

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI

COLLEGE OF ARCHITECTURE AND PLANNING

DEPARTMENT OF BUILDING TECHNOLOGY

**CLIENTS' PERCEPTION TOWARDS THE ESTABLISHMENT OF CONSTRUCTION
INDUSTRY DEVELOPMENT AGENCY IN GHANA**

A DISSERTATION PRESENTED TO THE DEPARTMENT OF BUILDING TECHNOLOGY
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE MASTER OF SCIENCE
DEGREE IN CONSTRUCTION MANAGEMENT PROGRAMME

**LIBRARY
KWAME NKRUMAH UNIVERSITY OF
SCIENCE AND TECHNOLOGY
KUMASI-GHANA**

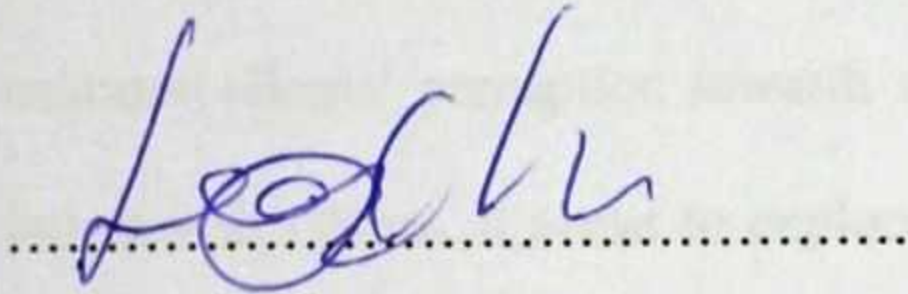
BY

CHARLES LEGBEDZE (BSc. Hons)

NOVEMBER, 2014

DECLARATION


I hereby declare that except for reference to other authors' work, which had been dully acknowledged, this thesis was the result of my own original research and that no part or whole of it had been presented for another award in this university or elsewhere.



Date.....07/11/2014.....

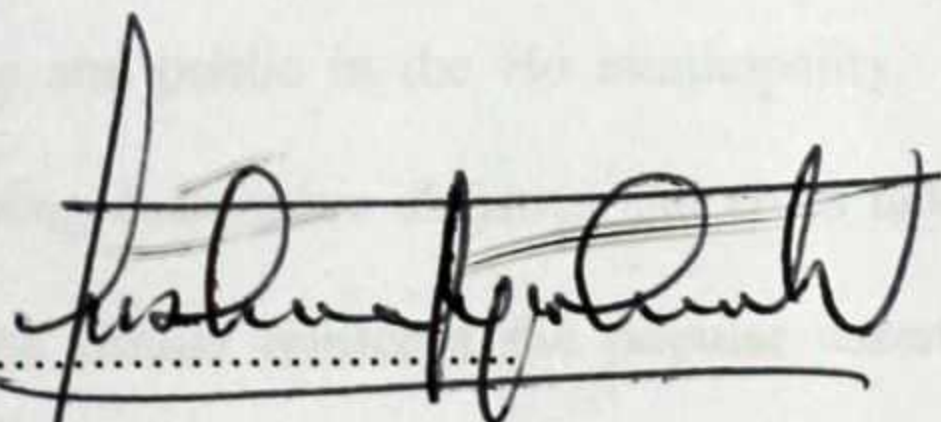
CHARLESLEGBEDZE (PG9128213)

Certified by:

Signature 

Date.....07-11-2014.....

DR. DE-GRAFT OWUSU-MANU (Supervisor)

Signature 

Date.....08/11/14.....

The Head of Department: PROFESSOR JOSHUA AYARKWA

LIBRARY
SWANE H HUMAN UNIVERSITY OF
SCIENCE AND TECHNOLOGY
KUMASI-GHANA

ABSTRACT

Construction industry is critical actor in the political, economic, social, cultural and environmental development of all countries. However, the industry is still struggling and described as an emerging concept in many developing countries. Sadly, very little is done about the regulatory activities of the construction industry in Ghana. The goal of this research was to examine clients' perception towards the establishment of a regulatory body of the construction industry in Ghana. It seeks to explore the construction industry environment with emphasis on client perception in order to devise strategies for their involvement in the establishment of the construction industry development agency and its agenda. This will bring tangible and long-term benefits to societal issues and increase the success of the construction industry by leveraging their resources and competencies. An extensive literature review was conducted to provide a thorough understanding of the recent developments and the underlying concept, operation and challenges of the construction industry in Ghana which call for the establishment of construction industry development agency. Structured survey questionnaire was administered to 100 clients both private and public in the Ho municipality. With a response rate of 70%, the data was analyzed using descriptive statistics and cross tabulation. Comparing the results with previous findings, the results reinforce the popular assertion that; quality of workmanship, meeting functional requirements, beneficiary's satisfaction and profitability are the way forward toward the establishment of the construction development agency. In terms of measure for skills and managerial capacity enhancement, the results showed that, majority of the respondents are of the view that this agency should fall under the Ministry of Water Resources, Works and Housing and must be decentralized to the district level. As demonstrated by the findings, the key empirical approach should be an executive agency, having programmes of its own with professional institutions and trade associations being the key player of the agency. The findings suggest that

the way forward is to promulgate laws for the construction sector and agencies and making sure that the laws are adhered by all. The study appropriately positions Ghanaian construction industry to take account of the economic, social and environmental concerns; whilst acting proactively to address key sustainable development challenges based on their core competences. The originality of the study is further anchored in the holistic approach of viewing the establishment of construction industry development agency from theoretical and empirical perspectives. Future research has to be conducted to explore the client's perception towards the funding of the construction industry development agency.

Keywords: Development agency, Construction Industry, Client, Perception, Development, Regulatory Policies.

ACKNOWLEDGEMENTS

My appreciation goes to Almighty God, my supervisor Dr. De-Graft Owusu-Manu and the entire lecturers of the Department of Building Technology for their supervision, constructive criticisms, useful suggestions, and encouragements. My thanks goes to Michael Adesi, a post graduate student at the Department of Building Technology. In this respect my special thanks goes to Dr. De-Graft Owusu-Manu for his immense contributions in terms of guidance, suggestions and encouragements without which this work would not have materialized.

I am grateful to Harry Ahelegbe for volunteering as research assistants in the collection of data. I would also like to express my appreciation to my course mates: Peter Agbaxode, Aaron Teku, Alex Adzinku and Jacob Owusu for their encouragements and support.

