. The critical findings from the literature were that there are binding constraints in the operations of small and medium scale firms. The report shows that these firms are faced with numerous challenges, which include: late payments of certified works done, Contractor's lack of managerial and technical capability to make profit on projects, challenges in job procurement, financial challenges, firm's registration challenges, site management and Leadership challenges. It was recommended that: Regular training for managerial and supervisory staff of small and medium scale construction firms is a positive index for improved output. Formulating of friendly financial policy for these contractors will go a long way to ensure their existence. There should be clear-cut or well defined standards for the registration of contractors which will reduce the proliferation of all sorts of incompetent contractors in the construction industry. Delays with interim and final payments, as well as onerous contract conditions faced by small and medium scale building construction firms, should be eradicated, as this can also impose huge constraints on the industry.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The construction industry is a multipart and a huge one, which has no similar characteristics with any other industry. Each feature within the industry represents a great challenge to be taken and overcome. What appears to be debatable however is whether the industry wields the much expected driving force required to pronounce its vital contribution towards accelerated national growth in terms of infrastructural development (Harris and MCcffer, 2004).

The industry consist of many types and size of organizations, diverse range of professional and other representative bodies; client and other practice, contractors and specialist firms all have their own agenda and commitments. For quite a long time, the advancement or otherwise of the construction and housing industry has largely been tied to the performance or competence of building contractors even though other professionals, notably Architects, Civil Engineers, Building Technologists and Quantity Surveyors play complementary roles in the execution of projects or contracts (Seeley, 1984).

The construction sector in Ghana is not only a significant source of direct employment, but also a sector which contributes, through its wide range of projects and operations, to the nation's development. The world's economy is unable to deliver employment for a growing number of workers; structural unemployment and poverty are persistent and growing problem in contemporary Ghana. Small and Medium Scale Firms have been advocated as an important means of generating employment in Ghana (Ofori, 2002).

In Ghana, the Small and Medium Scale Building Construction Firms have been termed as the Right- Hand Supporters of the country's development plan which have been outlined in the

vision 2020 Document (Ofori 2002). Hence, the recognition of the Small and Medium Scale Building Construction Firms must be paramount in the fulfillment of the Government's vision (steel and Webster, 1991).

Small and medium scale firms have been noted to contribute about 85% of manufacturing employment (Steel and Webster, 1991).

They represent about 80% of the private sector and also account for about 92% of businesses in Ghana. In the year 2006 to 2008 the then government's accepted that for its slogan of "Golden Age of Business" to succeed and for the country to reach the per capita income of US $1,000 by 2012, there was the need to steadily increase the rate of economic growth from the its level of 4-5% to 7-10%. Given that small and medium scale firm's vast portion of the firm tissue in Ghana, they have an important role to play in spurring growth (Laryea 2010).

The idea of small scale and medium scale firms' promotion in Ghana has been in existence since 1970 though very little was done at the time. Key institutions were set up to assist small and medium scale enterprises and prominent among them are the Office of Business Promotion and the present Ghana Enterprise Development Commission (GEDC). The main objective of GEDC was to assist Ghanaian businessmen to enter into fields where foreigners mainly operated. It also had packages for strengthening small scale industry in general, both technically and financially (Kayanula and Quartey, 2000).

The Economic Recovery Programme (ERP) instituted in 1983 has broadened the institutional support for small and medium scale firms. The National Board for Small Scale Industries (NBSSI) was also established within the Ministry of Industry, Science and Technology to address the needs of small businesses (Kayanula and Quartey, 2000).

The NBSSI established an Entrepreneurial Development Programme, intended to train and assist persons with entrepreneurial abilities into self-employment. In 1987, the industrial

sector also witnessed the coming into operation of the Ghana Appropriate Technology Industrial Service (GRATIS). It was to supervise the operations of Intermediate Technology Transfer Units (ITTUs) in the country. GRATIS aims at upgrading small scale industrial concerns by transferring appropriate technology to small scale and informal industries at the grass root level. ITTUs in the regions are intended to develop the engineering abilities of small scale manufacturing and service industries engaged in vehicle repairs and other related trades. They are also to address the needs of non-engineering industries (Kayanula and Quartey, 2000).

The most significant institutional weakness facing dynamic small and medium scale firms is their lack of access to external finance. Repressive financial policies in the past, especially low interest, and a monopolistic banking system minimized the interest of banks in developing this market. To reverse the consequences of these practices, a combination of financial liberalization and institutional reform was in order (Aryeetey et al., 1994).

In view of the relatively low level of response from the private sector to early Economic Recovery Programme ERP reform measures the focus was on the liberalization of various sectors, including the financial sector under the Financial Sector Adjustment Programme (FINSAP). Under the FINSAP, direct institutional measures aimed at supporting small enterprises were also been put in place. With World Bank assistance, the Programme of Action to Mitigate the Social Costs of Adjustment (PAMSCAD) created a special fund to assist microenterprises, and the Fund for Small and Medium Enterprises Development (FUSMED) was initiated to increase the amount of credit available to small and medium scale through commercial and development banks(Aryeetey et al., 1994). This was based on the presumption that poor availability of credit from formal sources was one of the major reasons why the private sector investment had not grown as expected. A major argument was that

small and medium firms with good growth potential were being discriminated against (Aryeetey et al., 1994). At the same time, however, the effectiveness of many similar SME credit was being called in question (Webster, 1991).

There are currently a number of financing schemes set up by government and the donor agencies available to the SME sector, including Private Enterprises and Export Development Fund, Export Development and Investment Fund, Deutsche Gesellschaft Fuer Technische Zusammenarbeit (GTZ), Business Assistance Fund, Ghana Investment Fund, Trade and Investment Programme, Africa Project Development Facility, Support for Private Enterprise Expansion and Development, Promotion of Small and Micro Enterprise Fund, Business Sector Programme Support, Revolving Loan Fund, Ghana Private Sector Development Fund etc. Inspite of these developments, the finance gap continues to be a major problem to SME development in Ghana (Webster, 1991).

According to Abdelsamed and Kindling (1978) the small and medium scales firms represent over 95% of the total number of business organizations in the United State of America. The U.S. Bureau of Labor Statistics, have projects that the number of jobs in construction will increase by 800,000 in the next ten years from 2004 (6,964,500) to 2014 (7,756,900).

These Small and Medium Firms or businesses employ six out of every ten people and have been responsible for more than half of all the innovations developed during the 20th century (Thompson, 1991).

In Swaziland, there seem a general consensus that Small and Medium enterprises are the mainstay of economic growth and prosperity (DidhukuThwala and MpenduloMuubu, 2002).

The South African Government is committed to economic growth and transformation. Historically Disadvantaged Individuals (HDIs), Small and Medium Sized Contractors are being encouraged to participate in the main stream economy as the construction industry is

seen as a vehicle for social change and economic empowerment (Construction Industry Development Board, 2004).

In Libya, the construction industry (CI) and for that matter, Small and Medium Scale Contractors have played a key role in social and economic development processes since the early 1950s. As a result, the country has experienced a tremendous increase in the scale and volume of construction activities. For instance, during the construction boom of the 1970s, Libya was the world's leading per capita consumer of cement. Furthermore, one of the world's largest civil engineering water projects (The Great Man Made River) has been planned, designed and constructed during the last two decades. Currently, the construction industry contributes 5.2 per cent of the Libyan Gross Domestic Product (GDP) and it employs around 3.2 per cent of the total workforce (Ofori, 1988).

The link between the construction industry and the winder economy has been theoretically and empirically acknowledged e.g. Drewer (1980); Turin (1969); Ofori (1988) and Wells (1986) a developed construction industry is described as a powerful engine to growth (Kirmani, 1988).

In general, demand for new construction products, and hence construction activities tend to be highest at the early stages of economic development and level off after high stages of economic development has been attained (Edmonds and Miles, 1984; Wells, 1986).

It has also been shown that during periods of acceleration economic growth, construction output grows at a faster rate than the economy as a whole. Inadequate construction capacity could act as a constraint on capital investment programmes. Investment and rate of growth will slowed down- and may eventually grind to a halt (Wells 1986, p.33).

However, each year the construction industry experiences a proportionally greater number of bankruptcies than other industries (Harris and MCcffer, 2004).

Most of the firms in the construction industry are the Small and Medium Scale Building Construction Firms who are affected most, despite their very important roles been played in the nation's economy (Ibid).

1.2 Statement of the Problem

Many construction firms have suffered financial ruin and bankruptcy because of delays in payment, which are common with government contracts (Croswell and McCutcheon, 2001). The building construction Industry experiences a high level of bankruptcies than other industries (MCcffer and Harris, 2004). It is therefore not surprise to see that, most of the construction projects that have been abandoned in our various towns and cities were being done by a construction firm that has gone into bankruptcy in Ghana. A sizable number of such firms are the small and medium scale building construction firms. The success of small and medium scale building construction firms are impaired by a common weakness from which firms suffer. It is therefore necessary for a study such as this to be done, so as to look at their activities and other contemporary challenges facing the small and medium Scale Building construction firms in Ghana.

1.3 Objectives of the study

The main objective of the study was to investigate into the activities of Small and Medium Scale building construction as a means of identifying the contemporary challenges facing them.

The Specific Objectives of the research are as follows;

- To identify the main activities of small and medium scale contractors.
- To identify the major challenges facing the small and medium scale contractors.

- To identify the cause of these challenges.
- To propose a means of addressing the challenges.

1.4 Research Question

The research questions generated to guide the study are:

1. To what extend are the activities of the small and medium scale firms affect the development of our nation?
2. What are the challenges facing small and medium scale building construction firms in Ghana and its effect on the contractors?
3. What can be done to reduce, if not eliminate the causes of the challenges facing small and medium scale building firms?

1.5 Research Methodology

This study was conducted using a combination of information gathering mechanisms.

Firstly, the study was conducted using conventional desktop based information gathering, which incorporates a literature survey and review; information was gathered through the internet and related web based applications.

Secondly, the researcher used interactive information gathering mechanisms that include an industry survey using a questionnaire, interviews with selected small and medium Scale firms. Some of the stakeholders that were consulted in the various stages of the research Work include the following:

Table 1.1: Small and Medium Scale firms, Management of District Assemblies and other Stakeholders that was consulted during the study.

Stakeholders	Description
Management of District Assemblies	Kintampo Municipal Assembly and Kintampo South District Assembly
Small and Medium Scale Firms	Selected Small and Medium Scale Contractors
Tradesmen of the Small and Medium Scale Firms	Masons, Carpenters, Steel Bender etc.

1.6 Justification of the Study

Over the last ten years since the creation of many metropolitan, municipal and district assemblies (MMDAs), by the various governments upon the recommendation by the electoral commission, no study has been undertaken to identify the contemporary challenges facing small and medium scale building construction firms, of which the districts usually work with. The study is therefore very important at this moment following the numerous challenges that these building firms are going through.

The study will serve as a reference for other researchers working on similar projects. This will be made possible through the findings of the study on the contemporary challenges facing small and medium scale building firms in Ghana.

The major findings of study will provide suggestions and proposals to improve the general managerial skills of the small and medium scale building construction firms in Ghana. Again it will help achieve their very important roles in the nation's development.

In brief, the findings of the study will be very useful to governments and policy makers in their quest to improve upon the performance of indigenous contractors in project implementation.

1.7 Scope of the Study

The scope of the study covered a number of small and medium scale building construction firms that have worked with Kintampo South and North Assemblies from the year 2000 to 2014, who are duly registered under the Ministry of Water Resources, Works and Housing.

1.8 Limitations of the Study

The activities of the small and medium scale building contractors' in Ghana was too large to be considered in one project work. Due to financial and time constraint, the project focused on the contemporary challenges facing the small and medium scale building construction firms.

1.9 Organization of the Report

This report contains six chapters, viz.

Chapter One introduces the research. It describes the background, problem statement, aims and objectives, scope justification and methodology of the research.

Chapter Two reviews related and previous work in the subject area.

Chapter Three this chapter outlined and describes the various methods and techniques that the researcher used to gather information for the study. The research design that the researcher employed for data collection and analysis are highlighted in this chapter. It described the study population, sampling procedure and technique, data collection techniques and tools used.

Chapter Four is the presentation of the results and a summary of the findings which highlights the vital points.

Chapter Five is a detailed discussion of the main research findings.

Chapter Six also presents the conclusion derived from the research and recommendations for further study.

CHAPTER TWO

LITERATURE REVIEW

2.1Introduction

This chapter is devoted to reviewing the relevant literature on the topic under study. Key sub-topics discussed include: The Characteristics of Construction Firms, Impact of Government Action on the Building Construction Industry, Contractor Classification in Ghana, Problem Contractors Faces with Classification, Regulation and Construction Industry in Ghana, Challenges Facing Contractors in Developing Countries, Opportunities Available to Contractors in Developing Countries, The Economic, Legal and Political Environment of Contractors in Ghana, Types of Construction Companies/ Firms and Challenges Faced by Small and Medium Scale Building Construction Firms.

2.2 The Characteristic of Building Construction Firms

Drucker (1989) states that, the biggest problem in building firms is growth, i.e. the problem of changing from one size to another. Many principals or owners of construction firms face this problem as the firms' expansion takes place. Often they cannot cope with the new situation facing them. Many Directors cannot delegate responsibility to subordinates due to a lack of trust and Drucker (1989) indicates that change in behavior, attitude, competence and vision are needed by people at the top. Success in building firms often results from a company providing a good service to client and doing a good job. These building firms can only service its customers by becoming bigger (Ibid).

2.3 Impact of Government action on the Building Construction Industry

Governments have a very important role in determining demand for the construction industry's output and its growth prospects because public authorities buy about 40 – 50 percent of its output and general economic measures have a powerful influence on the demand for private housing, commercial and industrial building. Because the industry is undercapitalized it soon experiences difficulties when monetary policies are introduced to check the economy as a whole, as it becomes evident in the late nineteen-nineties in Ghana (Seeley, 1984).

When policies of restrains operate there is usually a reduction in the volume of public building work particularly house building and projects, motor –ways and town centre re-development schemes are likely to be postponed. The adverse effects on contractors will not be immediate as contracts in hand will normally be completed. In the long run however the result can be serious resulting in;

a) Unemployment of building operatives.

b) Smaller building firms i.e. small and medium – scale firms being forced out of business.

c) Suppliers of materials and components being unlikely to extend their goods and plants

d) The lack of continuity of construction which increased building cost and reduces efficiency (Ibid).

An industry is affected either negatively or positively by the state of national economy and this is particularly so in an industry that is both home based and labour intensive. Because of the fragmented nature of the industry's both in terms of diversity within the construction team and the large number of sites and firms distributed or scattered throughout the country, the industry has traditionally suffered from lack of cohesion and restricted political influences (Drewer ,1980).

2.4 Contractors Classifications in Ghana

Governments regulate business formation and operation in the form of licenses, registration and permits. Complying with such statutory requirements to start and run a business is a process that all businesses need to go through to acquire legal form. Agricultural Development Bank ADB (2001) identifies business licenses under two categories: general business license, government permission needed for all business activities prior to engagement in the market; and specific business license, regulation of business activities in fields where government claims a specific public interest requiring safeguards concerns arising from specific sectorial, process or product related activities (Seeley, 2002).

The purpose of registration is to create a basic information structure, which helps provide up-to-date information on the business population for public policymaking and administrative purposes. Permits are related to activities which are in general forbidden, but where the government allows exemptions to conduct such activities under certain conditions. Contractor classification can thus be identified as combination of general and specific business licenses and registration. Contractors like all companies operating in Ghana, after obtaining a general business license are required by law (Companies Act of 1963) to register with the registrar general. In addition, contractors who wish to undertake public projects are to purchase application forms and complete them for consideration by the Contractor Classification Committee (Ofori, 1988).

The Ministry of Water Resources Works and Housing guidelines for the classification of contractors indicate that the exercise "aim at the proper grading of contractors into respective categories and financial classes. A contractor who wishes to apply for classification under these guidelines should first satisfy himself that he can fulfill the basic requirement in this document" Ministry of Roads and Transport (MRT, 2001).

The classification system is highly controversial, cumbersome and could hinder the development and survival of small contractors. Although not compulsory with the narrow base of the private sector, only well-established contractors could afford not to consider it for government sponsored projects. The procedure involves six steps in which the Chief Director, technical sub-committee, classification committee and the Minister of the respective ministry are involved (Eyiah and Cook, 2003).

2. 5 Problems Contractors Face with Classification

The system allows contractors in the higher financial categories to tender for projects which otherwise are meant for contractors categorized in the lower classes, but not vice versa. In effect, during the explosion seasons, contractors in the higher grades could take on several projects outside their class, with the lower classes left to concentrate on the relatively unattractive small projects. During decline, the latter are at a competitive disadvantage with respect to tendering for projects within their class since they will compete with former group (Edmond and Wards, 1991).