Finally, my thanks goes to my parents, Mr. and Mrs. Adolph Legbedze and my brothers and sister, Johnson Legbedze, Agnes Legbedze, Ramsey Fiattor and Faith Akakpofo. Their support, understanding and sacrifices enabled me to pursue this programme.

LIBRARY
OWENS & HUMPHREY UNIVERSITY OF
SCIENCE AND TECHNOLOGY
KUMASI-GHANA

DEDICATION

This Dissertation is dedicated to my wife Miss. Happy Aidam and my lovely kids, Makafui, Keli, and Edudzi Legbedze.

Table of Contents

Content	Page
DECLARATION.....	ii
ABSTRACT.....	iii
ACKNOWLEDGEMENTS.....	iv
CHAPTER 1:.....	1
1.0 Introduction.....	1
1.1 Background of the Study.....	1
1.2 Problem Statement.....	4
1.3 Aim of the Study.....	5
1.4 Research Question.....	5
1.5 Research Objective	6
1.6 Scope.....	6
1.7 Methodology.....	7
1.8 Significance of the Study.....	7
1.9 Limitations of the study.....	8
1.10 Organization of the Study.....	8
CHAPTER 2: LITERATURE REVIEW.....	10
2.0 Introduction.....	10
2.1 Concept of Industrial Development.....	10
2.1.1 Construction development.....	11

3.4.1 Presentation of Data	42
3.4.2 Statistical Considerations.....	42
CHAPTER 4: ANALYSIS AND DISCUSSIONS OF RESULTS.....	43
4.0 Introduction.....	43
4.1 Socio- Demographic Characteristics.....	43
4.1.1 Respondents Gender.....	43
4.1.2 Respondents level of Educational Qualification.....	44
4.1.3 Category of client's.....	45
4.1.4 Types of projects clients engage in.....	45
4.2.1 Indicated Principle on Performance of the Construction Industry.....	47
4.2.1 Indicated Criterion With respect to the Construction Industry in Ghana.....	48
4.2.2 Factors that Causes Poor Performance on Construction Projects in Ghana.....	52
4.3. Indicated Principle on Strength of the Construction Industry.....	55
4.3.1 Substantial Volume of Construction Work Which Provides Opportunities for All Firms in the Industry to Grow.....	55
4.3.2 Adequate Qualified and Experienced Personnel in All Segments of the Industry.....	56
4.3.3 Presence of Strong Professional Institutions and Trade Associations.....	57
4.3.4 Existence of Adequate Laws and Regulations to Govern the Construction Industry.....	58
4.3.5 Presence of Government Ministries, Departments and Agencies Which Properly Administer and Develop the Construction Industry.....	59
4.3.6 Foreign Firms from Which the Local Companies and Practitioners Can Learn.....	60
4.4 Problems and Weaknesses of the Construction Industry.....	61

4.4.1 Present Problems and Weaknesses of the Construction Industry in Ghana.....61

4.5 Client suggestion on the formation of regulatory and development agency for
Construction industry.....65

4.5.1 Whether Respondents agree that a Construction Industry Regulatory and
Development Agency should be established.....65

4.6 Responses on Whether They Think the Construction Industry Development
Agency Will Have a Sustainable Future.....66

4.7 Descriptive Analysis.....71

4.8.1 Descriptive Statistics and Cross Tabulation.....73

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS.....75

5.1 Introduction.....75

5.2 Review of research objectives.....75

5.4 Recommendations and policy implications.....79

5.5 Suggestion for future research.....79

References.....80

Appendix: survey questionnaires.....81

LIST OF TABLES AND FIGURE

Table 4.1: Distribution of Respondents Gender.....43

Table 4.2: Distribution of Respondents level of Educational Qualification.....44

Table 4.3: Category of client’s that belong to the construction industry.....45

Table 4.4: Types of project client’s engage in the construction industry.....45

Table 4.5: Extent to Which Respondents rate the following Indicated Criterion
With respect to the Construction Industry in Ghana.....46

Table 4.6:Extent to Which Respondents Agree or Disagree on Factors that Causes Poor Performance on Construction Projects in Ghana.....	50
Table 4.7:Presence of a Substantial Volume of Construction Work Which Provides Opportunities for All Firms in the Industry to Grow.....	52
Table 4.8: Presence of Adequate Qualified and Experienced Personnel in All Segments of the Industry.....	56
Table 4.9:Distribution on Presence of Strong Professional Institutions and Trade Associations.....	57
Table 4.10:Existence of Adequate Laws and Regulations to Govern the Construction Industry.....	58
Table 4.11: Distribution on Presence of Government Ministries, Departments and Agencies Which Properly Administer and Develop the Construction Industry.....	59
Table 4.12: Foreign Firms from Which the Local Companies and Practitioners Can Learn.....	60
Table 4.13: Extent to Which Respondents Agree or Disagree on the Present Problems and Weaknesses of the Construction Industry in Ghana.....	61
Table 4.14: Distribution on whether Respondents Agree that a Construction Industry Regulatory and Development Agency Should be Established.....	65
Table 4.15: Distribution on What Should the Broad Ambit of the Agency's Operations.....	65
Table 4.16: Main Functions of the Agency Be.....	66
Table 4.17:Institutional Arrangement for the Agency Be.....	68
Table 4.18:Which Parent Ministry Should the Agency Be Placed Under.....	69
Table 4.19: Key Players in the Agency.....	71
Table 4.20: Distribution on the Structure the Agency should have.....	71
Table 4.21: Descriptive Statistics.....	72
Table 4.22:Across Tabulation on whether Clients' are satisfied towards the establishment of construction industry agency in Ghana.....	73
Figure 4.1:Bar Chart Showing Responses on Whether They Think the Construction	

Industry Development Agency Will Have a Sustainable Future.....75

CHAPTER ONE

1.0 INTRODUCTION

The importance of the construction industry in economic growth and national development of a country cannot be underestimated (John and Huck, 2004). Construction industry development is recognized as a long-term task, which may change over time. Moreover, the physical infrastructure, built through construction activity, is the nation's economic backbone as it forms the arteries for the facilitation of productive activity by enabling goods and services to be distributed within and outside the country. Building construction also offer social and welfare benefits. For example, housing fulfils one of the most basic needs of people by providing shelter from the physical elements through construction activities. Construction of buildings also offer people the opportunity to improve their living standards. The construction industry can influence the competitiveness of enterprises within the economy. Construction can also affect the ability of the nation to attract foreign investment. It is important in this era of globalization as all nations are competing nations in terms of position to attract foreign investment (Ayetevi, 2005). The above can be achieved if construction industry development agency is established and equipped with funding and capacity base (Ofori, 2002).

1.1 BACKGROUND OF THE STUDY

Ghana gained its political independence on March 6, 1957. Around that period, Ghana's construction industry was dominated by giant organisations such as Taylor Woodrow Company and A-Lang Company, among other foreign firms operating in the country (Assibey-Mensah, 2008). In 1961 the country's own public-sector construction agency, the State Construction Corporation (SCC), was established with the primary goal of constructing highways, feeder

roads, urban roads and so forth in the most cost-effective and efficient manner. The State Construction Corporation (SCC) was successful for many years, but it was divested. The agency was heated with many operational bottlenecks, which led to increases in government expenditures and over budgeting (Assibey-Mensah, 2008).

In Ghana, the construction industry is constantly changing in the face of a volatile economic environment and highly competitive market (Ayirebi-Dansoh, 2005). The construction industry is directly linked to the Ghanaian economy because the government is the biggest client in the industry (AgyakwaBaah, 2007; Tuuli et al., 2007). Clients can be described as private or public sponsors or owners of a project. Clients are distinguishable in to four main categories in the Ghanaian Construction Industry: the Government (being the major client), Real Estate Developers, Investors and Owner occupiers Gyadu-Asiedu (2009). According to World Bank (2003), an approximate annual value of public procurement for goods, works and consultant services amount to US\$600 million. This represented about 10% of the country's GDP. This amount forms part of the bulk of the expenditure of all government agencies, namely, the Ministries, the Assemblies, Departments, Institutions and other Agencies. Procurement of contracts must strictly follow the rules and regulation of the national procurement law as stipulated in the Procurement Act, 2003 (Act 663).

The government as a client is represented by the Ministry of Road and Transport (MRT) (for road works) and the Ministry of Water Resources, Works and Housing (WRWH) in giving out projects. In recent times the various Ministries such as Local Government and Rural Development, Ministry of Health are quite autonomous and act as Clients when infrastructural development are within their domain. These projects are usually donor funded and sometimes require a percentage to be funded from the Government of Ghana (GOG) to be able to

implement. To further ensure effectiveness and maintenance of completed projects, the Government has further established allied Agencies and Departments such as Highway Authority, Urban Roads and Feeder Roads to act as a medium for implementation of the policies and programmes of the Ministry of Roads and Transport. The two main Ministries (MRT & MWRWH) established with the intention to take over formal construction, have in recent times essentially formulated policies, programmes with over-site supervision of implementing Agencies. Another Client is the Real Estate developers who are also the other group of clients who undertake large investment in construction. Usually, they are purposed by financial institutions for loans to undertake construction projects. Their performance is usually influenced by housing situations in the country.

Ghana real estate developers association (GREDA) in 2007 revealed that they expect extra assistance from the government to support their quest to contribute to solving the housing problem in the country. Some investors are usually financial companies that decide to invest capital in building construction. The social security and national insurance trust (SSNIT) is one of the leading investor in housing projects in Ghana. Gyadu-Asiedu (2009) further observes that Owner occupiers are individuals who decide to build their houses to live in. It has been the tradition of Ghanaians to buy lands from chiefs (chiefs are the custodians and owners of land in Ghana, not the government) and build houses. This tradition has been entrenched mostly because successive governments failed to meet the housing expectations of individuals. Some of these owner occupiers also rent out extra rooms in their houses for income. Therefore, these owner occupiers are able to progress to the level of being private investors. The owner occupiers, thus, constitute the larger number of clients in Ghana – almost every Ghanaian is a potential owner occupier. They, usually, do not engage professional consultants.

The construction industry in Ghana has been growing steadily over the years. Akoi-GyebiAdjei (2009) observes that contractors have demonstrated experience in building and civil engineering works. Currently the agency responsible for the registration of contractors (i.e., building or civil contractors) is the Ministry of Water Resources, Works and Housing (WRWH). The WRWH does this in collaboration with the Registrar General's Department under Act 179 (1963) of the companies' registration code. On registration, contractors are classified, based on a number of guidelines, including the following: plant equipment holding, financial standing, previous performance and technical expertise. The WRWH has two main classifications for contractors: Category 'D' for general building works and category 'K' for civil works. According to WRWH bulletin, inclusion of a contractor's name in the Ministry's classification register is not compulsory, but then it is only those who are duly registered who can tender for government contracts. The Greater Accra region also accounts for about 27.0% of the total number of all persons engaged within all industries

1.2 PROBLEM STATEMENT

Ferrell et al. (2000) observed that failure to acknowledge ethical challenges is a great danger in any organisation, particularly if business is treated as a game where ordinary rules or fairness do not apply. The non-existence of construction industry development agency in the country, has led to unprofessional practices such as fraud, bid-rigging, bribery, corruption, collusion, coercion, misrepresentation of facts and extortion. There have been some effort such as the Engineering Council Bill but it has not curbed the insanity in the construction industry of Ghana. Several buildings have collapsed as a result of construction operation without robust supervision and conformance to scientific and professional standards. In another vein, construction industry

players lack requisite capacities to deliver as a result of the non-existence of the regulatory agency to oversee the capacity development of players in the construction industry.

Additionally the construction industry has been plagued with the proliferation of quacks (unprofessional elements) parading as qualified professionals. This phenomenon has cast a huge slur on the image of the construction industry hence stampeding its growth, integrity and development. Underpinning the above problems is the absence of a regulatory and development agency for the industry. It is anticipated that the establishment of regulatory and development agency for the construction industry will curb the menace and chaos in the industry, hence a study in this direction will be opportune, appropriate and novel.

1.3 AIM OF THE STUDY

The aim of this study was to explore the construction industry development environment with emphasis on client perception in order to devise strategies for their involvement in establishment of the construction industry development agency and its agenda.

1.4 RESEARCH QUESTIONS

The following research questions are formulated:

- What are the key factors responsible for the performance of the construction industry?
- What are the causes of poor performance of the construction industry?
- What principles are needed for developing the strength of the construction industry?
- What are the existing weaknesses of the construction industry?

- What are the key ingredients for the establishment of a regulatory and development agency for the construction industry?
- What are the approaches for establishing construction industry development agency in construction sector?
- What are the developmental agenda and strategic action for sustaining construction industry development agency?