The irony is, at a given point in time, an enterprising financial class 3 or 4 contractor could be identified being engaged in several projects scattered all over the country, whose combined value could exceed the value of projects within financial class 1 range. If contractors could manage these diverse projects they should not be prevented from competing for more profitable projects if the opportunity exists. After all, such projects would not be awarded to them on a silver platter; they would have to go through the tendering process, provide bid and performance bond and be bound by the conditions of contract (Edmond and Wards, 1991).

The argument that the exercise would facilitate easy access to the numbers of contractors within each financial class and the number of work they undertake to influence government policy does not hold true in Ghana. Investigation revealed that Ministry of Water Resources Works and Housing (MWRWH) do not have an up-to-date list of contractors operating within their sectors. Many contractors could be identified on the register list, but have seized to operate for several years (Eyiah and Cook, 2003). The inadequacy of the classification system is further highlighted in the following statement:

There are no reliable data on the number of contractors in each works and financial categories used by the various contractor registration agencies.

One dare say that given the current inflationary state of the economy, the financial categories are meaningless as a guide on the financial standing of contractors. Nor does the evaluation process lend any credence to the results of the classification Ghana Institute of Surveyors (GIS, 2000).

In a bid to gain qualification into higher financial class some contractors acquire equipment in access of the minimum requirement, but fail to satisfy the classification committee for upgrade. Meanwhile, with the seasonality of work within the industry, which is more pronounced in developing country such as Ghana, because of the overt reliance on government work, and the narrow base of the private sectors, many of these items are left idle on sites under-utilized, with cost implications (Daniel, Johnson, Mann and Meadelall, 1994).

While the classification system is failing to achieve its objectives, the implication for contractors developing and the economy in general could be substantial. If after registering their businesses contractors cannot be guaranteed government projects, and have to go through stringent and costly procedures for further licensing then the incentive to formal legal status would be reduced. The affected firms are thus encouraged to operate without license in

the informal sector, which provide the opportunity for foreign firms to dominate the industry (ibid).

Lack of legal status makes it difficult for such firms to get access to formal services including established financial institutions. For contractors in the lower grades, economic growth is reduced, as business decision-making are distorted and long-term planning and investments are discouraged. For example, why invest in equipment and plant, expertise and premises when it takes several years to be upgraded to a higher financial class to be able to take up more profitable projects to justify the investment (Ofori, 1988).

Emerging entrepreneurs who have graduated from the universities and the polytechnics, with the necessary managerial and technical know-how, that could have helped nurture local small contractors are discouraged from joining the industry. Although contractors need not be classified before they could bid for privately sponsored projects, it is expected that the decision of client representatives would be influenced if they knew the financial status of contractors, in which case they would favour contractors in a higher financial class. The complex, opaque and costly nature of the classification procedures increases opportunities for corruption. Evidence by the fact that many contractors have no valid certificates and feel no need to renew their registration if they could obtain projects; contractors with poor performance records continued to obtain renewal certificates and have been offered major contracts Daniel, Mann, Johnson and Meadelall (DMJM, 1994). It is not uncommon to identify persons such as musicians and actresses, who have never been involved in construction, being awarded government contracts with value in the range financial class one (Eyiah, 1998).

Some applicants have stated equipment on the application form which they do not own United Nations Centre for Human Settlement (UNCHS, 1996). Contractors identified within the

higher financial classes have better influence with officials, as a result are less likely to have their payments delayed (Eyiah, et al, 1998). It would not be an understatement to suggest that this would be the trend with mobilization payment (advantage payment to contractors before projects have stated).

Generally, contractors in developing countries have a poor reputation (Edmond and Miles, 1984; Miles and Ward, 1991). In Ghana, perceptions on credibility favours contractors identified within the higher financial class. It is expected that this would filter through to stakeholders including material suppliers, plant hire organizations, financial institutions, trade creditors and client organizations. In this regard, contractors in the lower financial classes would be disadvantaged in attempting to deal with these stakeholders (Miles and Wards, 1991).

2.6 Regulation and Construction Industry in Ghana

The construction industry is one of the most highly regulated industries. Contractors find themselves interfacing with national, regional and district bureaucracies at all levels of a project: to obtain building permits, to have work inspected; and to have the completed project certified good for possession. Where the client is the government, particularly in developing countries, contractors deal with additional bodies in the layers of the bureaucracy to have their work monitored and valued and to follow-up payment certificates (Edmond and Miles, 1984).

It has been argued that reducing regulation within the construction industry will harm the health and safety of the nation as a whole: individuals and organizations need the quality and efficient buildings, roads and other infrastructure facilities to carry out everyday activities; and construction operatives need protection from an industry which is prone to accidents (Eyiah, 2003).

The European Union (EU) policy report on the European construction industry argues that"... market forces in construction do not always operate in the public interest, there are many eternal effects, and long-term benefits can be pre-empted by short-term decision making..." (Atkins, 1994) The report argues that, for construction, the free market mechanism is inefficient and unfair, so that "...regulation is required to protect the interest of consumers and future generations. This means efficient land use planning and construction control, and clear regime of liability legislation..." (Ibid)

Proponents of lesser regulation in the industry are of the view that prescriptive regulation and legislation about who can do what work could hinder the type of flexibility, competition and innovation that the industry needs Creusen (1999), World Trade Organization (2001) and British Columbia Construction Association (BCCA, 2001) argues on the basis of the uniqueness of the industry. The effect of any given location is acute, each project's site presents unique conditions and environmental constraints, projects are primarily of short duration and weather conditions can be adverse (Creusen, 1999).

Whereas as a manufacturer, for example, can differentiate his product and absorb higher cost by delivering greater perceived value, contractors generally bid on a job whose specifications are determined ultimately by the buyer (client). Several participants (including developers, contractors, trades, architects, engineers and suppliers) need to come together from inception to completion of any one project. There are contracts at every level of a project with every member of the construction team (Adams, 1997).

Many of the contracts will be lengthy and extremely complicated requiring careful deliberation in order to ascertain what is expected of each party. Balancing these rights and obligations is vital for mutual co-operation and productivity. The existence of an entire series of Construction Law Reports available to legal practitioners and published on a regular basis

evidences the fact that such a balance is not always achieved. Because of these unique characteristics, unnecessary regulation could frustrate contractors' ability to maintain adequate profit margin and, to innovate and remain competitive (British Columbia Construction Association, 2001).

On the international level, regulatory policies relating to control of land use, technical requirement, building permits and inspections, registration of contractors and professionals, wages and remunerations, classification of contractors, foreign equity limitation, transfer of funds between projects and lack of recognition of professional qualification have all impacted on the competitiveness and performance of contractors operating abroad General Agreement on Trade in Service (GATS, 2001). Nationally, politicians have voiced their concerns regarding regulation of the industry and the economy in general. In a United Kingdom (UK) parliamentary debate, a case was cited of a small construction firm who had to turn down major contracts because it could not secure insurance cover for accidents, which were extremely costly. This had resulted in loss of employment for the workforce (House of Commons, 2003). In Japan, high cost of housing was blamed on unnecessary regulatory policies, prompting a review relating to importation of foreign construction materials, labour and plant, and the overall building regulation system (Ministry of Foreign Affairs of Japan, 1996).

Empirical studies reveal the extent of regulation on the performance of contractors and efficiency of the industry as a whole. In the Dutch housing industry, overlapping quality and safety requirements had resulted in high administrative costs for contractors and entry barriers to new firms: information disparity between regulators and construction participants resulted in inefficiencies in the supply chain (Creusen, 1999).

In the USA, design costs of contractors engaged in government projects were found to be 6 per cent higher than they were on private sector contractors and construction costs were 9 per cent higher (Ibid).

The burden on small and medium contractors in developing countries, where public official exploit the situation for their personal interests, tends to be exacerbated. In Ethiopia, contractors were held responsible and made to pay fines and damages even where custom authority interferences had caused project delays. They were required to carry out work permitted within their licenses, which have restricted them from diversifying their projects and forced them to purchase expensive equipment to keep on hand, as required by the licensing provision. They were unable to expand their businesses because regulation prohibits them from borrowing from foreign banks. Excessively long periods taken for custom clearances for the importation of construction machinery and equipment and spare parts had affected productivity on sites. They were required to pay huge taxes on wages of technical expertise employed to manage their machines (Building blocks of Ethiopian construction).

In Tanzania, a survey to establish why contractors were operating informally revealed that 47 per cent felt requirements were difficult to meet and the costs involved were high (Mlinga and Lema, 1999).

In many developing countries, after obtaining license and registering to operate as a construction business, contractors who wish to engage themselves on government sponsored projects are further required to register with appropriate government department and then be categorized into financial groups (Eyiah and Cook, 2003).

2.7 Challenges Facing Contractors in Developing Countries

The market for major projects in developing countries tends to be dominated by foreign contractors. In a study on contractor development in Nigeria, in which 69 indigenous contractors and 71 professionals responded, Adams (1997) found that major projects in most developing countries are carried out by foreign contractors because of deficiencies in indigenous construction capacity. This was also found in a study of the business environment of contractors in Nigeria by Aniekwu (1995). Using a questionnaire survey covering 11 out of 21 states in Nigeria, Aniekwu (1995) asked 344 contractors to assess 47 variables relating to the construction industry in Nigeria. Of the 344 respondents, 266 were indigenous contract (wholly Nigerian-owned) and 78 foreign contractors (either Nigerian branch of a foreign company or Nigerian/foreign joint venture).

Although 78% of contractors were indigenous firms, their total share of annual construction work was likely to be significantly lower than the total annual volume of work done by the 22% foreign firms.

Constraints on indigenous contractors performance in Nigeria are emanating from uncertainties in supplies and prices of materials, obtaining interim payment, procuring work, access to capital, negotiating variation payment, access to plant and equipment, inappropriate contract conditions, maintaining plant and equipment, resolving contract disputes, meeting contract deadlines, design changes, incomplete contract documents, transporting materials and equipment, materials control on site, providing reliable tenders, communicating with client representatives, shortages of skilled labour, public image, accounting of financial management, inadequate supervision by client, project planning and site management, technical know-how, commitment to construction, company organization, personnel management, providing quality workmanship. Contractors in developing countries have

limited access to funding sources, especially contractors in the small-and-medium bracket. One of the biggest consequences of this is that it prevents them from satisfying the financial requirements (e.g. bid and performance bonds) needed to win major contracts often awarded to their foreign counterparts (Adams, 1997).

The situation in Ghana when it comes to challenges associated with construction in developing countries is not significantly different. Eyiah and Cooke (2003) carried out a questionnaire study to identify the financing needs and constraints of contractors in Ghana; determine the extent to which their characteristics influence financing needs and constraints; examine factors contributing to these constraints and the effect on different groups of contractors; and develop guidelines for policy-makers. The research was focused on the experience of the erstwhile Bank for Housing and Construction (BHC) in Ghana which was one of several government owned banks created to provide support for private housing schemes, expansion and modernization of immovable property, estates and industrial construction activities in Ghana. The Bank for Housing and Construction's financing programme achieved an appreciable level of success initially. However, the level of success later declined as a result of delayed payments to contractors for works completed; contractor's lack of managerial and technical capability to make profit on projects in which they were engaged, or to secure more lucrative ones; inability to obtain contracts; persistent delayed payments by major clients; and the deliberate refusal to repay loans. Despite the underachievement of Bank for Housing and Construction's the contractor financing programme, Eyiah and Cook (2003) advocated for more but effective financing schemes for local contractors. Other special programmes designed by banks like the Social Security Bank and to help contractors with project financing also failed as a result a number of factors discussed in Eyiah and Cook (2003). These include poor contractor's attitude towards

competitive tendering; contractor inability to service equipment loans; lack of spare parts to maintain equipment; poor managerial capacity of contractors; disparity between Ghanaian currency and foreign currency in which cost of equipment was to be repaid; and seizure of equipment from contractors‟ sites. The Bank for Housing and Construction's liquidation in 1996 has often been linked to its involvement with contractors.

The literature reviewed in this section of the paper reveals a set of complex challenges facing contractors in developing economies. An article in the April 17-23 2010 edition of The Economist by Wooldridge (2010) explains some of the current developments, challenges and opportunities associated with innovation in emerging markets.

Among the challenges are poor distribution systems, unpredictable income streams, pollution of the environment, infuriating and interfering governments, lack of basic infrastructure and services, and poverty. However, these should be viewed as obstructions and not obstacles to entering and investing construction markets in developing countries. There are opportunities too as indicated by Wooldridge (2010).

2.8 Opportunities Available to Contractors in Developing Countries

Nowadays, many multinational firms are moving into developing countries where a lot of markets are emerging (Wooldridge, 2010). Because such countries are mainly developing countries, there is a lot of demand for all types of construction work (Jaselskis and Talukhaba, 1998). A lot of developing countries also have incentive packages designed to attract foreign investment and foreign firms including tax reliefs (Ibid).

In Ghana for example, the Free Zones Act, 1995 was passed inter alia to provide incentives such as tax concessions to firms granted licenses under the Act (Ofori, 2001).

Corruption has often been touted as a problem in developing countries (Olken, 2009; Olken 2007).

However, it may also be an opportunity for firms who have the capacity to bribe government officials to win projects. For example, in 2000, the company now known as Aon Ltd. was censured and fined £300,000 (US $435,000) by Lloyd's Disciplinary Board in relation to payments, including to government officials, in Ghana, Nigeria and the Philippines in the 1990s (Transparency International, 2009 report p.71).

The UK Serious Fraud Office in 2009 exposed Mabey and Johnson Ltd, a British construction firm, for overseas corruption practices in Ghana, Jamaica, Bangladesh, Mozambique, Angola and Madagascar. The firm was fined £6.6 million by the Crown Court judge Lord Rivlin.

Reparations are also to be paid by the company to the governments of Jamaica and Ghana (http://www.sfo.gov.uk/).

In many developing countries, government agencies tend to be are lax and there is not a strict enforcement of laws relating to environment, labour, sustainability, health and safety, etc (Wooldridge, 2010). Therefore, businesses are not likely to incur much overhead of ensuring compliance with environment and labour rules. In short, although the poor institutional structures in developing countries are often criticized, these same deficiencies enable multinational firms to realize high profit margins (Wooldridge, 2010).

2.9 The Economic, Legal and Political Environments of Contractors in Ghana

Ghana is a major Sub-Saharan African country with a population of 23.5 million people. It has a vibrant and stable multiparty democratic political system of governance particularly in the past 20 years (i.e. since the introduction of the 1992 constitution which ushered in the current Fourth Republic). However, in the past there have been pockets of political instability

and a history of coup détats. For example, between 1966 and 1983, Ghana experienced five successful military coups. To date, there is no research work that explains the impact of politics on the construction industry in Ghana. Therefore it is hard to conclude on the impact of politics in Ghana on the construction industry (Quartey, 2002).

Nonetheless, the research work by Jaselskis and Talukhaba (1998) on bidding considerations in developing countries makes it clear that governments in developing countries have a direct influence on construction in both the public and private sector through their behaviour, policies and legislations. As in many other Countries, governments are the major construction client in Ghana (Eyiah and Cook, 2003). Hence it is hard to disconnect the impact of government and politics on construction in Ghana. For example, a contractor who is not registered with the government ministries responsible for works and housing or roads and transport will not be entitled to the award of any government project or contract (Ibid).

In recent years, Ghana has experienced stable patterns of real GDP economic growth rate (2008) of around 7.2%. Further economic growth is predicted particularly with the recent discovery of oil in Ghana. (as revealed in a study on links between the growth of the construction industry and the growth of the macro-economy in Ghana by Anaman and Osei-Amposah, (2007) ; and another on oil and urban development in Ghana by Obeng-Odoom, 2009 published in the African Review of Economics and Finance).

As there is a strong link between construction and economic activity (Hughes and Hildebrandt, 2003 and Calvert, 1995) the projected economic growth in Ghana and the emerging oil industry suggests that demand for construction goods and services will increase in the coming years. Another reason why demand for construction work is likely to increase is that Ghana is a typical developing country (according to the United Nations Human Development Report/Index, 2008) and according to a paper by Jaselskis and Talukhaba

(1998: pg 185) developing countries have great need for almost all types of construction such as highways, roads, hospitals, power plants, dams, housing, maintenance on existing infrastructure, etc.

The construction industry in Ghana is an important element of the national economy. The government of Ghana Growth and Poverty Reduction Strategy report (2005) reported that the construction industry contributed 8.8% to GDP in 2003 and 2004, ranking third behind agriculture (35.99%) and government services (9.98%).

The legal system in Ghana (formerly the Gold Coast) is based on English common law and customary law (mainly as a result of British imperialism in the Gold Coast (from the early 1800s) and colonial rule from July 24, 1874 to March 6, 1957).

The civil law in force in Ghana is based on the Common Law, doctrines of equity and general statutes which were in force in England in 1874, as modified by subsequent Ordinances. Ghanaian customary law is, however, the basis of most personal, domestic and contractual relationships. Criminal Law is based on the Criminal Procedure Code, 1960, derived from English Criminal Law, and since amended (Hildebrandt and Hughes, 2003).