1.5 OBJECTIVES OF THE STUDY

Specific objectives set for the study are:

- To uncover the key factors required for the performance of the construction industry;
- To identify the causes of poor performance in the construction industry;
- To assess the principles required for developing a robust construction industry;
- To identify the existing weaknesses of the construction industry;
- To identify key issues required for the establishment of a regulatory and development agency for the construction industry;
- To uncover the approaches for establishing construction industry development agency in construction sector;
- To outline developmental agenda and strategic action for sustaining construction industry development agency;

1.6 SCOPE OF THE STUDY

The study covered both private and public clients in the Ho municipality. The rationale for selecting the municipality was because of the already existing and ongoing construction projects. It is the capital of Volta region where many of the respondents are mainly based. Limitations identified provide the basis for future research recommendations. This research had the following limitations: Some respondents were reluctant to accept the questionnaire on the ground that they might not have time responding to the questions while others refused to respond to the questionnaire. The potential effect of sampling, unsystematic and measurement errors and their likely impact on the data collected, analysis undertaken and the conclusions drawn. Due to the varying levels of literacy amongst the private clients, verbal communication between the researcher and respondents became a problem delaying the collection of the questionnaires.

1.7 METHODOLOGY OF THE STUDY

The methodology adopted to conduct this research involved a critical review of relevant literature on client's perception on the establishment of construction industry development agency. The researcher made use of ~~survey~~ research design where qualitative and quantitative data were acquired. The collection of data from the field was done through activities such as conducting interviews and administering of questionnaires. The questionnaires were designed to include; close-ended questions and scaled-response questions. The collected data were then analyzed using descriptive statistics, Cross tabulation and chi-square test of significance with the help of SPSS and Microsoft Excel.

1.8 SIGNIFICANCE OF THE STUDY

According to Gyadu-Asiedu (2009), several developing countries at various levels of socio-economic development including Ghana have recognized the need and importance of taking measures to improve the performance of the construction industry. However this has not materialized over the years. One of the ways to enhance this is the efficiency in role of the consultants' performance in project execution. Bowen et al. (2007) stated that construction professionals are expected to behave with professional integrity, honesty and fairness. Through this study, construction stakeholders, for that matter clients should have a better appreciation of implications regarding the prevailing market conditions as well as future opportunities available. With this information, everyone could capitalize on its strengths and prioritize to identify opportunities to achieve a sustainable growth. More importantly, the results of the study provide the industry with pointer to, and indicators of potential niche markets in the immediate term, while serving as a source of reference for policy-makers when formulating medium to long terms development strategies for promoting sustainable development of the Ghanaian construction industry.

The recommendations for formulating a long-term vision to sustain construction development in Ghana should retain manpower and professionals i.e. the core competency of the industry. Nevertheless, further research into the development of a series of comprehensive and reliable forecasting models to predict the short to medium terms overall and sectorial construction volume is imperative. This would provide crucial clues about prospective construction manpower demand at various levels so that suitable plans for education and training can be put forward to ensure a stable supply of construction manpower and professionals in future.

1.9 ORGANIZATION OF THE STUDY

The thesis comprised of five chapters: the first chapter started with the Background to the study, the problem statement research objectives, research questions and purpose of the study, significance, limitation, methodology and scope of the study. Chapter two focused on the review of the literature. Chapter three focused on methodology which described the research design, the population sample, and data gathering instruments, pilot study and data collection procedures of the study and methods of the data analysis. In four, results and discussions of the findings were presented. Finally, the summary of the findings, conclusions, recommendations and suggestions for future research formed the concluding chapter of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 INTRODUCTION

This chapter presents the conceptual framework and a review of some literature pertaining to the topic under study; this makes a fair and informed assessment of the current situations in the construction industry. The available literatures have been reviewed under the following broad themes for convenience; Concept of Industrial Development, Construction development, Initiatives from Countries around the World concerning construction industry development, Characteristics of the construction sector, Establishing Construction Industry Development Agency, Sources of Funding Construction Industry Development, Challenges confronting the establishment of construction industry development agency, Stakeholders in Construction Industry, Strategies for sustaining the establishment of construction industry development agency, The role clients play in construction industry development.

2.1 CONCEPT OF INDUSTRIAL DEVELOPMENT

The importance of industrial development as an engine of economic growth and development cannot be overstated. Virtually today's industrialized countries actively support and protect their industries through specific policies and institutions. Africa has to design and implement similar industrial development strategies to develop a sound industrial and technological base to enable the continent to integrate successfully into the global knowledge economy (UN, 2011). Indeed, the continent's ability to modernize, meet its urgent development needs and diversify its economic activities will largely depend on the development of dynamic industries (Hella & Couser 2011). The critical role played by construction industry in today's world leads to economic development. Various initiatives promoting industrial development on the continent

have been undertaken. For instance, the Conference of African Ministers of Industry (CAMI). In 1980, the Lagos Plan of Action (LPA) for Economic Development (1980-2000) these initiatives are strategies for fostering collective self-reliance and sustainable development on the continent. In 1981, proposals for an Industrial Development Decade for Africa (IDDA) were adopted at the 6th CAMI. Under the IDDA, industrialization was a means of attaining self-reliance and self-sustainability as foreseen in the LPA. In 2001, the New Partnership for Africa's Development (NEPAD) adopted an overall common vision and strategy for the attainment of Africa's sustainable development.

2.1.1 Construction development

The role of the construction industry in economic growth and national development have inspired efforts in nations to develop their industries to enable them reach their developmental status. Several development theorists assumed that industrial growth would ensure, or result in, the development of construction. Others, however, have pointed out the important role that construction plays in development. Dalton (1974) noted that a building industry engaged with public works was one of the leading sectors of Russia's development "effort in the early 18th Century and (Flores, 1971) also observed that Mexico created a construction industry by building irrigation dams and roads since 1925, this supported agricultural and industrial expansion.

Definition of Construction Industry Development

Task Group (TG29) of the International Council for Research and Innovation in Building and Construction, at its meeting in Arusha in 1998, defined construction industry development as follows:

Construction industry development is a deliberate and managed process to improve the capacity and effectiveness of the construction industry to meet the national economic demand for building and civil engineering works, and support, sustained national economic and social development objectives.

Construction industry development promotes:

- Increased value for money to industry clients as well as environmental responsibility in the delivery process
- The viability and competitiveness of domestic construction enterprises
- Optimisation of the role of participants and stakeholders through technological, institutional enhancement and appropriate human resource development.

Construction industry development is deemed to have the following components: human resource development; materials development; technology development; corporate development; development of documentation, procedures and operating environment; institution building; and development of operating environment.

2.1.2 Initiatives from Countries around the World concerning construction industry development.

In the industrialised countries, where construction industries are relatively matured, the need for the continuous development of the industry is increasingly realised. For example, there have been major studies of the UK construction industry in recent years including those which resulted in the reports by government appointed task forces led by Sir Michael Latham and Sir John Egan (Han, S, 2008). There have also been key studies of the national and provincial

construction industries in Australia, Hong Kong and Singapore and more recently, Malaysia has also completed major reviews of their construction industries.

The reviews of the industries in these developed and newly industrialising countries have been given momentum by both internal and external trends which indicate a challenging future for construction industries. The trends include the need for an increasingly sophisticated economy, client demands, technological and social change, globalisation leading to competitive pressures, welfare of workers' health and safety in construction, and the effect of construction activity on the environment (Raftery, J. et al., 1997). The review of the construction industries of the developed and newly industrialising countries have aimed at a radical restructuring of all aspects of the industries. The initiative in Singapore is a good example of such efforts. Construction exercises in Singapore were launched in a bid to improve the productivity of the industry by reinventing its processes, procedures and practices. The vision of Construction is "To Be a World Class Builder". It set concrete targets for the industry and recommended initiatives to meet the targets.

Construction proposes to transform Singapore's construction industry from an industry which is "dirty, dangerous and demanding" ("3Ds") to one which is "professional, productive and progressive" ("3Ps"). The desired outcomes for the Singapore construction industry are as follows:

- A professional, productive and progressive industry;
- A knowledge workforce;
- Superior capabilities through synergistic partnerships;
- Integrated process for high build ability;
- Contributor to wealth through cost competitiveness; and

- Construction expertise as an export industrial

In Malaysia, the Construction Industry Master Plan (CIMP) was developed by the construction Industry Development Board (CIDB) in collaboration with the private sector of the industry. The master plan covers the period 2006-2015. The vision is to develop the country's construction industry into a world-class, innovative, and knowledgeable global solution provider. The strategic thrusts were: (i) integrate the construction industry value to enhance productivity and efficiency; (ii) strengthen the image of the construction industry; (iii) strive for the highest standard of quality, occupational safety and health, and environmental practices; (iv) develop human resource capabilities and capacities in the construction industry; (v) innovate through research and development (R&D) and adopt new construction methods; (vi) leverage on information and communication technology in the construction industry; and (vii) benefit from globalisation including the export of construction products and services (Asia Construct, 1997).

An example of newly industrialized economies relevant to Ghana is construction development agencies. It is clear that there is no shortage of good initiatives. A key ingredient is the organisational and procedural framework for implementing the existing national programmes and suggested ideas which would help the construction industry. Some recent developments in a number of African countries show that there is growing awareness of the need for action. There is an increasing trend of countries going beyond strategic reviews to prepare national construction industry policies. Examples of these countries which have formulated national policies are Rwanda (which published its policy in 2009) and Uganda (where the policy was published in 2008). It is pertinent to note that, in each case, the formation of an agency to manage the development of the construction industry is one of the major strategic thrusts. In

Uganda, action is underway to prepare the legislation to give statutory backing to the policy (Ham & Hult, 1999).

2.1.3 Characteristics of the construction sector

The International Labour Office's report of 2001 entitled "The Construction Sector in the twenty-first century" highlights a number of factors that differentiate this sector from other industries (ILO, 2005). In general, the sector consists of the building industry, the civil engineering industry and construction materials production. Internationally, 60 to 70% of the funding for civil engineering comes from the public sector, while the proportions are reversed for building, with two thirds being privately funded. Within the materials production industry, the industrial environment varies from forestry and timber production, through quarrying of aggregate, the heavy industrial production of steel, aluminium, cement, brick, bitumen, plastic, paint and glass, to the light manufacturing of components such as window-frames, doors, and light fittings. This is a highly complex labour environment with diverse needs in terms of training and different capacity to absorb unskilled labour. Construction in developing countries tends to rely to a large extent on locally produced and fabricated materials, and in this way the growth of the sector plays a significant role in stimulating the economy as a whole from what is often termed 'backward linkages'. An important aspect of the construction sector is that it has traditionally been one of the industries within which people who have neither skills nor land for the production of food, have been able to earn a living, however precarious. This has been termed the ability to "absorb the excluded" (de Sousa, 2001). This attribute of construction is extremely important as a component of the social characteristics of the sector.

Moreover, as an industry that can provide jobs for people with a wide range of skills and formal learning, down to very low levels of both, important 'sideways linkages' are formed to the

immediate community of the employee and to the rest of the country. Workers at the lower end of the wage scale will tend to purchase predominantly local goods and services from markets in their immediate vicinity because of financial constraints and lack of mobility. The 'forward linkages' which are created through the products of construction; roads, clean water and sanitation, electricity, houses and public facilities all contribute to increased productivity, improved performance of learners who will become the next generation of workers, and to emerging businesses (McCutcheon et al, 2004).

Principal characteristics of the construction sector were identified, namely:

- a) Ownership patterns distorted through colonialism and apartheid;
- b) The role of small and micro-enterprises, especially small contractors;
- c) The shift to informal labour practices, including 'labour only' contracts;
- d) The cyclic, and especially the volatile, nature of the sector;
- e) The lack of entry-level skills and skills training of site workers, with associated problems of low productivity, health and safety; and
- f) The globalization of the larger and more experienced participants in the sector.

It can be observed that despite initiatives to overcome the marginalization of the majority of the population through the dysfunctional economy resulting from bad governed policies, positive results were slow and uneven (McCutcheon et al., 2004:17). The decline in construction training is attributed to the move to more flexible labour practices, brought about volatility of the industry. Also construction companies to subcontract the actual building but while becoming construction management specialists was not there. The present African governments has responded to this phenomenon through the establishment of new forms of construction training, but this has been met with some scepticism (McCutcheon et al., 2004:19 & 23). Similar

hesitation can be seen in relation to the government of Ghana's emphasis on small contractor development as its principal measure to redress distorted patterns of ownership, while simultaneously encouraging more labour-intensive delivery. Despite mentorship programmes, small contractors have an increasingly high attrition rate, and contribute a small fraction of the output of the industry (McCutcheon et al 2004:20). The phenomenon of high structural unemployment is identified as a central theme, with its direct consequences on workers' job security and ability to engage in wage negotiations. Moreover, in the construction sector, the increasing actualization of the workforce through subcontracting and 'labour only' arrangements leads to precarious conditions at a broad level in terms of lack of social security and benefits, but more directly in relation to health and safety issues. This was noted as the most vulnerable in the construction sector and was forced to absorb much of the risk, whether as labourers or as small contractors, as the established businesses abandon the actual construction in favour of management functions (McCutcheon et al., 2004). In the context of being a briefing document for organized labour to address the disturbing unemployment trends in the country, the report concludes: Two interrelated issues emerge as the central findings of the research on which this report is based, namely the changing role of labour in the construction sector, and the importance of informed and properly structured employment intensive programmes. The initiatives to date on the latter through the Special Public Works programmes indicate awareness and the political will to use the creation and maintenance of infrastructure and public facilities as vehicles for job creation. Now the challenge lies in adapting local and international experience to make these programmes viable in achieving their objectives. (McCutcheon et al., 2004).