2.10 Types of Construction Companies/Firms

The general optimum size of a construction firm cannot be easily determined by anyone, as the size of a particular firm is affected by the nature of the work that the company involves itself in, the conditions under which a particular job needs to be executed or carried out, how it is organized and the ability of the management to co-ordinate affairs on and off the site (Seeley, 1984).

It is very interesting trying to identify the various types of building construction firms within the construction industry as many factors have to be taking into consideration. This stems

from the fact that businesses vary in their level of capitalization, sales and employment (MCcffer and Harris, 2004).

Within the Africa continent, countries have different ways of categorizing their building construction firms. Countries also differ in their level of economic development to justify the generalization of a single definition for construction companies. The Bolton committee (1971), in attempting to address the problem, based on what they called 'economic' and 'statistical' definitions, proposed various definitions for different sectors (Laryea S. 2010).

In Tanzania, contractors are categorized into five groups, and within each group contractors are categorized in seven financial classes (Mlinga and Lema, 1999).

In Malawi, Building Contractors are categorized in six financial classes, while civil Engineering and Electrical Contractors are categorized into five financial classes (Ebohom and Rwelamila, 1991).

There are three main categories of contractors in Ghana, there are the road contractors, who are issue by certificates by the Ministry of Road and Transport (A1B1, A2B2, A3B3 and A4B4 categories); Electrical Contractors, who are issue certificates by the Ministry of Energy (E1G1, E2G2, E3G3 and E4G4 categories), "E" representing electrical works and "G" representing Plumbing Works and the building construction firms which are have the large number of enterprises of various sizes as registered and categorized by the Ministry of Water Resources, Works and Housing (MWRW&H) as D1K1, D2K2, D3K3 and D4K4. Based on factors such as annual turnover, equipment holding, personnel, the D1K1 class of contractors are termed as larger firms, whereas D2K2 construction firms are medium and D3K3 and D4K4 are small firms (Edmonds, 1984).

The larger firms, according to MWRW&H are registered as financial class 1, capable of undertaking projects of any value, class 2 (the medium firms) are capable of undertaking

projects up to US$500,000 or GH¢750,000.00, while the small firms (financial class 3) are also capable of undertaking projects up to US$200,000 or GH¢ 300,000.00 or class 4 to undertake projects up to US$75,000 or GH¢112,500.00 (Ibid).

Table 2.1 Category and Financial Classes' of Building Construction Firms as at 2008

Types of Building Construction Firms	Category	Some Specific Works to be undertaken	Financial Class
Large Firms	D1K1	They undertake contracts of many types and sizes with a considerable variation in resources requirements, demanding skills over a wide spectrum and operate in and of their countries of origin.	Any value
Medium Scale Firms	D2K2	Large building and civil engineering contracts.	US$500,000 or GH¢750,000.00
Small Scale Firms	D3K3 and D4K4	The core business was to undertake refurbishment work.	US$200,000 or GH¢ 300,000.00
		To undertake basically smaller works.	US$75,000 or GH¢112,500.00

Source: **Ministry of Water Resources Works and Housing (MWRWH)**

There is no universally agreed definition of small and medium construction firms, which are also considers as enterprise or business. Some of the commonly used criteria are the number of employees, value of assets, value of sales and size of capital as well as turnover (Eyiah, 2003).

The Bolton report (1971) described a small business as having a small share of its market or alternatively a large share of a very small market. The business must be managed in a personalized way and not through the medium of a formalized management structure by the owners or part owners and should be independent in that it does not form part of a larger organization. Management should be free from outside control in taking principal decisions (Burns, 1989).

In Ghana, the National Board for Small-Scale Industries (NBSSI, 1990) also defines small and medium enterprise as one which employs not more than twenty-nine persons with plant and machinery value (excluding land, buildings and vehicles) not exceeding the equivalent of US$100,000. It again applies both the "fixed asset and number of employees" criteria and defines a small-scale enterprise as a firm with not more than 9 workers, and has plant and machinery (excluding land, buildings and vehicles) not exceeding 1 million Ghana cedis (Seeley, 1984).

There is no single and uniformly acceptable definition of a small firm, because firms differ in their levels of capitalization, sales and employment. Hence, definitions which employ measures of size (number of employees, turnover, profitability, net worth), when applied to one sector, could lead to all firms being classified as small, while the same size definition, when applied to a different sector, like the construction sector could lead to a different result (Kayanula and Quartey, 2000).

For small firms the number of people employed should be between 10 to 99 employees and medium firms the number of people should be between 100 to 200 employees. The value of fixed assets in the firm has also been used as an alternative criterion for defining small and medium Construction Firms (Elaian, 1996).

The definition of small and medium firms in industrialized countries is given as small - firms' employs 99 or less workers and medium - firms employs between 100-499 workers.

The classification given for developing countries is small – firms' employs between 5-19 workers and medium - firm's employs between 20-99 workers (Elaian, 1996).

2.11Large Scale Building Construction Firms

Depending upon the policies of the shareholders and board of directors towards expansion and growth of turnover, some companies are able to develop into very large concerns indeed (Harris and MCcffer, 2004).

The mechanisms needed to bring about expansion are varied and depend upon market opportunities coupled with the ability of the organization to secure work at competitive price delivered to budget. Employment of competent directors, managers, staff and workforce will be paramount in achieving success in this respect. These types of building construction firms are actually of a good financial class, well equipped, have sound management and are of a high reputation. They undertake contracts of many types and sizes with a considerable variation in resources requirements, demanding skills over a wide spectrum and operate in and of their countries of origin. The underlying principle of the simple form of structure is often retained, but decentralized into individual specialist activities example civil engineering, building etc. usually largely autonomous with only major policies and function controlled centrally (Harris and MCcffer, 2004 pg. 309).

In Ghana, the Ministry of Water Resources Works and Housing (MWRWH) has classified the Very Large Scale Building Contractors as first class contractors i.e. DIK1 in general building works, with a financial threshold ranging over $500,000.00 as at the year 2009 (Elaian, 1996).

2.12 Medium Scale Building Construction Firms

Most Medium Scale Building Construction Firms are developed from expansion of scale-sized firms. The firms may be managed from a single head office or may be regionalized in order to serve its customers' needs better. The functional approach to the management of the businesses will now have been expanded to form service departments, or divisions: estimating, surveying, Planning, Contracts, Plant, Personnel and Administration (MCcffer and Harris, 2002)

Each may be managed by a director or, if regional, by a regional director (Cooke and Williams, 2004).

In UK, the parameter differs from in excess of 300 employees to 1200 employees as pointed out by Seeley (1984).

They have the capabilities to undertake large building and civil engineering contracts to a tune of $ 500,000.00 within the countries in which they operate as well as aboard. There are different dimension as to how to classify the large scale building construction firms, all the same, the Ministry of Water Resources Works and Housing has classified such firms as D2K2 Building Construction Firms in Ghana (Cooke and Williams, 2004).

As provided in the Ministry of Water Resources Works and Housing Guideline (1998) the various duties of the staff are coordinated by the Engineer who does this by using the needed instruction on daily basis to the various gang leaders through the general foreman (Ibid).

2.13 Significance of Medium – Scale Building Construction Firms

The basic function of a Medium – Scale Building Construction Firms as it were, is to carryout and complete works designed by others i.e. consultants (Edmond, 1984).

As noted by Cooke and Williams (2004) the main reason of medium scale building firms establishment came about as most of the small scale building firms decided to increase their work load, turnover etc.

Due to varieties of job contents and types, most of them are carried out by medium-scale construction firms, namely building of single height, refurbishment of buildings, Construction of pavilions, cladding of 3 units classroom blocks, plumbing works, repairs and fence construction works (Ibid).

In Ghana, most of the large-scale contractors subcontract the medium-scale buildings construction firms as sub-contractors whenever they are awarded a huge contract.

In addition, because of the proliferation of works, Medium-Scale Construction Firms are engaged to undertake them making it very important in the construction industry (Seeley, 1984).

They actually help to minimize the unemployment problems facing the country, as they employ artisans, skilled and unskilled labour in all part of the country (Cooke and Williams, 2003).

Since they are accessible and available in all parts of the country their services are always available to both the private individuals, public as well as District Assemblies including entrepreneurs who undertake development projects in the remote areas of the country where the very large and large construction firms will not like to work (Ofori, 1991).

As a result of the great number of them in the system, they promote healthy and more competition in the construction industry therefore producing good quality works.

Their services are affordable due to the non-complexity of the firms, in terms of plants and equipment and the use of local labour and materials making their operating and overheads cost quite low (Ofori, 1991).

Moreover, the Districts and the Municipal Assemblies in which they operate in get some sort of revenues from them, as they have to be registered with them before they can start business with them. In the same vein, the central government gets some revenues from them, as the number of them according to the Ministry of Water Resources Works and Housing 2008 is around 50,141 nationwide, meaning that the source of revenue generated from payment of their statutory tax is very substantial (Adams, 1993).

Higher level technical and consultancy services are not needed in their operation, which makes their average skilled technical know-how somehow affordable (Adams, 1993).

The importance and viability of these medium-scale construction firms are immeasurable and the Gh. I. S 1995 has anchored the prosperity of the importance and viability of medium-scale construction firms in the construction industry in Ghana (Seeley, 1994).

2.14 Small Scale Building Construction Firms

There is no single definition of what constitutes a small building construction firm. This stems from the fact that businesses vary in their level of capitalization, sales and employment (Storey, 1994).

In Ghana, the small scale building construction firms have been classified as D3K3 and D4K4 building construction firms with a financial class ranging $ 20,000.00-$ 75,000.00 (Edmond, 1984).

The firms are managed by a principal or owner, with 60 per cent of the workload obtained by negotiation and the rest from competitive tenders He tends to make all decisions, and tends to

do everything himself. He does not appear to be able to delegate responsibility to the people around him. They appear to be content with the profit returns they are achieving and may not wish to become any bigger (Cook and Williams, 2003).

Their level of management is nothing to write home about; nevertheless they believe to be good managers in their own field. Unless the principals of such firms overcome these problems, their firms will fail to expand and continually will run into bankruptcies', it is not surprising that the principals of such firms finish up having a heart attack (Ibid).

They rarely or at times do not employ more than 50 operatives and usually for many fewer according to Seeley (1984).

The policies of the Small Scale Building Construction Firms are to use labour only and usually recruit such laboures in a town or village in which they secured contracts.

The Small Scale Building Construction Firm control procedures include:

Control is maintained by constant visit to the project site by the principal in order to coordinate materials, plant etc. The principal's major concern is providing service to client and ensuring that projects are completed on time at a reasonable profit (Cooke and Williams, 2003).

Maintaining client contact during a project is considered essential to the success of the business. Management checks are made on project profitability at interim valuation stages on a somewhat ad hoc basis. Monthly site meetings on all projects are attended by the principal. The majority of the principal time is spent on preparing tenders for new work and chasing round his existing projects (Eyiah, 2004).

2.15 Significances of the Small and Medium Scale Building Construction Firms

The contributions of the Small and Medium Scale Building Construction in the construction industry cannot underestimate (Seeley, 1984).

Small and medium scale contractors' contributions in Ghana have been recognized by many researchers and policy makers. The contribution of small contractors to the creation of jobs and to the alleviation of poverty has been recognized by many Governments in the Developing Countries including the Ghana Government (Laryea, S. 2010).

They are the major feature of the economic landscape in all developing countries today; they are powerful instruments for generating job opportunities as small contractors can perform small projects at different and remote geographical locations that might be unattractive to big firms or too costly for the big firms (Liedholm and Mead, 1999).

According to Integrated Emerging Contractor Development Model (IECDM) because of their low overheads, the Small Scale Contractors work at more competitive prices. According to Alex Eyiah (2004) the importance of the Small Scale Building Construction Firms is more felt in developing countries where infrastructure facilities required for improved living conditions is relatively undersupplied. Ghana's cases testify the current infrastructure position in many developing countries. The housing situation could be described as national crisis. A study conducted by the Ghana Real Estate Developers Association (GRADA) in 1999 estimated the annual housing requirement to be about 120,000 units per annum, but production at that period was only about 30,000 units per annum (UK Trade Partners, 2003). The road network condition survey conducted in 1999/2000 under the Road Sub-sector Plan for 2000-2005 established that the overall network was 29.2 good, 27.1% fair, and 43.7% poor; the rate of rehabilitation and maintenance equaled the rate of deterioration (Alex Eyiah, 2004).

It was concluded "If the road sub-sector is to achieve its set objective by the year 2005, it implies that over the next six years, a total of 2,822km of the trunk road network will have to be improved to good conditions through reconstruction, rehabilitation and upgrading" Ministry of Road and Transport, (1999).The need for urgent response to address the situation cannot be an underestimation. Meanwhile, because of the inadequacies of local contractors in many developing countries (most of whom are small firms); foreign construction firms are usually engaged to undertake most large projects, Adams (1993), Aniekwa (1994) and Ofori (1991).

These firms prefer to employ expatriates even where qualified local professional manpower is available and to import other resources required for their operations. Writers of contractor development argue that most developing countries can no longer afford dependence solely on imported resources to execute their construction works or to maintain existing ones to meet these demands because of the direct bearing on the value-added, explained as: "For a given work, the value-added in construction depends on many factors, such as design, construction technology, use of equipment and labour, equipment performance, price and wage levels, temporal works and processing of materials during construction (Osborne, 1984).

Contractor who carries out a highly mechanized construction operation using expatriate personnel and imported equipment and materials may be able to achieve high quality and complete the job on time, but the value added in construction as well as the value added by local industries supplying construction input will be low" (Kirmani, 1988).

The engagement of foreign contractors is not being disputed, for reasons given earlier, but many are of the view that to enhance efficiency in implementation of the construction required to stimulate growth, development of local contractors must be given due consideration (Aniekwa, 1994).

Their effective participation, Adams (1993) notes, would increase competition among themselves; they would in turn make increased use of local materials and resources and also create job opportunity for local professionals.

Consequently, value added by the industries supplying various inputs to construction. In support, the UNCHS (1996) suggests that the quality of work of small contractors needs to be upgraded to enable them to give greater value for client money; with improved expertise small contractors can help reduce the reliance of imported inputs. It is also acknowledged that improvement in the activities of small contractors would optimize job creation opportunities in construction infrastructure and housing; encourage the creation and sustainability of small-scale enterprises; strive towards fulfilling the country's projected construction needs; and enhance the benefit accruing to the community through their involvement in construction (Ofori, 1991).

It becomes imperative to develop small contractors, particularly, in situations where foreign contractors feel reluctant to engage themselves in projects in the rural areas (where infrastructure are most needed) because of their financial unattractiveness (Kirmani, 1988).

Miles and Ward (1991) in their study in Ghana, sponsored by the ILO, justified their focus on small contractors on the grounds that:

• They are powerful generators of income and employment

• Without a network of efficient small contractors rural health centres, villages water suppliers, low-cost roads and similar projects are often difficult or expensive to provide

• The more soundly based the small-scale sector can be made the better will be the prospect for the development of medium and large-scale national firms.

2.16 Challenges Facing Small and Medium Scale Building Construction Firms

The challenges faced by small and medium contractors can be distinguished between those that affect small scale contractors and those that affect medium-sized contractors.

Small and medium contractors are facing increased competition due to the long-term real decline in demand, and many contractors have responded by shedding labour (Osborne, 1984).

The larger contractors have responded by moving into the international market. Small local contractors, in particular, are furthermore subject to volatilities due to the geographic distribution of construction and the peak workloads that characterize construction Projects, which has further reduced their ability to build capacity (Aniekwa, 1994).

The small and medium scale building construction firms are faced with numerous challenges which include:

2.17 Registration Challenges

According to the Ministry of Water Resources, Works and Housing guidelines (1998), the small scale and medium-scale building construction firms are required by status to have documentary proof or evidence of recognition of proven capability and competence. This is done by registration in line with the Ministry of Water Resources Works, and Housing guidelines (1998).

In addition, the other government agencies like the Metropolitans, Municipals and the District Assemblies (MMDAs) where these firms do business with also expect them to register with them before they can actually take project from them. The amount been charged at the various sector where the registration is done is very high (Amposah, 2007).

Moreover, the whole process for the registration is very cumbersome and frustrating in some contractor's point of view, as the one from the Ministry of Water Resource Works and housing has to be done in Accra, no matter where one is coming from in this part of the Country (Aniekwa, 1994).

2.18 Financial Challenges / Problems

Before construction work can be carried out effectively, it is very important that they are carefully and properly planned in the first place (Croswell and MCcutcheon, 2001)

Decision will be required on a whole range of issues from construction method, financing, i.e. raise much capital to execute the job (Denyer, 2002).

In Ghana the policy of the government with regards to many public projects and which the Ministry of Water Resource, works and Housing strictly enforces is that a contractors has to pre-financial a project that he has won, which will serve as a requirement in the condition of contract (Eyiah, 2003).

Most of the small scale and medium scale firms raise capital through other credit facilities, and of late, the interest rate in connection to the loans given by these Banks are very high, that is making interest payment on loans given the Small Scale and Medium Scale Firms by the banks and other credit facilities difficult to pay. And if they are able to pay it erodes the profit on their project (Ofori, 2002).

2.19 Poor Records Keeping

Poor record keeping is also a cause for start-up business failure. In most cases, this is not only due to the low priority attached by new and fresh entrepreneurs, but also a lack of basic business management skills. Most business people, therefore, end up losing track of their

daily transactions and cannot account for their expenses and profits at the end of the month (Crainer, 1990).

During the early stages of some business startups, owners were unable to separate their business and family domestic situations. Business funds were put to personal use and thus used in settling domestic issues (Cook and William, 2004).

This has a negative impact on profitability and sustain-ability. Some owners/managers employ family members simply because of kinship relations (Ibid).

In some cases, these have turned out to be undisciplined and ineffectual, a factor that has led to eventual and sometimes rapid failure of businesses, Rwelamila (2002), Croswell and McCutchen (2001), Mphahlele(2001), Ofori (1991), Wijewardena and Tibbis (1999).

2.20 Technical/ Personnel Challenges

Successful project cannot happen in vacuum; however, no-one can effectively plan and control a project without understanding the culture and methodologies of the industry that organises and carried out the work (Cook and Williams, 2004).

There is a wide disparity in the standard of competence across the industry, a largely semi-skilled and itinerant work force and a general low standard of education and qualifications in technical staff employed in the industry (Walker, 2002).

Construction work which entails temporary occupation of a site tends to portray different technical problems identification for future projections of the site (Cole and Clutterbuck, 1998).

Technical problems encountered by small and medium – scale building firms do actually vary. Investigations and interpersonal interviews revealed that most of these firms are unable

to attract qualified and requisite technical personnel and other part - time staff, which makes their technical supervision very poor and unattractive.

2.21 Problems / Challenges of Payment of Works Done/Executed

Although the C.O.C (condition of contracts) of any project if is a government one, stipulate the time or period that it a contract if raise a certificate the certificate needs to be honoured. That is clause 25 (1) of the conditions of contract for building work, (5thEdition 1998). However personal interviews reveals that this is not so as most of the employers to these small and medium – scale firms, that is the District, municipal and metropolitan Assemblies depend solely on their common fund in paying certificate raised by these firms. Meanwhile, these common funds are release by the central government in a quarterly manner, thus if a contractor raises certificate and the said assembly has finish disbursing it fund that means the contractor has to wait till when the next quarter common fund will be released.

Delayed in payment of contracts executed can best be classified as the greatest challenge facing small and medium scale contractors but more worrying is the failure of clients, usually the government, to pay interest or compensation for delayed payment (Mphahlele, 2001).

The plain truth is that whereas local contractors are afraid to claim interest on delayed payment for fear of victimization, foreign contractors are duly paid interest and suffer no victimization (Laryea, 2010).

2.22 Challenges with Invitation to Tender Requirement

To be able to secure a job from client, more especially at the District Assemblies and to the large extend the other ministries, a firm needs to meet some minimum requirements, which are usually spelt-out in the invitation for tenders (IFT) from these clients. The provision of

these requirements comes with its own cost, as the agencies from which these securities, insurances and other professional indemnities will be obtained, charge exorbitant fees before they released these documents to the contractors (Laryea, 2010).

Personal interviews with some of the contractors revealed that, to secure job from clients depends on "whom you know" "what political party is in power" and one's ability to pay or readiness to pay 10% of the project cost that he intends to bid for.

Another challenge that one has to go through is the competition that comes with projects invitation, as most of them invite different classes of contractors to tender for a particular job, example. D3K3 and above, which obviously place the smaller firms in a very difficult condition to secure such a job (Olken, 2009).

Small scale contractors can be economically useful if projects are designed to suit their capacity (Croswell and McCutcheon, 2001).

The Department of Public Works (1997) stated that contractor development in South Africa is needed for the following reasons:

- The relatively low skills and resources required at this scale can easily lower the entry point for the historically disadvantaged people to begin to participate in the industry.

- Large numbers of functional small and medium-scale contractors can help to decentralize the construction industry dominated by established white contractors.

- A large number of functional contractors can develop a platform for growth and the redistribution of wealth.

- Small contractors can be powerful instrument on job creation within the construction industry depend on the government policies.

- Small contractors can perform small projects at different and remote geographical locations that might be unattractive to big firms.

- Low overheads enable small contractors to work at more competitive prices.

2.23 Challenges with Clients

Contractors working in Ghana face a great challenge with respect to payment of certified work done, more especially Government of Ghana (GoG) funded projects. Certified work done are not pay on time, which go a long way to affect contractors on their profit margins, increase interest on loans collected from their financial institutions (Walker, 2002).

Partisan politics is another contemporary challenge facing Ghanaian contractors, especially those working with the Municipals, Metropolitans, District Assemblies (MMDAs) and other governmental agencies. As most District Chief Executives (DCEs) who inherent projects that had been awarded by their predecessors, deliberately refused to pay certificates submitted to them on such projects, as they see those contractors, as contractors of the than District Chief Executives or the political party at that time, hence the abandoned of projects in our various Assemblies (Laryea, 2010).

2.24 Challenges with Consultants

Poor supervisions and monitoring on the part of project consultants, affects contractors, as they are usually issued with variations orders by consultants due to their regular visit by these consultants to project site (Adams, 1997).

Ambiguity in the tender documents, projects drawings, bills of quantities as well as contract documents prepared by some consultants affect contractors, as it affect time, quality of work done, increase projects cost (Wooldridge, 2010).

2.25 Other Challenges or Problems

Apart from above the mentioned challenges, there are other vital challenges which hinder the progress of small and medium –scale construction firms, these include the following:

Equipment, managerial organisation, company policy, human relation and leadership style (Cook and Williams, 2004).

❖ Managerial Organisation

Observations made so far into the activities of the Small and Medium Scale Building Construction firms revealed that the levels of managerial organisation in these firms are nothing to write home about. They actually lack the basic managerial principles which was established by "Henri fayol" (1999) and which has also be outlined by many management writers including Breach, Clutterbuck and Cole, Crainer, Denyer, Drucker, (1990).

These principles of management are; forecasting and planning, Organisation, Commanding or directing, Controlling, Coordination, Motivation and Communication.

❖ Leadership Difficulties

As businesses expand, the leadership style of the principal or managing director becomes apparent (Breach, 1990).

As stated earlier on, most of these small scale and medium –Scale Building Firms expand from small – scale firm and the kind of leadership style that these managers were using at the level of the small – scale firm is having an adverse effects on their medium – scale firms as at now (ibid).

Traditionally leadership has tended to be associated with autocratic command, especially within the small – scale firms which the medium – scale firm developed from (Dixion, 1991).

Many of the small and medium scale firms' directors or managers still see leadership mainly in terms of issuing orders which are obeyed by subordinates without questions.

Leadership is the lifting of man's vision to higher sights and rising of man's performance to a higher standard. Management can only create the leadership under which potential leadership qualities become effective (Drucker, 1989).

Clutterbuck and goldsmith (1984) indicate that to be effective 'leaders must be seen'. Perhaps the question should be posed, 'how many times in the last twelve months have you had personal contact with your company chairman or Chief Executive? Perhaps not at all!

Dixion (1991) defines leadership as the process of directing and influencing the work of team members. Leadership is concerned with guiding and directing other.

These leadership qualities, from personal observations and interactions with most of the small and medium-scale constructors indicate that they do lack them.

❖ **At the Construction Stage**

All building works are affected by factors which results in satisfaction of owner including a combination of aesthetic aspects and structural needs. At the real construction stage the following factors are considered (Drucker, 1989).

- Site condition, location, access size, ground condition and organisation.
- Construction methods or techniques.
- Contract conditions.
- Unpredictable items, hidden obstruction, labour and economic conditions etc.

❖ Location of Site

The location of site can affect the availability of labour, materials, special transport facilities, extra charges and deliveries disposals and haulage distances and other associated works (Miles and Ward, 1991).

❖ **Organisation**

This may affect the progress of work, speedy completion, usually a reflection of efficiently organised site since organized laid-out and tidy site enhance safety since accidents cause hold up, thereby increase cost of work (Clutterbuck and Goldsmith, 1984).

❖ **Ground Condition**

Ground condition will affect the choice of equipment transportation, mechanical plant, foundation type and design in relation to variations in ground conditions (Drucker, 1989).

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The effect of research methodology on the possible outcome of any research endeavor can never be overemphasized. The success and validity of any research work critically depends on the appropriate selection of the research methods (Fellows and Lui, 2003; Steele, 2000)

This chapter discusses the research design and methodology including their strengths and weaknesses and highlights the general approach to the research project.

3.2 Research Design

This section discusses the overall research method used for the study and justifies the reasons for using them. The design employed includes the area of study, population, sampling techniques data collection procedure and data analysis.

3.3 Area of Study

The study was conducted in Kintampo South District and Kintampo North Municipal, located in the Brong Ahafo Region of Ghana.

3.4 Population

The contractors in Ghana are categorized into three main categories', the Road Contractors, who are issued certificates by the Ministry of Road and Transport (A1B1, A2B2, A3B3 and A4B4 categories), the Electrical Contractors who are issued certificates by the Ministry of Energy (E1G1, E2G2, E3G3 and E4G4 categories) and the Building Contractors, who are given certificates to operate by the Ministry of Water Resources Works and Housing D1K1,

D2K2, D3K3 and D4K4 categories. The category D represents contractors' in "general building works" and the K represent contractors in the "civil works" (Dansoh 2005, Eyiah and Cooke, 2003).

The study however, focuses on building contractors with classes D3 and D4 in the case study area. Therefore the population adopted for the research in this context, means small and medium scale building contractors in Ghana who have worked and those currently working with both Kintampo South and North District Assemblies.

3.5 Sampling Technique and Sample Size

3.5.1 Selecting the Contractors

The stratified sampling technique was used to categorize the contractors into small and medium scale building firms in the Kintampo Municipal and Kintampo South districts. In all, 240 contractors within the districts were identified with the contract register and contractor's database of the District Assemblies. The researcher ensured that there was a high degree of correspondence between the sampling frame and the sample size because the accuracy of a sample, first and foremost, depends on the sampling frame.

The sample size for the study was chosen based on the assertion in Nachmias and Nachmias (1996), that if the population are few hundreds, a 30% or more sample size will do; if several hundred, a 20% sample size will do, if a few thousands, a 10% sample will do; and if several thousands, 5% or less sample size will do. In view of this, the researcher selected 120 contractors from each firm's category. The total population for the two categories of contractors was 240 from Assemblies' Database. In all 97 contractors were selected as the sample size for the study. Out of this, 36 contractors representing 30 per cent were selected from a total of 124 medium scale firms, 60 contractors representing 38 per cent from 90 small

scale building construction firms (Table 3.1). The selection of the equal number of contractors from the various firms was seen as necessary due to the researcher's intention of obtaining an accurate comparison of the contemporary challenges facing the scale and medium building construction firms.

Table 3.1: Sample Size Selected from Contractors Categories in the District Assemblies

Contractors Type	Population	Percentage (%)	Sample Size
Medium scale building Firms	120	30	30/100*120=37
Small building Scale Firms	160	38	38/ 100* 160= 60
Total	**240**		**97**

The researcher employed the use of systematic and purposive sampling techniques for the selection of the cases for the study. Systematic sampling technique was used to select the contractors from the various categories because of its simplicity. This method involves identifying, listing and numbering all the contractors in the study area. Where S represents the total number of contractors in each category and R the required number of contractors to be selected, a skip interval I=S/R was calculated. This was calculated to be 3 for all the contractors' types.

The first firm was selected by adding the skip interval 3 to a randomly picked number between 1 and the interval. Subsequent contractors were selected by adding the interval to the last serial number (Afolabi *et al.* 2004).

3.5.2 Selecting the Assembly staff

The purposive sampling method was employed by the researcher to select the Assembly's Staff for the study. This was deemed necessary because of the researcher's expectation of obtaining experienced design professionals who are directly involved in contract administration.

In sampling, the main objectives are to select a portion of a universe that the results may, or could be, extended to the whole population. It is in this respect that representativeness of the universe of which a sample forms a part becomes fundamental to sampling. However, certain characteristic of the universe of which a sample forms a part becomes fundamental to sampling. Certain characteristics or phenomena are not distributed randomly or uniformly in a universe. In such cases, a representative sample may not at all include a unit typical of the characteristics in questions, or it may include so few units that their analysis may not be statistically significant. In such cases, it is more appropriate to identify units of the universe, which satisfy the characteristics of the phenomenon under investigation (Kumekpor, 2002).

Therefore, since the staff of the District Assemblies i.e. Kintampo South District Assembly and Kintampo North Municipal Assembly, are made up of various individuals (workers) ranging from the District Chief Executive to the Messengers, the researcher chose the units from the population (workers of the Assemblies) not by a random procedure, but they were intentionally picked for the study because of their characteristic or because they satisfied certain qualities which are not randomly distributed in the universe, but they exhibits most of the characteristics of the interest to the study.

The researcher, have judgment and knowledge of the characteristic of the units of the universe as to the object of the study. Because it was known by researcher that certain individual units, by their very characteristics, will provide more and better information on a particular subject

than a randomly-selected unit, there was the need for such units to be purposefully picked up for the study. The selection did not involve intricate procedures of random sampling.

Those units selected, were the District Chief Executives, District Coordinating Directors, District Planning Officers, and District Engineers from the named Districts.

In all eight respondents were selected from the District Assemblies.

3.5.3 Selecting Contractors' Tradesmen

The Researcher used a non probability sampling called convenience sampling in selecting the tradesmen of the various firms for the study; convenience sampling is probably the most common of all sampling techniques. With convenience sampling, the samples are selected because they are accessible to the researcher. Subjects are chosen simply because they are easy to recruit. This technique is considered easiest, cheapest and least time consuming (Kumekpor, 2002).

The Researcher visited the various sites in both Kintampo South and North Assemblies where projects were being undertaken by small and medium scale firms, and administered the prepared questionnaire to any of the artisans that were on sites during his visits.

3.6 Data Collection Procedures

Two types of data were collected. These were secondary information (data) and primary data. Secondary data were obtained through the review of existing relevant literature sourced from journals, conference text books, and those obtained from the internet. Primary data were obtained mainly from the conduct of survey using questionnaires.

The questionnaires were administered and collected by the researcher and assisted by trained personnel. The personnel who assisted in administering the questionnaires were trained

systematically by taking them through the vetted questionnaire. They were also involved in the pre-test to get them through the vetting questionnaire. Some of the questionnaires were collected on the spot after respondents had filled them and others were collected a week later. Other methodologies that were employed in addition to the above include; interviews, site visits and Journals.

3.7 Research Instrument

Questionnaires were used because it covered a large number of respondents who could answer freely with no personal contact. The questions were directed to the stakeholders and answered by each group of people chosen as the population. The question items included pre-coded and lexis scale type questions. About the lexis, scale respondents were asked to indicate the extent to which they agree with the statement provided.

3.8 Data Analysis

Tables were used to analyze and summarize the scores to determine the challenges facing small and medium scale building construction firms in Ghana. Again pie charts were also employed to enhance the interpretation of the data.

CHAPTER FOUR

4.1 Introduction

This chapter is devoted to the analysis of the responses to the survey questions. It is categorised into four parts, with part one having different sub-sections.

PART ONE: - RESPONSE TO CONTRACTOR'S QUESTIONNAIRES

Section A: Analysis of Contractors Responses

4.2 Background information of Contractors

Table 4.1a and Table 4.1b contain the background information of the contractors. It highlights on their classifications, the types of companies in the study area, types of contractors, registration with register general, classification of contractors and types of company.

Table 4.1a Background Information of Contractors

1. Types of contractors in the study area?			
Building Contractors	Road Contractors	Electrical Contractors	Total
80	12	5	97
82.4%	12.5%	5.1%	100.0%
2. Is your company registered with the Register General?			
Yes		**No**	**Total**
96		1	97
98.9%		1.0%	100.0%

Table 4.1a reveals that, 82.4 per cent of the contractors are building contractors, as their clients (Assemblies) activities revolve mainly on building, about 12.5 per cent of the contractors are road contractors and 5.1 per cent are electrical contractors who are engage by the Assemblies to do some electrical works for them.

Majority (98.9%) of the small and medium-scale firms have registered their companies with the appropriate register general's office and 1 per cent of the firms have not been registered with the Ministry of Water Resources Works and Housing.

Table 4.1b Background Information of Contractors

1. Classification of contractors.				
D1K1	**D2K2**	**D3K3**	**D4K4**	**Total**
2	5	63	27	97
2.1%	5.2%	64.9%	27.8	100.0%
2. Types of Company				
Sole proprietorship		**Joint**		**Total**
93		4		97
95.9%		4.1%		100.0%

According to Table 4.1b, 63 of the contractors representing 64.9 per cent are D3K3 contractors, (27.8%) of the firms are properly registered under the class of D4/K4, whiles (5.2%) are registered as D2K2 and a few (2.1%) are D1K1 contractors.