Long-term vision and policy for the industry

This factor grouping comprises a variety of variables, all of which are concerned with the long-term thinking needed for the industry's future. Investors in the industry need to have confidence that their return on investment is commensurate with the risk of political instability. Such confidence can only be provided when information is freely available about matter which affects the business environment as well as specific projects. Construction projects can be huge in relation to individual firm's financial resources, and investors need to be sure that their investments have a long-term future. Hong Kong has a number of examples of large infrastructure projects which illustrate this point, including the airport, container port developments as well as connecting highways and railway construction (Asia contract, 2010). Governments, in their roles as major clients, often have large stakes in the infrastructure development, and their control of contract conditions may have adverse effects on investor sentiment if the risk placed on contracting parties is unusually high (Wells and Wall, 2003). It is important for government to have a good understanding of the way the industry thinks and responds to policies planned and implemented. Good understanding by the government also implies that they need to have ways of establishing construction industry development agency which will regulate and direct policies for good performance of the industry. Without good understanding and indicators for assessing the behaviour of the industry, government cannot be sure that their policies are appropriate and are achieving their intentions. Government is often accused as being a regulator of the economy through using fiscal and capital investment measures, and this is a reason given for the poor performance of the construction industry as a whole. For appropriate policies, there also needs to be good coordination between key government departments (Loosemore et al., 2003).

Apart from the government and investor viewpoints, there are other stakeholders who play their part in this factor. Research and development is closely associated with a long-term view of industry development, this being carried out by research institutions, private sector materials & components supply industry as well as universities. Finally, thinking of suitable visions and policies for the industry is a very difficult task, and requires sufficient management skills at a high level of achievement (Ashworth, 2004). Some management skills are as follows;

1. Financial and human resources in construction development

There are six variables which load on this factor. Investment and funding are essential to the development of the industry and these have been mentioned by several interview respondents in both developed and developing countries with more or less equal emphasis (Loosemore et al 2003). Whereas in the developing world, lack of funds has for decades been a chronic problem, generally in the developed world, this is a serious issue. However, there is a growing recognition in the developed countries that the industry needs to attract investment and this shows a growing awareness that competition is not only between construction companies within the industry but also competition between industries (Wells, 1986). The government's role is important in this respect since it is their policies and the presentation of industry's performance data that is often used for comparison between various industries. Thus government understandings of the construction industry, particularly in respect of intervention or lack of intervention would be important. The second theme under this factor concerns the human resources, particularly the development and availability of skills and knowledge. Several research reports in both developed and developing countries lament the lack of skills particularly at craft and operative levels. It is

interesting to note that of all 62 variables training and education receive the highest mean score concerning importance for the development of the construction industry (Walls and Ruth, 2000).

2. Thinking the best and behaving the best (a best practice culture)

Jesus Christ said that if we hate our brother in our hearts, then we have also committed murder in our hearts (Matthew 5: 21-22). The link between thought and behaviour as illustrated by this quotation can be seen to be very close. Likewise the link between our ethical behaviour and achieving best practice is also close. If the construction industry wants to achieve best practice, it must also think the best. (Fox, 1999) has already indicated the strong influence of values upon industry development as captured through a series of interviews with experts in construction industry development. The response from a wider population as captured in this quantitative study is consistent with his earlier findings. The other variables loading on this factor do not feature so strongly, but they are all of the same sign. Communication between government and contractors is important to encourage good ethical behaviour and can assist in identifying good practice. Some researchers have put forward a strong argument that since government is a major client of the industry, it can and should use its influence as a client in order to promote and to encourage best practice. Examples from the UK and Hong Kong both support this point (Ham & Hult, 1999). The availability of craft and operative skills does not seem to fit with this factor and no comment is made about this at this stage. Training and education, by contrast, are the most important way of promoting and achieving improved ethical behaviour and best practice. It is interesting to note that two other variables also load on this factor namely, long term thinking of industry and confidence in indigenous skills. Long term thinking of industry is clearly closely related to ethical behaviour and confidence in indigenous skills is achieved when honesty and integrity can be demonstrated (Anvuur et al., 2006).

3. Techniques supporting high production performance

Five variables load on this factor all relating to the production process. Prefabrication and standardised production is aimed at improving productivity and lowering cost. Recent management techniques which have become popular in construction include benchmarking and supply chain management as well as application of construction IT. Sufficient research has been carried out on these to demonstrate the benefits to the construction industry. The last variable which is appropriate production technology selected by contractors is consistent with the application of recent management techniques (Anvuur et al 2006).

4. A learning culture

There are 3 variables which load on this factor and they are to do with self-help and self-development combined with the organisation culture. The first variable originally came from experience in South Africa. But it is interesting to note that the respondents have considered this an important value. The variable of 'attention to organisation culture' is grouped together under this factor and an interpretation of this combination needs to use the concept of values. Culture is all about values. The linking of individual values in order to establish a culture is clearly important. The third variable, the use of computing skills, appears not to fit with the other 2 variables. It can be argued that the use of computing skills is something which encourages individual development and self-learning, particularly with access to the internet (Anvuur et al., 2006). Thus this factor is labelled a learning culture that is important for the development of the industry as a whole. From a developed country perspective, this emphasis comes through number of countries as identified in national reports of their respective construction industries, for example, UK (Latham report, 1994); Hong Kong (CIRC, 2001) and (HKHA, 2000); and

Singapore (Construct, 1999). Evidence from developing countries of the need for a learning culture is not so common. A learning culture is something that is necessary and important within the construction industry, and so a large number of stakeholders within the industry need to be involved. In addition, stakeholders outside the industry would also need to play their part, especially the national government through any appropriate changes in the education and training processes generally.

2.2 ESTABLISHING CONSTRUCTION INDUSTRY DEVELOPMENT AGENCY

There have been approaches from many countries at different levels of economic progress, to manage the continuous development of their construction industries. These have led to formation of construction industry development agencies to protect, promote and outline various regulations which help develop the construction industry.