Majority (95.8%) of the small and medium-scale companies are sole proprietorship contractors and (4.3%) of the firms are joint ventures.

SECTION B: Analysis of Contractors Responses to Problems of Regulations, Registration etc.

This section of the analysis looked at the contractors assessment of the registration procedures involved in getting a firm registered, the possibility of contractors using friends certificate in tendering for projects, how contractors see the tendering processes as well as the Evaluation Reports, Assessment of the regulation in the construction industry, Contractors sources of soliciting of projects and opportunities available in the country's construction industry.

4.3 Assessment of Registration Procedure

Majority (92.7%) of respondents as indicated in figure 4.1 find the registration procedures as cumbersome and frustration, as the registration is done at the national level no matter where one is in this country, not to talk about the number of registration that they have to go through with the various Districts and Municipal Assemblies where they have to bid project. 7.2 per cent on the other hand are happy about the registration procedure in the industry, as they believe that it keeps some sort of checks and balances in the industry and also helps the district assemblies to increase their revenue base.

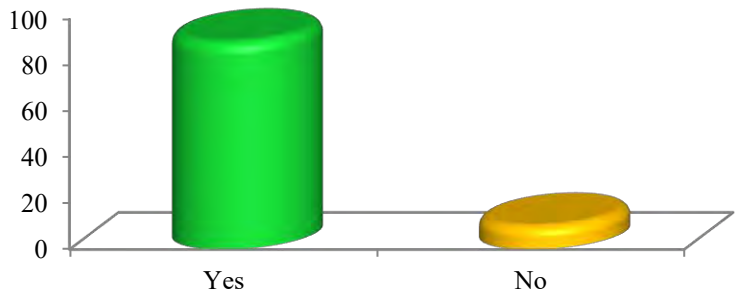

Fig 4.1 Assessment of contractor's registration procedure in the country

4.4 Usage of Friends' Certificate in Tendering

Table 4.2 Usages of Friends' Certificates in Tendering

	Frequency	Percent
Yes	65	67%
No	32	33%
TOTAL	**97**	**100%**

According to Table 4.2, (67%) of the contractors have used their friends' contract certificates to tender for projects and 32 of the contractors representing (33%) of have not done that before.

4.6 Regulation in the Construction Industry

Table 4.3 Regulation in the Construction Industry

	Frequency	Per cent
Yes	87	89.6%
No	10	10.4%
Total	**97**	**100%**

Table 4.3 reveals that majority (89.6%) of the respondents are not happy about the regulation in the industry and whiles 10 of the contractors representing 10.4 per cent are happy about how the construction industries are regulated.

4.7 Areas of Soliciting for Jobs

From figure 4.2, majority (82.4%) of the contractors, solicit for project through competitive tendering, 13.4 per cent of the contractors solicit for jobs through negotiation tendering (with private individuals) and a few (4.1%) of the firms gets project through sub-contracting.

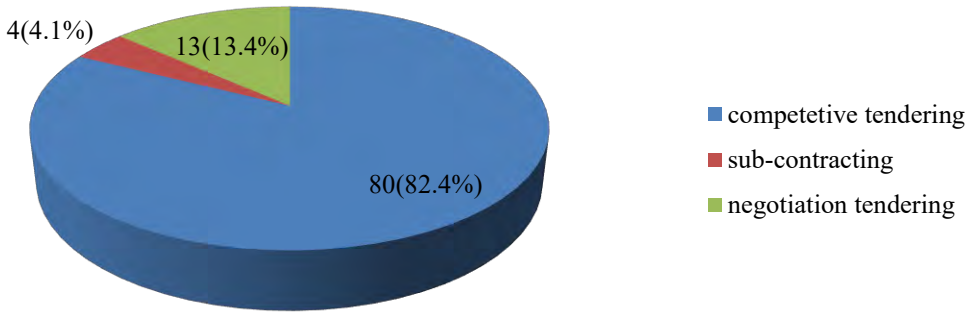

Fig 4.2 Areas of soliciting for projects

4.8 Assessment of Procedure for Contract Award/ Evaluation Reports

Table 4.4 Assessment of Procedure for Contract award

	Frequency	**Per cent**
Yes	87	89.6%
No	10	10.4%
Total	**97**	**100%**

According to Table 4.4, more than two-third (89.6%) of the contractors do not have confidences in the procedure for contract award in the country, as they see the tendering or procurement processes a mere formality that their clients subject them in to, as many at times, the winner of a particular project is a prearranged, based on ones level of "connection". and 10.4 per cent of the firms have confidence in the procurement processes.

4.9 Opportunities Available to Contractors in Ghana

According to Figure 4.3, 62 of the contractors, representing 64 per cent indicated that, there is flexibility in laws, relating to environment, labour, sustainability, health and safety in Ghana, 26 per cent of availability of market with respect to construction works in the country as it is a developing nation and (10%) of tax reliefs on construction activities as compared to other developed countries.

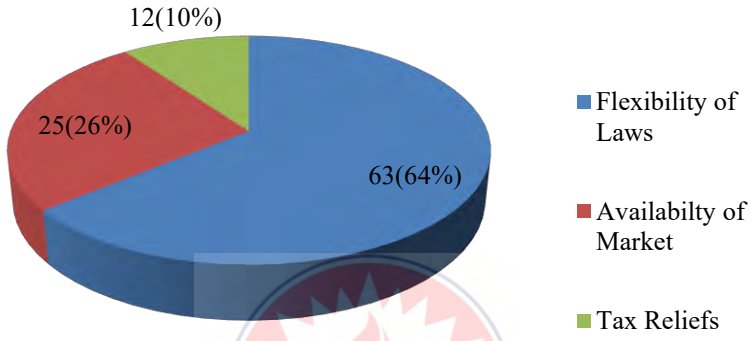

Fig 4.3 Opportunities available to small and medium scale contractors

SECTION C: Main Challenges of the Contractors

This Section of the analysis looks at the main challenges faced by Small and Medium Contractors in the study area.

4.10 Registration Challenges of firms

Majority (74.3%) of the contractors are faced with the challenge of the registration being centralized, whiles 15% of the firms interviewed have difficulty with the financial involvement in getting a firm registered and 10.3% of the firms see the whole registration process as cumbersome.

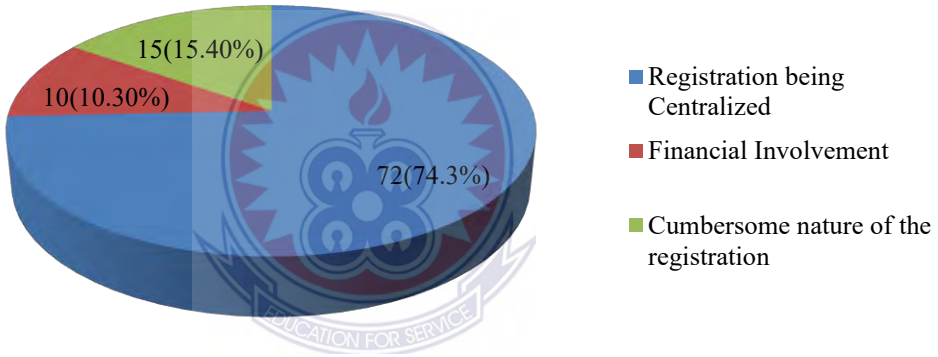

Fig 4.4 Challenges face with registration

4.11Financial Challenge

Figure 4.5 reveals that, 77.3 per cent of the small scale and medium-scale find it difficult in getting loans or access loans to execute projects, 19.9 % of the respondents or firms are worried or challenged with the high interest on the loans they accessed from their bankers and 3 of the respondents, representing 3.1 per cent are faced with the challenge of getting bank guarantee to take advance loans from their clients.

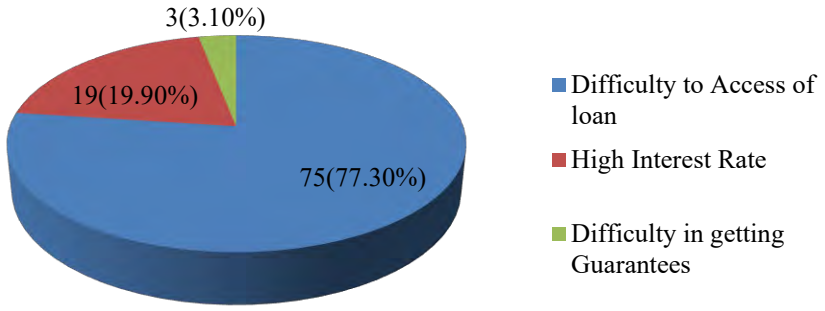

Fig 4.5Financial Challenges Facing Small and Medium Scale Firms

4.12 Contractor's Records Keeping System

According to Figure 4.6, majority (78.7%) of the firms have poor records keeping, whilst (10%) have good record keeping customs, 8 of the contractors representing 8.2 per cent have a very good record keeping habit and only a few (3.1%) have a well defined record keeping systems.

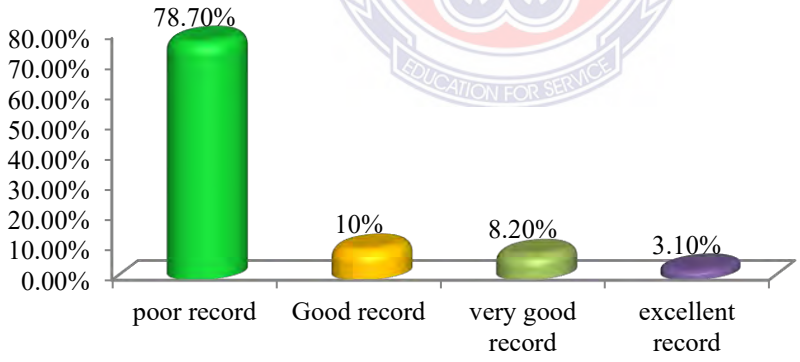

Fig 4.6 Records keeping

4.13 Technical/Personnel Challenges

Table 4.5 Technical Challenges

	Frequency	Per cent
Yes	73	75%
No	24	25%
Total	**97**	**100%**

Table 4.5 reveals that, 73 of the contractors representing 75 per cent have challenges with personnel. 25 per cent of the small and medium scale building contraction firms has no technical challenges.

4.14 Challenges with Payment of Certified Work.

Table 4.6 Rate of Payment of Certified Work Done

	Frequency	Per cent
Very late	80	82.5
Late	12	12.3
Timely	3	3.1
Very timely	2	2.1
Total	**97**	**100%**

According to Table 4.6, two third (82.5%) of the contractors mostly receive payments of certified work done very late, whiles 12 of the contractors, representing 12.5 per cent receive their payment of certified work late, 3 of the contractors representing 3.1 per cent usually

receive their payments on timely and few (2.1%) receive their monies very timely, as stipulated in the condition of contracts.

4.15 Challenges with Invitation to Tender Requirements

Table 4.7 Challenges with Invitation to Tender Requirement

	Frequency	Per cent
Provision of bonds and securities	78	80.4
Cost of tender documents	13	13.4
Mood of Advertisement	3	3.1
Competing with higher contractors	2	2.2
Total	**97**	**100%**

Table 4.7 reveals that majority (80.4%) of the firms have challenges with regards to the invitation to tender requirements, as the cost involved in getting the bid security or bank guarantees are concerned, 13 of the firms, representing 13.4 per cent have challenges at the cost at which tender documents are being sold.

Whilst 3.1 per cent of the contractor have challenges with the mood at which advertisement are issued out in some news paper which are not widely circulated in the country and 2.2 per cent have challenges competing with other contractor with higher class (e.g. D1K1 contractors).

4.16 Challenges with Clients

Table 4.8 Challenges with Clients

	Frequency	Per cent
Delay in payment	47	48.5
Partisan Polities	44	45.4
Cost of Tender Documents	6	6.1
Total	**97**	**100%**

According to Table 4.8, nearly 48.5 per cent of contractors have challenges with their client's inability to pay them on time, 44 of the contractors representing 45.1 per cent of the small and medium scale firms are worried or challenged by the involvement of partisan politics in the construction industry, more especially when it comes to government projects and 6.1 per cent have challenges at the high cost at which tender document are being sold recently.

4.17 Challenges with Consultants

Table 4.9 Challenges with consultants

	Frequency	Per cent
Ambiguity in tender documents	47	48.5
Poor supervision	39	40.2
Numerous variation orders	7	7.2
Certification of invoices	4	4.1
Total	**97**	**100%**

Table 4.9 reveals that, 48.5 per cent of the small and medium scale building construction firms has problems with the tender document prepared by projects consultants, whilst 40.2% per cent have problems with the poor supervision of projects on the part of project consultants.

It could be seen from Table 4.9 that, 7 of the firms, representing 7.2 per cent have problems with the numerous variation orders received from consultants and 4.1 per cent of the firms have difficulty in getting consultants to certify their prepared certificates.

4.18 Contractor's Equipment Holdings

Table 4.10 Equipment Holding of the Firms

	Frequency	Per cent (%)
Excellent	2	2.1
Very good	3	3.1
Good	4	4.1
Poor	88	90.7
Total	**97**	**100**

According to Table 4.10, more than two third (90.7%) of the contractors have poor equipment holding, 4.1 per cent have good equipment holding and a little proportion of the contractors (3.1%) of the firms have very good requisite equipment.

It could also be seen from Table 4.10 that 2 of the contractors representing 2.1 per cent have the requisite equipment.

4.19 Managerial Challenges of the Firms

Table 4.11 Managerial Challenges of the firms

	Frequency	Per cent (%)
Excellent	4	4.2
Very good	5	5.2
Good	9	9.3
Poor	79	81.5
Total	**97**	**100**

Table 4.11 disclosed that, one forth (81.5%) of small and medium scale building construction firms has poor managerial skills, 9.3 per cent have good managerial abilities and 4.2 per cent seems to have a very good managerial cleverness.

It could be seen from Table 4.11 that, a little around 4.2 per cent of the contractors have excellent managerial supremacy.

4.20 Leadership Challenges

Table 4.12 Leadership Qualities of the Firms

	Frequency	Per cent (%)
Excellent	2	2.1
Very good	3	3.1
Good	9	9.3
Poor	83	85.5
Total	**97**	**100**

According to Table 4.12, one fourth (85.5%) of the contractors have poor leadership qualities and 9.3 per cent have good qualities when it comes to leadership.

Around 3.1 per cent of the small and medium scale building constructions firms has very good leadership virtues and just a few (2.1%) have excellent leadership skills.

4.21 Challenges at the Construction Site

According to Figure 4.7, more than half (55%) of the contractors have challenges at the construction stage in respect to site condition, location of site, access to site, ground condition and organisation at the site.

It could be seen from Figure 4.7 that, 27 per cent have challenges at the construction stage in respect to unpredictable items at the site as such hidden obstructions and economic conditions, 10 per cent have challenges to construction method to be employed at the site and 8 per cent have challenges with contract conditions.

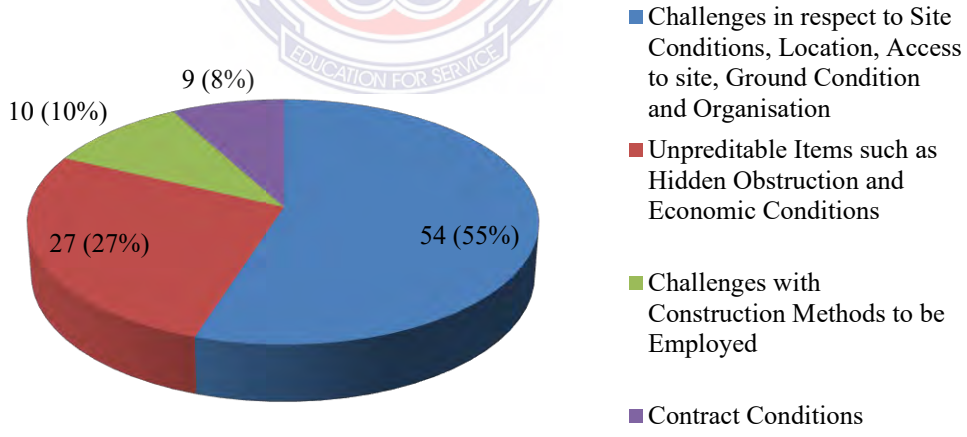

Fig 4.7 Challenges face at the construction Stage

Part Two: - Response from Interviews of District Co-ordinating Directors, District Planning Officers and District Engineers.

4.22 Analysis of Interviews with District Co-ordinating Directors, District Planning Officers and District Engineers

This section of the analysis takes a look at the response from the key personnel of the District Assemblies, who normally have encounter with the contractors. In all eight officers from both District Assemblies were interviewed.

It highlights on the types of work usually undertaken in the two districts, the registration system by the contractors in the districts, the number of projects that have been abandoned by contractors in the various districts as well as the possible causes of those abandoned projects.

Table 4.13a Analysis of the responds from the District Co-ordinating Directors, District Planning Officers and District Engineers

1. How long have you been in this district?

9-7years	6-4years	3-1 year	Total
5	2	1	8
62.50%	25.0%	12.50%	100.0%

2. Which class of building contractors do you usually work with?

D1K1	D2K2	D3K3	D4K4	Total
1	1	2	4	8
12.50%	12.50%	25.0%	50.0%	100%

Averagely, how many D3K3 and D4K4 building contractors have you worked with in the last five years?

70-50 years	50-30years	30-20years	20-5years	Total
4	2	1	1	8
50.00%	25.0%	12.50%	12.50%	100%

According to Table 4.13a, 62.50 per cent of the key staff of the district assemblies has worked for 7-9 years, which was very helpful to the researcher as they were able to provide the necessary information concerning the contractors, 25 per cent have worked at the districts between 4-6years, whiles 12.5 per cent have be working at their various district between 1-3 years. Half (50%) of the contractors have worked with the assemblies for the last five years are D3K3 contractors, 25 per cent are D4D4 contractors.

Table 4.13b Registration systems at the District Assemblies, abandoned projects in the Districts etc

Do contractors have to register with assembly before they transact business with district Assembly?		
Yes	**No**	**Total**
8	0	8
100.0%	.0%	100.0%
Have there be a situation whereby D3K3 and D4DK contractors abandoned projects in your district.		
Yes	**No**	**Total**
6	2	8
75%	25%	100.0%
How many projects have D3K3 and D4K4 building contractors abandoned in your district in the last five years?		
20-10 projects	15-10projects	10-5 projects	Total
2	2	4	8
25.00%	25.00%	50.00%	100%

According to Table 4.13b, any construction firm that wants to business with the district assemblies, will have to register with them. 4 of the officers, representing (50%) indicated that between 5-10 abandoned projects in the districts assembly were those which was being

constructed by D3K3 and D4K4 firms, 25 per cent indicated that between 10-15 abandoned projects were being handled by D3K3 contractors and 2 of the officers representing 25 per indicated the between 10-20 abandoned projects in their district were being handled by D3K3 and D4K4 contractors.

4.23 Causes of Project Abandoned in the Districts

According to Figure 4.8, half (50%) of the District Assembly's staff indicated that, the causes of the abandoned projects were the non-payment of certified work, 3 of the senior staff, representing 37.50 per cent indicated that, the causes of the abandoned projects in their district were as a results of managerial incompetence on the part of the contractors.

It could be seen from Figure 4.8 that, 25 per cent of the worker believe that the causes of the abandoned projects in their district has to do with the inadequate technical and equipment holding of the small and medium scale firms.

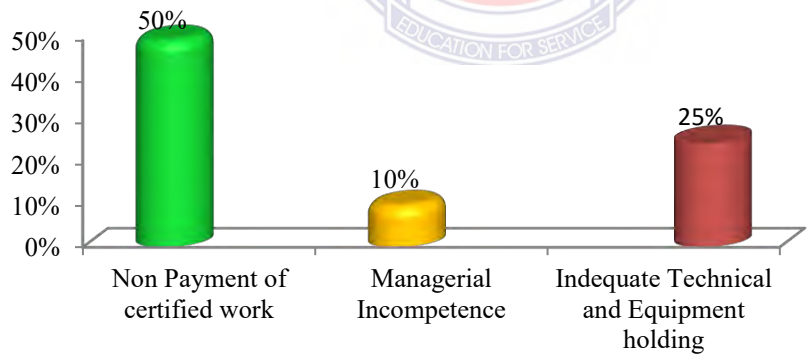

Fig 4.8 causes of abandoned projects in the districts

4.24 Analysis of Interviews of the Tradesmen

This section of the analysis takes a look at the response by the operatives of the contractors. It highlights on their level of motivation, the level of education and the number of refresher course attended by these operatives in the last five years etc.

In all 100 skilled and unskilled workers were interviewed through questionnaires and interpersonal conversations.

Part Three: - Response from interviews of Tradesmen

Table 4.14a Analysis of response from Tradesmen on their profession, educational qualification etc

1. What is your profession?

Mason	Carpenter	Steel bender	Total
55	30	15	100
55.0%	30.0%	15.0%	100.0%

2. Educational level of tradesmen.

Tertiary	Secondary	Vocational	Total
5	25	70	100
5.0%	25.0%	70.0%	100.0%

3. Working Experience of tradesmen with their firms

Less than a year	2years	4years	7years	Total
10	12	35	43	100
50.0%	12.0%	35.0%	43.0%	100.0%

According to Table 4.14a, more than half (55%) of the tradesmen working with the small and medium scale firms are masons, 30 per cent are carpenters and 25 of the tradesmen representing (25%) are steel benders.

Majority (70%) of the workforce is from vocational and technical institutions, 25 per cent are secondary school leavers and few (5%) are graduates from tertiary schools.

Half (50%) of the workforce of the small and medium scale firms have worked with the firms for less than a year, 43 of the workforce, representing 43 per cent have worked with their respective firms for seven years, 35 per cent have worked with the firms for four years and 12 per cent of skilled and unskilled laboures have worked with their firms for two years.

Table 4.14b Analysis of response from Tradesmen with respect to trainings and refresher programmes

1. Were you given any training prior to you appointment?

Yes	No	Total
10	90	100
10%	90%	100.0%

2. Have you attended any refresher program or workshop within the last five years?

Yes	No	Total
12	88	100
12%	88%	100%

Majority (90%) of the skilled and unskilled were not given any form of training prior to their employment, whilst 10 per cent were given some form of training before they were employed by their companies.

Table 4.14b; reveal that 88 per cent of the tradesmen have not attended any form of refresher courses in the last five years and around 12 per cent have attended a refreshers programme or course in the last five years.

4.25 Motivational Mechanisms of Small and Medium Scale Firms

According to Figure 4.9, the major source of motivation by the small and medium scale firm to their workforce is the provision of free accommodation, 35 per of motivation in working with D3K3 and D4K4 building construction firms is through financial rewards and 9 per cent is by recognition.

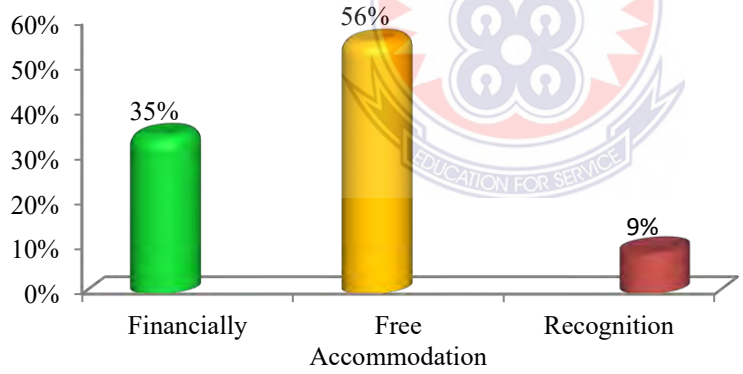

Fig 4.9 Motivational mechanisms of small and medium scale firms

Part Four: Synthesis

This part brings together the analysis of all the interviews held with the stakeholder involved in the study.

Majority (74.3%) of the respondent have problems/challenges with the registration being centralized whiles 15 per cent of the firms interviewed have difficulty with the financial involvement in getting a firm registered and 10.3% of the firms see the whole registration process as cumbersome.

Majority, 77.3 per cent of the small and medium-scale firms have difficulty or challenges of getting or accessing loans or credit to execute their projects, whilst (19.9%) of the contractors are worried or challenged with the interest rate on the loans they accessed from their bankers 3 of the respondents, representing 3.1 per cent have difficulties of getting bank guarantee to take advance loans from their clients.

Majority (78.7%) of the firms have poor records keeping, whilst (10%) have good record keeping customs. 8 of the contractors representing 8.2 per cent have a very good record keeping habit and few (3.1%) have a well defined record keeping systems. 73 of the contractors representing 75 per cent have challenges with personnel and 25 per cent of the small and medium scale building contraction firms has no technical challenges.

Two third (82.5%) of the contractors mostly receive payments of certified work done very late.

12 of the contractors, representing 12.5 per cent receive payment of certified work late, 3 of the contractors representing 3.1 per cent usually receive their payments timely.

2.1 per cent receive the monies very timely, as stipulated in the condition of contracts.

Majority (80.4%) of the firms have challenges with regards to the invitation to tender requirements, as the cost involve in getting the bid security or bank guarantees are concerned, 13 of the firms, representing 13.4 per cent have challenges at the cost at which tender documents are being sold, whilst 3.1 per cent of the contractor have challenges with the mode at which advertisement are issued out in some news paper which are not widely circulated in the country.

2.2 per cent have challenges competing with other contractor with higher class (e.g. D1K1 contractors).

Nearly 48.5 per cent of contractors have challenges with their client's inability to pay them on time. 44 of the contractors representing 45.1 per cent of the small and medium scale firms are worried or challenged by the involvement of partisan politics in the construction industry, more especially when it comes to government projects and 6.1 per cent have challenges at the high cost at which tender document are being sold recently.

About, 48.5 per cent of the small and medium scale building construction firms has problems with the tender document prepared by projects consultants. Whilst 40.2 per cent have problems with the poor supervision of projects on the part of project consultants. Also 7 of the firms, representing 7.2 per cent have problems with the numerous variation orders received from consultants and 4.1 per cent of the firms have difficulty in getting consultants to certify their prepared certificates.

More than two third (90.7%) of the contractors have poor equipment holding, 4.1 per cent have good equipment holding. A little proportion of the contractors (3.1%) have all the requisite equipment and 2 of the contractors representing 2.1 per cent have the requisite equipment.

Two third (81.5%) of small and medium scale building construction firms have poor managerial skills, 9.3 per cent have good managerial abilities, 4.2 per cent seems to have a very good managerial cleverness and a little around 4.2 per cent have excellent managerial supremacy.

One fourth (85.5%) of the contractors have poor leadership qualities, 9.3 per cent have good qualities when it comes to leadership. 3.1 per cent of the small and medium scale building constructions firms have very good leadership virtues and just a few (2.1%) have an excellent leadership skills.

More than half (55%) of the contractors have challenges at the construction stage in respect to site condition, location of site, access to site, ground condition and organisation at the site.
27 per cent have challenges at the construction stage in respect to unpredictable items at the site, hidden obstructions and economic conditions. 10 per cent have challenges to construction method to be used at the site and 8 per cent have challenges with contract conditions.

About, 62.50 per cent of the key staff of the district assemblies has worked for 7-9 years, which was very helpful to the researcher as they were able to provide the necessary

information concerning the contractors. 25 per cent have worked at the districts between 4-6 years whiles 12.5 per cent have been working at their various districts between 1-3 years.

Almost, if not majority (50%) of the contractors that have worked with the district assemblies for the last five years are D3K3 contractors, 25 per cent are D4D4 contractors.

Half of (50%) respondent indicated that between 5-10 abandoned projects in the districts assembly were those being constructed by D3K3 and D4K4 firms. 25 per cent indicated that between 15-10 abandoned projects were being handled by D3K3 contractors.

Two (2) of the officers representing 25 per indicated the between 20-10 abandoned projects in their district were being constructed by D3K3 and D4K4 contractors.

50 per cent of the District Assembly's staff indicated that, the causes of the abandoned projects were the non-payment of certified work, 3 of the senior staff, representing 37.50 per cent indicated that, the causes of the abandoned projects in their district were as a results of managerial incompetence on the part of the contractors.

25 per cent of the worker believe that the causes of the abandoned projects in their district has to do with the inadequate technical and equipment holding of the small and medium scale firms.

More than half (55%) of the tradesmen working with the small and medium scale firms are masons, 30 per cent are carpenters. 25 of the tradesmen representing (25%) are steel benders.

Majority (70%) of the workforce is from vocational and technical institutions, 25 per cent are secondary school leavers and a few (5%) are graduates from tertiary schools.

Half (50%) of the workforce of the small and medium scale firms have worked with the firms for less than a year, 43 of the workforce, representing 43 per cent have worked with their respective firms for seven years.

35 per cent have worked with the firms for four years and 12 per cent of skilled and unskilled laboures have worked with their firms for two years.

Majority (90%) of the skilled and unskilled were not given any form of training prior to their employment, whilst 10 per cent were given some form of training before they were employed by their companies.

It was reveal that, 88 per cent of the tradesmen have not attended any form of refresher courses in the last five years and around 12 per cent have attended a refresher programs or course in the last five years.

The major source of motivation by the small and medium scale firm to their workforce is the provision of free accommodation, 35 per of motivation in working with D3K3 and D4K4 building construction firms is through financial rewards and 9 per cent is by recognition.

CHAPTER FIVE

DISCUSSIONS

5.1Registration Challenges

The Ministry of Water Resources Works and Housing guidelines for the classification of contractors indicate that the exercise "aim at the proper grading of contractors into respective categories and financial classes. A contractor who wishes to apply for classification under these guidelines should first satisfy himself that he can fulfill the basic requirement in this document" (MRT, 2001, p.2). The classification system is highly controversial, cumbersome and could hinder the development and survival of small and medium contractors. Although not compulsory with the narrow base of the private sector, only well established contractors could afford not to consider it for government sponsored projects. The procedure involves six steps in which the Chief Director, technical sub-committee, classification committee and the Minister of the respective ministry are involved.

The argument that the exercise would facilitate easy access to the numbers of contractors within each financial class and the number of work they undertake to influence government policy does not hold in Ghana. Investigation revealed that MWRWH do not have an up-to-date list of contractors operating within their sectors. Many contractors could be identified on the register list, but have seized to operate for several years (Eyiah and Cooke, 2003).

It was revealed that all the firms within the study area are duly and properly registered under the Ministry of Water Resources Works and Housing.

However, 74.3 per cent of these firms complained bitterly about the centralized nature of the registration process. The registrations according to the contractors are done at the national level, notwithstanding where one is coming from, which is of a great challenge to them.

Another equally important challenge being faced by these firms is the amount of money one has to spend in getting his or her firm registered. The registration, from personal interaction with some of the contractors is costing Ghc 2,000.00 to Ghc3, 000.00 depending on the class one is looking for. The cumbersome nature of the registration process is another challenge to the firms.

The finding seems to support Aniekwa (1994) claim that, the whole process for the registration is very cumbersome and frustrating.

It also support Amposah (2007) statement that " in addition, the other government agencies like the Metropolitans, Municipals and the District Assemblies (MMDAs) where these firms do business with also expect them to register with them before they can actually take project from them. The amount been charged at the various sector where the registration is done is very high"

5.2 Financial Challenges of the Firms

It is undeniable fact that, construction activities are capital intensive, and requires firms and individual who are financially sound to undertake them.

However, It was established from the research that, majority of the firms (77.3%) are faced with the challenge of getting loans and other credit facilities to undertake much of their projects which have been awarded to them.

Another challenge being faced by small and medium scale firms is the interest rates charge on the loans that they have to struggle to get. Some banks and other credit facilities where these firms take loans to execute their projects, takes exorbitant charges on their loans. Aside this, the firms are at times required to provide some form of securities, which according them are difficulty to come by.

Some clients or projects make room for advance payment to successful contractors, upon the firm's ability to provide an Advance Bond or Advance Bank Guarantee from an Insurance Company or Banks respectively. The difficulty and the financial involvement in acquiring this Security is another challenge to these firms.

The finding gives credence to Aryeetey (1994) assertions that, the most significant institutional weakness facing dynamic small and medium scale firms is their lack of access to external finance. Repressive financial policies in the past, especially low interest, and a monopolistic banking system minimized the interest of banks in developing this market. To reverse the consequences of these practices, a combination of financial liberalization and institutional reform was in order.

It seems to give credence to Ofori (2002) claim that, most of the small scale and medium scale firms raise capital through other credit facilities, and of late, the interest rate in connection to the loans given by banks are very high, making interest payment on the loans or other credit facilities difficult to pay, which eventually erodes the profit on their project.

5.3 Records Keeping

Crainer (1990) stated that, poor record keeping is a cause for start-up business failure.

In most cases, this is not only due to the low priority attached by new and fresh entrepreneurs, but also lack of basic business management skills. Most business people, therefore, end up losing track of their daily transactions and cannot account for their expenses and profits at the end of the month.

It was revealed from interpersonal interviews with some of the small and medium scale contractors that, they do value the essence of keeping records on their day to day activies.

Most of the firms interviewed have no offices meant for the companies and the principal owners used either their cars or small portfolios' as their offices, thereby making record keeping very difficult.

Generally however, majority (78.7%) of these firms admitted that their levels of record keeping is nothing to write home about and has been of a challenge.

The finding seems to support Crainer (1990) statement that, poor record keeping is also a cause for start-up business failure. In most cases, this is not only due to the low priority attached by new and fresh entrepreneurs, but also a lack of basic business management skills. Most business people, therefore, end up losing track of their daily transactions and cannot account for their expenses and profits at the end of the month.

5.4 Technical Challenges

There is a wide disparity in the standard of competence across the industry, a largely semi-skilled, itinerant work force, a general low standard of education and qualifications in technical staff employed in the industry.