There have been some initiatives in Ghana which provide support for the effort to establish an industry development agency in Ghana. The Construction Industry Development Institute (CIDI) has been established at the Kwame Nkrumah University of Science and Technology in Kumasi as a think tank which seeks to offer strategic leadership in the built environment sector “to provide an opportunity to promote understanding and support for construction industry development and improved delivery of infrastructure to the Ghanaian public. CIDI is the lead development partner of the Construction Industry Development Agenda (CIDA) of Ghana, and the main objective is to coordinate regional and national level construction activities and supports the scaling up of construction related development programmes which hope to achieve through three core pillars, namely: Promoting Competition Proactively, Rethinking the Construction Industry and Fulfilling the Promise. CIDI has the potential to play an important role in the groundwork for the establishment of the national development industry. The initiative

which should be highlighted is the work of the Association of Building and Civil Engineering Contractors of Ghana (ABCEG). The association has undertaken a series of consultations among the stakeholders in the construction industry in Ghana to consider the case for an industry development and regulatory agency. A delegation from the association visited South Africa to study that country's experience in those regards. This construction industry development agency propose fall under the supervision of Ministry of Roads and Transport and Ministry of Water Resources, Works and Housing. These ministries play a range of roles in construction including those of client and regulator (Ghana Highway Network Master Plan, 2001-202). Some countries, such as China and Vietnam, have ministries of construction. Such ministries represent the highest form of administrative responsibility and, perhaps, effectiveness, as they are able to directly formulate and implement policies, monitor their execution, offer incentives and rewards, and impose sanctions when necessary. For example, the current objectives of China's Ministry of Construction are to: prepare development plans, policies and laws for the industry; prepare rules and regulations on technical progress, quality management and safety; guide system reform; promote the transformation of businesses; and manage the operations of overseas construction companies in China (Walker et al., 1999). In some countries Government and quasi-government agencies dedicated to the development of the construction industry have also been formed. The first distinct construction industry development agency was the National Construction Council (NCC) of Tanzania which was proposed in the report of a team of eminent experts on construction which undertook a review of the country's construction industry in the mid-1970s (Ministry of Works, 1977). The Construction Industry Development Board (CIDB) in Singapore was formed in 1984 to spearhead the expansion and development of the construction industry. It is arguably the most successful and most widely studied of the industry development agencies. In

1999, the CIDB was merged with the Building Control Division of the then Public Works Department to form the Building and Construction Authority (BCA). The functions of Authority under the BCA Act which relate to industry development are:

- promote the development, improvement and expansion of the construction industry including the use of advanced technology in the construction industry;
- advise and make recommendations to the Government on matters affecting or connected with the construction industry;
- raise standards and efficiency in the construction industry by encouraging the standardisation and improvement of construction techniques and materials;
- provide consultancy and advisory services related to the construction industry;
- promote the advancement of skills and expertise of persons in the construction industry;
- raise the professionalism and capabilities of firms in the construction industry;
- promote the adoption of internationally recognised quality management systems in the construction industry;
- facilitate the supply of essential construction materials and secure and manage land and facilities related to their import and production; and
- carry out research for the ~~development~~ and improvement of the construction industry (Government of Singapore, 1999).

The Construction Industry Development Board (CIDB) of Malaysia was established under an Act in 1994. Its objectives are to:

- promote and stimulate the development, improvement and expansion of the construction industry;

- advise and make recommendations to the government on matters relating to the construction industry;
- promote, stimulate and undertake research into any matter relating to the construction industry;
- promote, stimulate and assist in the export of services relating to the construction industry;
- provide consultancy and advisory services with respect to the construction industry;
- promote quality assurance in the construction industry;
- encourage the standardisation and improvement of construction techniques and materials;
- initiate and maintain a construction industry information system;
- provide, promote, review and co-ordinate training programmes organised by public and private centres for skilled construction workers and construction site supervisors;
- accredit and register contractors and to cancel, suspend or reinstate the registration of any registered contractor; and
- accredit and certify skilled construction workers and construction site supervisors.

The Institute for Construction Training and Development (ICTAD) (Sri Lanka) was formed in 1986. Its objectives are:

- To improve the capacity of training institutions and facilitate the qualitative improvement of training programmes to meet the needs of semi-skilled and managerial personnel;
- to improve the quality and efficiency of the construction industry by encouraging innovative approaches in technology and industrial development activities and in achieving economy in construction works.(Construction Industry Development Board, 2007).

The CIDB of South Africa was also established by a statute in 2001. The objects of the Board included;

- promoting the contribution of the construction industry in meeting national construction demand and in advancing: (i) national, social and economic development objectives;
- industry performance, efficiency and competitiveness; and (iii) improved value to clients;
- providing strategic leadership to construction industry stakeholders to stimulate sustainable growth, reform and improvement of the construction sector;
- determining and establishing best practice that promotes: (i) improved industry stability; (ii) improved industry performance, efficiency and effectiveness; (iii) procurement and delivery management reform; (iv) improved public sector delivery management; (v) national social and economic objectives, including (1) growth of the emerging sector, (2) labour absorption in the construction industry; (3) improved labour relations; and (4) positive safety, health and environmental outcomes; and (vi) human resource development in the construction industry;
- promote best practice through the development and implementation of appropriate programmed and measures aimed at best practice and improved performance of public and private sector clients, contractors and other participants in the construction delivery process;
- promote uniform application of policy with regard to the construction industry throughout all spheres of Government;
- promote, establish or endorse: (i) uniform standards; and (ii) ethical standards, that regulate the actions, practices and procedures of parties engaged in construction contracts;

- promote sustainable growth of the construction industry and the participation of the emerging sector therein;
- promote appropriate research on any matter related to the construction industry and its development;
- implement policy on construction industry development; and
- advise the Minister on policy and programmed which impact on construction industry growth and development.

In some developing countries, the construction industries have established, managing and funding organisations dedicated to the continuous development of the industries. An example is the organization in India. The Construction Industry Development Council (CIDC) of India is to promote, upgrade, strengthen and develop the industry in all aspects so as to engender quality, speed, economy and efficiency in construction, and for the industry to be competent and competitive at home and abroad, and to be responsive to economic, technical, environmental and social changes and public policies to provide impetus and support for raising quality, providing uniform criteria for evaluating capabilities, enhancing environmental consciousness, and securing wider appreciation of the industry's problems; and to initiate a process of self-reform towards simplification, rationalisation, liberalisation, and greater transparency and equity.