The study revealed that about 75% of the small and medium scale firms are not able to employ the people with the technical know-how into their firms. They are thus compelled to employ semi-skilled workers who levels of appreciating certain construction activities are very low.

The finding affirms Cook and Williams (2004) declaration that successful project cannot happen in vacuum; however, no-one can effectively plan and control a project without understanding the culture and methodologies of the industry that organises and carried out the work. Again, it supports Walker (2002) assertion that, there is a wide disparity in the standard of competence across the industry, a largely semi-skilled and itinerant work force and a

general low standard of education and qualifications in technical staff employed in the industry.

5.5 Challenges of Payment of Certified Work Done.

The study revealed that, two third (82.5%) of the contractors mostly receive payments of certified work done very late, whiles 12 of the contractors, representing 12.5 per cent receive their payment of certified work late.

3 of the contractors representing 3.1 per cent usually receive their payments on timely and a very few (2.1%) receive the monies very timely, as stipulated in the condition of contracts.

It was also established that the non-payment of certified work done by contractors, especially government projects has contributed significantly to the collapse of more firms in the country than any other problems. The argument raise in some quarters is that, these firms are required by some contracts to submit line of credit to sustain them in their project life cycle that actually is not any justification for their certified work done not being paid.

5.6 Challenges with Invitation to Tender Requirements

Majority of the respondents (80.4%) indicated that, the major challenge faced with the invitation to tender is the high cost involved in getting Bonds and Securities during tendering. The requirements by clients for tenderers to provide them with the above mentioned bonds have its associated challenges.

Another disturbing challenge facing small and medium scale firms is the payment of bribes before they are awarded contracts, about 30% of the respondents has this challenge.

As indicated by Croswell and McCutchen (2001), small scale and medium scale contractors can be economically useful if projects are designed to suit their capability. About 2.2 per cent

of the respondents are faced with the challenge of competing with other contractors of high class for a similar job.

The finding gives credibility to Laryea (2001) pronouncement that "to be able to secure a job from client, more especially at the District Assemblies levels and to the large extend the other ministries, a firm needs to meet some minimum requirements, which are usually spelt-out in the invitation for tenders (IFT). The provision of these requirements comes with its own cost, as the agencies from which these securities, insurances and other professional indemnities will be obtained, charge exorbitant fees before they release these documents to the contractors"

Again, it supports Olken (2009) observation that, another challenge that a small and medium scale building contraction firms have to go through in winning a project, is the competition that comes with projects invitation, as most of them invite different classes of contractors to tender for a particular job, example. D3K3 and above, which obviously place the smaller firms in a very difficult condition to secure such a job.

Finally, Croswell and McCutcheon (2001) declared that, for small scale building contractors to be economically useful, projects should be designed to suit their capacity.

5.7 Challenges with Clients

Nearly half (48.5%) of the respondents indicated that, the major challenge they face with their clients is their inability to pay them the certified work done. Personnel interaction with the respondent revealed that the situation is more disturbing with Government funded projects.

The study also revealed that clients to most projects found it extremely difficult to pay their contractors their retention monies on time. In this regard contractors also fell reluctant to attend to some defects after the defect liability period.

A sizable number of the respondents (45.1%) are challenged by the present partisan politics which has virtually eaten in all sphere of our recital, as most of their clients are government institutions, as any change of government affects their work.

This finding confirms an earlier research conducted by Walker (2002) which revealed that, contractors working in Ghana face a great challenge with respect to payment of certified work done, more especially Government of Ghana (GoG) funded projects. Certified work done are not pay on time, which go a long way to affect contractors on their profit margins, increase interest on loans collected from their financial institutions.

This finding confirms an earlier research conducted by Laryea (2010) which indicated that Partisan politics is another contemporary challenge facing Ghanaian contractors, especially those working with the District Assemblies and other governmental agencies. As most District Chief Executives (DCEs) who inherit projects that had been awarded by their predecessors, deliberately refused to pay certificates submitted to them on such projects, as they see those contractors, as contractors of the then District Chief Executives or the political party at that time, hence the abandoned of projects in our various Assemblies.

5.8 Challenges with Consultants

Challenges face with consultants as indicated by some of the contractors' ranges from poor preparation of tender documents to poor supervision, numerous variations orders to untimely preparation of certificate.

Nearly half (48.5%) of the respondents indicated that they have problems with the tender document prepared by projects consultants. 42 per cent complained about the poor supervision on the part of consultants. Whiles 7.2 per cent complained about the numerous variation orders received from consultants handing their projects. It was revealed that 4.1 per

cent of the contractors have difficulty in getting consultants to prepare their certificates for them, to the extent that some consultants demand monies before they prepare the certificates. The above mentioned factors pose a great challenge to contractors as they depend solely on the information provided by these consultants in arriving at some vital decisions.

5.9 Challenges with Equipment

The research revealed that, majority (90.7%) of the contractors have bad equipment holding, 4.1 per cent have good equipment holding, a little proportion of the contractors (3.1%) have all the requisite equipment.

5.10 Leadership Challenges

The results revealed that, majority (85.5%) of the contractors have poor leadership qualities, 9.3 per cent have good qualities when it comes to leadership. 3.1 per cent of the small and medium scale building constructions firms have very good leadership virtues and just a few (2.1%) have excellent leadership skills. Hence it can be deduced that indeed Small Scale and medium scale contractors will continued to be less productive and effective since they lack quality leadership.

Hancock (1995) stated that the effectiveness of an organization also depends on the ability to integrate the workforce into a well-motivated and productive team that is committed to the completion of projects and overall success of the firm.

Leadership is the lifting of man's vision to higher sights and rising of man's performance to a higher standard. Management can only create the leadership under which potential leadership qualities become effective (Drucker, 1989).

Dixion (1991) defines leadership as the process of directing and influencing the work of team members. Leadership is concerned with guiding and directing other.

Clutterbuck and goldsmith (1984) indicate that to be effective 'leaders must be seen'. Perhaps the question should be posed, 'how many times in the last twelve months have you had personal contact with your company chairman or Chief Executive? Perhaps not at all!

The finding seems to support Dixion (1991) assertion that, traditionally leadership has tended to be associated with autocratic command, especially within the small – scale firms which the medium – scale firm developed from. Many of the small and medium scale firms' directors or managers still see leadership mainly in terms of issuing orders which are obeyed by subordinates without questions.

5.11Challenges at the Construction Site

Majority of the respondents indicated that, they are faced with some challenges at the construction stage, from site condition to location of site (i.e. availability of labour, materials, special transport facilities, extra charges, deliveries disposals, haulage distances and other associated works), access to site, ground condition (Ground conditions affect the choice of equipment transportation, mechanical plant, foundation type and design in relation to variations in ground conditions) and organisation at the site (this affect the progress of work, speedy completion, usually a reflection of efficiently organised site since organized laid-out and tidy site enhance safety since accidents cause hold up, thereby increase cost of work).

Nearly 27% are faced with the challenge of unpredictable items at the site, hidden obstructions and economic conditions. Whiles 10% have challenges to construction method to be used at the site, and about 8% have challenges with contract conditions.

5.11.0 Discussion of Analysis of the Responses by the Key Personnel of the District Assembly

This part of the research looked at the discussion of the analysis of the responses by the District Co-ordinating Directors, District Planning Officers and the District Engineers of the two Assemblies.

5.11.1 Number of years spent in the Districts by the key personnel in the District Assemblies

It was established that, majority (62.50%) of the key staff of the district assemblies has worked for 7-9 years, which was very helpful to the researcher as they were able to provide the necessary information concerning the contractors.

25 per cent have worked at the districts between 4-6 years and 12.5 per cent have be working at their various district between 1-3 years.

5.11.2 What Class of Contractors do you usually do business in this Assembly?

It came that 66 per cent of the of the physical infrastructures in the various Districts have been executed by the D3K3 Contractors, whiles 33% of the assemblies' developmental projects have been undertaken by D4K4 Contractors.

The finding seems to back Liedholm and Mead (1999) assertion that, D3K3 and D4DK contractors are the major feature of the economic landscape in all developing countries today; they are powerful instruments for generating job opportunities as small contractors can perform small projects at different and remote geographical locations that might be unattractive to big firms or too costly for the big firms. Miles and Ward (1991), in their study in Ghana, sponsored by the ILO, justified their focus on small contractors on the grounds that:

• They are powerful generators of income and employment.

• Without a network of efficient small contractors, rural health centres, villages water suppliers, low-cost roads and similar projects are often difficult or expensive to provide.

• The more soundly based the small-scale sector can be made the better will be the prospect for the development of medium and large-scale national firms.

It becomes imperative to develop small contractors, particularly, in situations where foreign contractors feel reluctant to engage themselves in projects in the rural areas (where infrastructure are most needed) because of their financial unattractiveness (Kirmani, 1988).

5.11.3 Contractor's Registration in the Assemblies

All the respondents in the District Assemblies indicated that, the Contractors are expected by the Assemblies to register with Districts before they are allowed to do business with them.

Despite the complex, opaque and costly natures of the registration procedures at the national level, contractors are expected to register with any District where they want transact business.

5.11.4 Causes of Projects being abandoned by Small and Medium Scale Building Firm

Delayed payment of contracts executed can best be classified as the greatest challenge facing small and medium scale contractors, but more worrying is the failure of clients, usually the government, to pay interest or compensation for delayed payment.

Half (50%) of the causes of projects being abandon by contractors are the delay in paying for the certified work done.

It came out that, half (50%) of the senior staff of the districts believe that the causes abandoned projects were the non-payment of certified work.

3 of the senior staff, representing 37.50 per cent indicated that, the causes of the abandoned projects in their district were as a results of managerial incompetence on the part of the contractors and 25 per cent of the workers believe that the causes of the abandoned projects in their district is as a result of inadequate technical and equipment holding of the small and medium scale firms, as most of the personnel of these firms can not appreciate and explain simple project drawings or design, which resulted in demolition.

The finding strongly support the study conducted by walker (2002), which revealed that successful project cannot happen in vacuum; however, no-one can effectively plan and control a project without understanding the culture and methodologies of the industry that organises and carried out the work.

5.12.0 Discussion of Analysis by Operatives

This part of the research looks at the discussion of the analysis of the responses by the operatives of the contractors. It discuss among other things, their level of education, working experience, in-service training for the operatives as well as their means of motivation.

5.12.1 Levels of Education of the Operatives

No-one can successfully plan and manage a project by lacking the culture and methodologies of the industry that organises and carried out the work. There is a wide difference in the standard of competency across the industry, a largely semi-skilled and nomadic work force and a general low standard of education and qualifications in technical staff employed in the industry.

It was divulge that, the education and the technical know-how of the operative are nothing to write home about. Majority (70%) of the workforce is from vocational and technical

institutions, 25 per cent are secondary school leavers and few (5%) are graduates from tertiary schools.

5.12.2 Experiences of the Operatives

It was revealed that, the experiences of the operatives of the contractors are bad, half (50%) of the workforce of the small and medium scale firms, have worked with the firms for less than a year, 43 of the workforce, representing 43 per cent have worked with their respective firms for seven years, 35 per cent have worked with the firms for four years.

12 per cent of skilled and unskilled laboures have worked with their firms for two years.

The low level of the experiences of these workforces have contributed to shoddy works at their various sites, which have resulted in project demolition and subsequent lost of profit margin to their respective firms..

5.12.3 Training of operatives by firms or In –Service Training of the Operatives

Majority (90%) of the skilled and unskilled were not given any form of training prior to their employment, whilst 10 per cent were given some form of training before they were employed by their companies.

Most managing directors of these firms does not see the need to give in-service-training to their workforces, as they believe spending money on such training will not serve the company any good, because the probability of losing them are higher.

5.12.4 Refresher courses for operatives

It was established that majority (88%) of both skilled and unskilled laboures of the construction firms have not attended any form of refresher courses in the last five years. The

construction industry like any human institution is a dynamic, which experiences different changes regularly. It was very interesting to observe that some of the laboures were not able to convert drawing measurements from metrics to imperial and vice versa, not to talk about interpretation of simple drawings. 12 per cent of the operatives have attended some form of refresher courses in the last five years, which was evidence at their job executions.

5.12.5 Motivation of Operatives

As noted by Harris and MCcffer (2004) success in the application of work incentives aimed at generating higher levels of performance and production output will largely depend on establishing a careful balance of the many inter-related motivating factors necessary in achieving worker satisfaction.

The level of motivation of any individual with regards to his or her work brings the best out of the follow.

The research reveals that, the major source of motivation for the small and medium scale firm to their workforce is the provision of free accommodation, as Directors of these firms usually rent room for them without taking or deducting the rent fees from their salaries and wages. 35 per cent of motivation in working with D3K3 and D4K4 building construction firms is by financial rewards.

9 per cent is by recognition, whenever they do something extraordinary for their firms.

CHAPTER SIX

6.1 Introduction

This chapter concludes the thesis. It highlights the summary of findings, conclusions and recommendation.

6.2 Summary of Findings

- The registration process has been found to be very cumbersome, financially high and frustrating.
- It was obvious from the findings that most of the small and medium scale firms are finding it extremely difficult to secure loans from banks and other credit facilities.
- The records keeping of the small and medium scale firms are nothing to write home about.
- The small and medium scale firms in the country are not able to attract and employ the requisite technical persons to assist them in their construction activities.
- The processes or requirements of invitation for tenders (IFT), the loyalty of Evaluation Reports and Procedure for award of contracts in the country should be taken a second look at, as most of the respondents have some serious reservation about the entire processes. The public procurement board should have a second look at it Act, Act 633 and screw some of it holes. Finally the various thresholds of the various tender entities should be look at.
- It is crystal clear that most of the collapsed small and medium firms in our various communities and cities can be attributed to the non-payment of certified work done.
- It was generally observed that the technical capacities of the construction firms in Ghana are generally nothing to write home about, not that the technical men and

women are not available, but the willingness and preparedness on the part of the contractors to pay them what they are due, is something they have to look at.

- The rate at which we have allowed party politics to found its way into the construction industry was a source of worry to most of the respondents. The consequence of this bad canker if not stop is very clear.
- It was observed that contractors are faced with challenges in respect to ground condition, unpredictable items at the sites, access to sites, sites location, construction methods to adopt, land disputes etc.

6.3 Conclusion

The small and the medium size contractors in Ghana is relatively underdeveloped mainly constrained by limited access, high cost of capital and weak support programmes from the government. There is also lack of managerial capabilities and lack of skills.

The most important deciding factors in the development of small and medium scale contractors in Ghana are to address the issue of access to finance; delay in payment of certified work done and adequate support from government must be a priority.

Survival, growth and expansion of the small and medium business sector are essential for economic growth and job creation in Ghana.

It is clear from the study that almost all the small and medium scale building construction firms are faced with a number of challenges or difficulties. These include the following;

- Financial problems
- Technical Personnel and good Supervision
- Managerial Problems
- Firms Registration

- Site Management
- Leadership Style and
- Equipment and Facilities

The above findings and discussions helped to bring to light that, most of the problems or difficulties that these firms encounter or faces can be attributed to their own inadequacy and this can be eliminated through change in general aspect of company's management and Planning, though it is one of the most difficult aspects in management and Planning.

6.4 Recommendation

Based on the findings of this study, it is recommended that the following interventions be considered to ensure that the challenges facing small and medium scale building construction firms are reduced if not eliminated.

- ***Non Payment of Work done.***

Delays with interim and final payments, as well as onerous contract conditions faced by small and medium scale building construction firms, can also impose huge constraints on the industry. Many of these firms have suffered financial ruin and bankruptcy because of delays in payment, which are common with government contracts.

Again, delayed payment of contracts executed can best be classified as the greatest challenge facing small and medium scale contractors but more worrying is the failure of clients, usually the government, to pay interest or compensation for delayed payment.

The plain truth is that whereas local contractors are afraid to claim interest on delayed payment for fear of victimization, foreign contractors are duly paid interest and suffer no victimization. It is needless to say that shoddy work has unfortunately become the trademark

of the construction industry but it is significant to caution that in our attempt to cleanse the industry we should do it in such a way that we do not throw away the baby with the bath-water.

- ***Education***

Regular training for managerial and supervisory staff of small and medium scale construction firms is a positive index for improved output. It has been said that while only a few schools exist for training artisans and other tradesmen, on the job training programmes handled by men without technical expertise has been found to be less beneficial to the construction industry.

Again, the professional bodies that regulate the construction industry in this country should make it a point or habit to organize Seminars, Conferences, and Regular Meetings for contractors and even their technical staffs, to enable them update themselves in the current methods of construction and development in the industry.

- ***Financial Support***

It came out during the research that, a good number of small and medium-scale building construction firms in the study area have collapse over the years. Those that are in operation currently are not strong enough due to their financial standing.

To arrest the situation, it is necessary to involve the formulating of friendly financial policy. The government as well as the stakeholders in the building construction industry should assist to enable easy assessment of loans. There used to be a Bank called Bank for Housing and Corporation which during it existences were helping contractors financially during the execution of project. It will be very helpful if such bank or any other, which will have a direct

link to construction, is introduced into the country to give some form assistance, as in the case of Agric Bank to farmers. The influx of foreign contractors is certainly not the panacea to the problem of shoddy work and mediocre performance.

A vibrant contractors association enjoying the active support of government is all that we need to push the construction industry forward.

Again, something should be done to ensure a flexible collateral security with regards to assessment Bank loans and other Credit facilities for contractors.

- ***Firms Registration***

First, let's take a look at the registration of contractors by the Ministry of Water Resources, Works and Housing. While it is common knowledge that anybody at all (whether lettered or unlettered) can register to become a contractor, common sense dictates that the physical inspection of offices, equipment and staff must, at least, be one of the major determinants for the registration and renewal of certificates and licenses.

The absence of clear-cut or well defined standards for the registration of contractors has led and continues to lead to the proliferation of all sorts of incompetent contractors in the construction industry. And the result is scramble for the available few jobs, poor or under quotation of contracts, inexperience and ignorance conspiring effectively and efficiently to produce shoddy work.

Though a good number of contractors are on record to have performed well and continue to do excellent jobs, the shoddy output of some of them has eroded public confidence in local contractors in general.

This unfortunate setback appears to have provided officialdom with the much needed stance of their preference for foreign contractors to the local ones for the execution of medium and major contracts.

To remedy the situation, the Ministry of Water Resources, Works and Housing must not only be interested in the registration and classification of contractors but perhaps more importantly continue to undertake a physical inspection of the offices and equipment of contractors before and after their registration.

Again, registration of contractors and renewal of their licenses must be done in consultation with the Association of Building and Civil Engineering Contractors of Ghana (ABCECG).

In other words, membership of ABCECG must be a requirement for the registration of contractors to facilitate monitoring of their performance and sanctioning of recalcitrant or non-performing ones.

Furthermore, there is the need for the ministry to empower ABCECG's technical team to regularly visit project sites of contractors to help ensure that projects are properly executed. The technical team's role should be regarded purely as complimentary to that of the project consultants.

The issue of outmoded equipment remains one of the nagging problems confronting local contractors. To help build their capacities and improve delivery, the ministry must, as a matter of urgency, assist local contractors to procure modem equipment.

Again, the registration Procedure and requirement should be made more flexible by the Ministry of Water Resources, Work and Housing.

The registration of these firms should be done at the regional levels so that inspection of requirement especially equipment can easily to ascertained.

The registration fees charged should be packaged well to include charges at the District Assemblies and Municipal Assemblies to avoid a situation whereby a contractor will have to register in any District Assemblies where he or she wants to operate or do business with.

Moreover, the duration for the processing of the registration document (Registration Certificates) should reduced since most of the contractors consider the long duration as delay and time wasting.

LIST OF REFERNCES

ABDELSAMED & KINDLING (1978) *Why Small Businesses Fail*: *S.A.M. Adv.Manage. J. 46(2): 24-32.*

ABOR, J. & BIEKPE, N. (2006) *Small Business Financing Initiatives in Ghana" Problems and Perspectives in Management Volume 4, Issue 3, 2006.*

ADAMS, O. (1997) *Contractor Development in Nigeria: Perceptions of Contractors and Professionals. Construction Management and Economics, 15 (1), 95-108.*

AFOLABI, W.A.O., ADDO, A. A., & SONIBARE, M. A. (2004) *Activity Pattern Energy Intake and Obesity among Nigerian Urban Market Women. International Journal of Food Sciences and Nutrition*, *55*, 85-90.

ALKIN, W.S. (1994) *Strategies for the European Construction Sector: a Programme for Change, Final Report of the Strategic Study on the Construction Sector, European Commission.*

AMPOSAH, F. (2007) *Improving Project Management in Ghana.*

ANIEKWU, A.N. & OKPALA, D.C. (2010) *The Effect of System Factors in Contract Service in* Nigeria.

ANIEKWU A. (1995) *The Business Environment of the Construction Industry in Nigeria Journal of Construction Management and Economics, Vol.13, paper 445-445.*

ARYEETEY, E.A BAAH-NUAKOH, A, DUGGLEBY, T. HETTIGE H. & STEEL, W.F (1991), *Supply and Demand for Finance of Small Enterprise in Ghana, Discussion Paper No. 251 Technical Department, Africa Region, Washington, D.C World Bank.*

BOLTON COMMITTEE (1971) *Report of the Inquiry on Small Firms,* HMSO,London.

BUSINESS IN SOUTH AFRICA, *A Paper for the Small Enterprise Association* of Australia and New Zealand, *16th Annual Conference Ballarat*.

BUTTLER (1988) *Elements of Administration for Building Students*.*4th edition* U.K publish by-Stanley Tardner ltd 1988.

CLUTTERBUCT D.CRAINER (1990): *Markers of management,* Macmillan press.

CLUTTERBUCK D. & GOLDSMITH W. (1984) *The Winning Streak,* Weidedfeld & Nicholson.

COOK & WILLIAMS (2004) *Construction Planning, Programming and Control 2nd edition.*

CREUSEN, (1999); WTO, (2001); BCCA, (2001) *Housing Construction Between Competition and Regulation*

CRESWELL, J. (1994) *Research Design; Quantitative and Qualitative Approaches Thousand Oaks,* CA, Saga.

CROSWELL J.A. & MCCUTCHEON, R.T. (2001) *Small contractor development and employment*.

DENYER, J.C (1972) *Students' Guide to Principles of Management*, *2nd edition,* Zeus press.

DRUCKER, P.F (1989) *The Practice of Management*. Butterworth-Heinemann.

DREWER, S (1980) *Construction and Development: A New Perspective; Habitat International, Vol. 5, pp395-428.*

DIXION, R. (1991) *Management theory & practice management made simple series*.

EDMONDS G.A. & MIILES, D (1984) *Foundation for Chang: Aspect of the Construction Industry in Developing Countries Intermediate Technology.*

EYIAH, A.K. & COOK, P. (2003) *Financing Small and Medium-scale contractors in Developing Countries: A Ghana Case Study*. *Construction Management and Economics*, 21, 357-367.

EYIAH, A.NDEKUGRI, I., & AMBROSE, B. (1998) '*Payment Delays on Construction Projects: the Case of Ghana, First International Conference on Construction Industry Development in Developing Countries*, Arusha, Tanzania.

EYIAH, A. (2004) *Regulation and Small Contractor Development: A Case of Ghana, Centre on Regulation and Competition, Institute for Devolopment Policy and Management*, University of Manchester, UK Paper No. 80 ISBN: 1-904056-79-2

EYIAH A. & COOKA (2010) *Construction Management and Economics Vol.21 pgs 357.*

GHANA NEW AGENCY (2010) *Barclays to give SME's Foreign Exposure,* Daily Graphic, 15th April.

GOLDSMITH, R.W. (1996) *Financial Structure and Development,* Connectict Yala University Press.

KAYANULA, D. & QUARTEY, P. (2002) *The policy environment for medium sized enterprise in Ghana and Malawi, Finance and Research Development program working paper series No.*

LIEDHOLM & MENDS (1999) *what makes Small and Firms Grow: Finance, Hunma Capital, Technical Assistance and the Business Environment in* Romania.

LIEDHOLM & MENDS (1998) *Venture Capital: Impact of Growth of Small and Medium Scale Enterprise in* Kenya.

LIEDHOLM & MENDS (1998) *The Dynamics of Developing Countries: Micro and Small Enterprises in Developing Countries.* World Development Group Publishing.

HENRI F. (1961) *Principals of Management: General and Industrial Management.*

KIMANI, S. (1988) *The Construction industry in Development: Issues and Option; Discussion Paper, Infrastructure and Urban Development Department, World Bank*, Washington DC.

LARYEA S, R. & HUGHES W. (Eds) *Process West Africa Built Environment Research (WAER) Conf. 27-28 July 2010* Accra, Ghana 215-226.

ILLINGWORTH, C. (1994) *Construction Methods& Planning* London published by- E&FN SPON, 1999

MCcFFER & HARRIS F. (2004) *Modern Construction Management*: 5th edition.

OFORI G. (1988) *Construction Industry and Economic Growth in Singapore, Journal Of Construction Management and Economics, Vol. 6, P. 57-70.*

OFORI G. (1991) *Programmes for Improving the Performance of firms in developing countries; Journal of Construction Management and Economics, Vol. 9 pp. 19-38.*

OFORI, G. (1999) *''Strategies for Organizing Workers in the Informal Economy'' Trade Union in the Informal Sector: Finding their Bearings, Nine country paper, labour Education 1993/3 No.16.*

OSBOURNE, R.W. (1993) *Introduction to Building: Singapore* Published by Longman 1993.

SEELEY, I.H (1984) *Quantity Surveying Practice Singapore;* published by Longman 1993

SMITH, H. (2000) *Regulatory Policies and Innovation; School of Geography and the Environment,* University of Oxford.

STEEL, W.F (1996) *Financial System Approach to supporting Microfinance Development, paper present at the Africa Region /SBP/EP/Finance* Zimbabwe.

STOREY, D. (1994) *Understanding the Small Business Sector.* Rout ledge: New York.

STUNTER, C. (2000) *The Entrepreneur Field Book.* Upper Saddle River NJ: Prentice.

THOMPSON, K. B. (1991) *Facing an Uphill Battle: B.E. Special Report on Small Business. Black Enterprise, Nov 19, Vol. 22 Issue 4.*

THOMPSON, K.B. (2002) *Research Methods $Techniques of Social Research,* SonLife Press & Service Accra, Ghana.

TURIN, D.A. (1969) *The Construction Industry: Its Economic Significance and Its Role in Development 2nd edition,* University College Environment Research Group.

WALKER A. (2002) *Project Management in Construction: Blackwell Science 4thedition.Oxford.*

APPENDIX A

SURVEY QUESTIONNAIRE

CONTRACTORS ONLY

Topic: Contemporary challenges facing Small Scale and Medium Scale Building Construction firms in Ghana.

(A case study of some selected small and medium scale building contractors in Kintampo South and North District Assemblies)

Section A: Background Information

1. What type of building contractor are you?

   Building Contractor [0]

   Road Contractor [1]

   Electrical Contractor [2]

2. Is your company registered?

   Yes [0]

   No [1]

3. What class of contractor are you?

   D1K1 [0]

   D2K2 [1]

   D3/K3 [2]

   D4/K4 [3]

4. Is your company

   Sole proprietorship [0]

   Joint partnership [1]

5. Your area of specialization

General building works	[0]
Refurbishment	[1]
Painting and decoration	[2]
Repairs and renovation	[3]
Roofing	[4]
Other, specify	[5]

Section B: Problems of Regulations (registrations etc.)

1. How do you assess the registration procedure of building construction firms in Ghana?

Vary easy	[0]
Easy	[1]
Difficulty	[0]
Very difficult	[1]

2. Have you used a friend or any other company's registration certificate to tender for a project before?

Yes	[0]
No	[1]

3. Do you have problems in the manner in which your clients invite contractors of different classifications to tender for the same job?

Yes	[0]
No	[1]

4. Do you have any problems with the regulation of the construction industry in Ghana?

Yes	[0]
No	[1]

5. Where do you solicit for projects/jobs?

Open Tendering	[0]
Negotiation Tender	[1]
Selective Tendering	[2]

6. How do you see the procedure (tender process& evaluation procedure) for awarding contract in Ghana?

Fair	[0]
Not fair	[1]
Excellent	[2]
Good	[3]
Bad	[4]

7. Have you ever involved yourself/ your company in any of these?

Payment of bribe to secure contract	[0]
Using political influence	[1]
Any other, specify	[2]

8. What are some of the opportunities available to a contractor in a developing country like Ghana?

Emerging of foreign business into Ghana, which requires more infrastructures [0]

Some tax reliefs on building activities [1]

Flexibility in laws relating to environment, labour, sustainability, health and safety [2]

Section C: Main Challenges Faced by Small Scale Contractors

1. What are some of the registration challenges you usually encounter?

   Centralized nature of the registration [0]

   Financial involvement [1]

   Cumbersome nature of it [2]

2. How are you affected financially when you are awarded projects?

   Getting funds to execute the projects [0]

   Interest on loans secured [1]

   Difficulties in getting bank guarantee, to take advance loans from employers [2]

3. How will you assess your firm in terms of record keeping?

   Very good [0]

   Good [1]

   Bad [2]

   Fair [3]

4. Are you able to employ people with the technical know-how in your firm?

   Yes [0]

   No [1]

5. How do you assess them in terms of projects handing?

   Excellent [0]

   V. Good [1]

   Good [2]

   Average [3]

Bad [4]

6. Do you receive payments for certified work done on time?

Always [0]

Not always [1]

Mostly very late [2]

After more than 1 month [3]

7. How are you affected by delayed payment, if it is the case? Select as many as are relevant.

It affects the quality of the work [0]

It affect the time of completion [1]

It affects my budget [2]

It affects my profit [3]

8. What are some of the challenges you normally face in your bid to procure projects?

Payment of bribe in other to be given projects [0]

High charges in respect to bonds and securities [1]

Political influences [2]

Competition with firms of high classes [3]

9. What are some of the challenges faced with clients

Payment of certified work done [0]

Difficulty in paying retention monies [1]

Partisan politics in respect to Government projects [2]

10. What are some of the challenges face with project consultants?

Poor preparation of tender documents/drawings [0]

Poor supervision [1]

Numerous variation orders [2]

Delays in preparation of certification for claims [3]

11. How do you assess your Equipment and facilities

Very good [0]

Good [1]

Bad [2]

Fair [3]

12. How do you assess yourself or the management staff of your firm(s) in the management of this firm?

Very good [0]

Good [1]

Bad [2]

Poor [3]

13. How is your human or your management human relation with the operative or others?

Very good [0]

Good [1]

Fair [2]

Bad [3]

14. In your own assessment, do you think your firm has the requisite leadership qualities to drive home the policies of this firm?

Yes [0]

No [1]

15. Do you have the needed managerial and organisation skills to manage and organize your company?

Yes [0]

No [1]

16. What are some of the challenges that you face at the construction stage?

Site condition, location, access, ground condition and organisation [0]

Construction methods or techniques [1]

Contract conditions [2]

Unpredictable items, hidden obstruction, labour and economic conditions [3]

APPENDIX B

SURVEY QUESTIONNAIRE

DISTRICT CO-ORDINATING DIRECTORS, DISTRICT ENGINEERS AND DISTRICT PLANNING OFFICERS ONLY

TOPIC: Contemporary Challenges Facing Small Scale and Medium Scale Building Construction Firms in Ghana.

(A case study of some selected Small and Medium Scale Building Construction firms that have worked and currently working with Kintampo south and North Assemblies)

By: Osarfo Patrick

Towards a degree of Master of Technology

University of Education-Kumasi Campus

1. How long have you been in this District?

   9-7 years [0]

   6 -4 years [1]

   3-1year [2]

2. Which class of building contractors do you usually work with?

   D1K1 [0]

   D2K2 [1]

   D3K3 [2]

   D4K4 [3]

3. What type of jobs/projects do you usually undertake in your District?

   Rehabilitation [0]

   Renovation and Repairs [1]

   General Building Works [2]

   Refurbishment [3]

4. Do contractors have to register with the District before they can undertake any project?

Yes [0]

No [1]

5. Averagely, how many D3K3 and D4K4 building Contractors have you worked with in the last 5 years?

70-50 firms [0]

50-30 firms [1]

30- 20 firms [2]

20 – 5 firms [3]

6. Has there being a situation that D3K3 or D4K4 contractor abandoned his project in your District?

Yes [0]

No [1]

7. How many projects have they abandoned in your District?

20 -15 projects [0]

15- 10 projects [1]

10- 5 projects [2]

8. What were the causes of these projects abandoned?

Managerial problems [0]

Technical problems [1]

Financial problems [2]

Equipments problems [3]

Payment of work done [4]

APPENDIX C

SURVEY QUESTIONNAIRE

OPERATIVES ONLY

TOPIC: Contemporary Challenges Facing Small Scale and Medium Scale Building Construction Firms in Ghana.

(A case study of some selected Small and Medium Scale Building Construction firms that have worked and currently working with Kintampo South and North Assemblies)

By: Osarfo Patrick

Towards a degree of Master of Technology

University of Education-Kumasi Campus

1. What is your profession?

   Mason [0]

   Carpenter [1]

   Steel bender [2]

2. What is your level education?

   Tertiary [0]

   Secondary [1]

   Vocational [2]

3. For how long have you been working in this firm?

   2 years [0]

   4 years [1]

   7 years [2]

   Less than a year [3]

4. Were you given any form of training before been employed?

Yes [0]

No [1]

5. Have you attended any refresher courses within the last five (5) years?

Financial [0]

Free accommodation [1]

Recognition [2]

6. How are you motivated on your job?

Yes [0]

No [1]

7. Do you like to take part in any decision making on the site?

Yes [0]

No [1]