Another organisation in India which seeks to develop the construction industry on a national basis is the National Institute for Construction Management and Research; it focuses on training. Industry funded research organisations in industrialised countries such as the Construction Industry Institute in the United States and the European Construction Institute, based in Loughborough, United Kingdom and the Construction Industry Research and Information

Association, UK undertake research on topics identified by industry, and prepare and disseminate reports and best practice guides. However, as private organisations, they are not involved in implementation or direct monitoring of construction industry development initiatives (Asia Construct, 1997).

2.2.1 Advisory Organisations

There are some advisory organisations concerned with construction industry development which may be government departments or private organisations. They undertake studies, prepare and disseminate reports; may prepare programmes and policies; and advise government directly. These include the Construction Industry Board (UK), and units in the ministries responsible for construction in many countries. There is a unique example of an executive construction industry development organisation which was formed and specifically given a limited life. The Construction Industry Development Agency (CIDA) (Australia) was set up in 1992 and given a mandate until 1995 to implement the Construction Industry Reform Strategy agreed by government, industry (clients and employers of construction personnel) and unions. The stakeholders' vision for CIDA was that of a world-class Australian "building and construction industry" delivering customer requirements in many different ways. Its mission was the development of the construction industry and continual improvement. It identified the following key issues: better project definition; performance standards for contractors; rationalisation of contractual relationships; more effective management practices; improved technical efficiency and capability; more efficient and flexible work practices; improved education for management personnel; a career structure and continuity of employment for workers; improvements in safety and working environments; strict adherence to award and agreement provisions; and reduction in lost time. The CIDA achieved much, but as an indication that construction industry development

is a long-term, continuous activity, it has been followed by many initiatives and reports at the national and state levels, as mentioned above. But in Ghana there is no such agency that will take on the responsibilities of regulating and directing policy decision for the growth of the construction industry.

2.3 SOURCES OF FUNDING CONSTRUCTION INDUSTRY DEVELOPMENT

Government intervention creates favourable environment for effective flow of cash for funding construction industry development. As a responsibility, it is imperative for the government to strive to create the economic conditions necessary for the stability of construction finance market (Karley, 2002). As a result of these interventions, Getfund is established. The government has introduced certain incentives into the country's Investment Code for the benefit of those who want to invest in construction project. These include tax holidays, zero rating of all equipment and machinery imported into the country and unrestricted transfer of loan and interest repayments, in addition to dividends, fees and royalties (Corporate Ghana, 2005). International non- governmental organizations (INGO's) / Non- governmental organizations (NGO's) have also acted as the mediator of the funding body and the government. They assisted in funding construction projects and constructing tens of thousands of temporary shelters and permanent homes (Siriwardena et al, 2010). United Nation, European Union, International Development Board and other international organization address humanitarian issues while providing the necessary funds to the community project. These funds are utilized for the purpose e.g. if a precondition is imposed to spend the money on community development project, the donors ensure that the funds are used for its purpose (Siriwardena et al, 2010). In Ghana, funds were not manage properly due to lack of construction industry development agency which will be charge

with the responsibilities of regulating and implementing policy decisions that will help minimize the bad behaviours of some of the stakeholders in the construction industry.

2.4 CHALLENGES CONFRONTING THE ESTABLISHMENT OF CONSTRUCTION INDUSTRY DEVELOPMENT AGENCY

Establishing construction industry development agency in all country faces difficulties and challenges. Also the problem facing the establishment of construction industry development agency is significantly fundamental, serious and complex. These challenges and difficulties alongside the general situation of socio-economic stress, chronic resources, shortage and a general inability to deal with key issuer (Ofori, 2000). There are numerous potential factors that affect the establishment of construction industry development agencies which will regulate and implement developmental policies on construction projects. Chronic delay in raising certificate for construction contractors, lack of credit facilities for firms, poor communication structures and an unreliable material supply base demanded the establishment of construction industry development agency. Ahadzie (2011) also said that lack of finance and credit facilities for contractors, delay in the payment of contractors for work done, design changes and/or variations, low morale and motivation of craftsmen, poor planning, supervision and low mechanization, as some of the important factors ~~for~~ lack of construction industry development agency in the country. In Ghana contracts take lengthy periods to reach financial closure and also, often subjected to unnecessary delays, poor coordination and communication structures, fiscal constraints and extensive systems of controls and land ownership disputes World Bank (1996, 2003). In a recent study, Fugar and Agyarkwa-Baah (2010) also synthesized a number of these

factors towards highlighting their relevance in contemporary Ghanaian construction practice. They concluded that the factors affecting construction industry development performance could be classified under the following themes: materials, manpower, equipment, financing, environment, changes, government action, contractual relationships and scheduling and controlling techniques and lack of proper regulatory bodies. Construction industry development face condition of uncertainty and risk, the source of such risk are severe in developing countries and includes;

Instability

Construction industry is one of the industries to feel the effect of economic recession (UNIDO, 1993). This phenomenon could be financial or other business risks make the development of this sector difficult. The construction industry in both developed and developing country is volatile. However, instability and volatile are more severe in developing countries with scares resources (Well, 1986). Discontinuity and fluctuation which characterise construction industry demand are also volatile in some developing countries (Moavenzadeh, 1984). For this reason construction industry are not able to neither maintain and develop skilled supervisors' staff and skilled labour nor establish an appropriate supply of basic equipment to help contractor deliver good work.

Scares resources

Many developing countries ~~are richly~~ endowed with natural resources but most are also characterise by shortage of resources such as money, trained personnel, technical know-how and appropriate technology practices that can help boost the construction industry.

2.5 STAKEHOLDERS IN CONSTRUCTION INDUSTRY

Construction project's stakeholder is the influential participating party who engages with the project throughout its life cycle to achieve its aims). The extent to which the project objectives and the clients' aims are aligned creates possible uncertainties, such as schedule deviation and conflicting stakeholders interests that project managers need not to underestimate (Chinyio and Olomolaiye, 2010). Construction stakeholders can be categorized as primary and secondary stakeholders. Primary stakeholders include client, consultant, and PM (Project Manager) who are considered as directly connected to the project while Secondary stakeholders include investors, suppliers, employees, sub-contractors, third party, banks, governmental authorities, pressure groups, trade associations, and communities(Atkin and Skitmore, 2008).. A project stakeholder can be defined as a person (or group of people) who has a vested interest in the success of a project and the environment within which the project operates. Vested interest is defined as having possession of one or more of the stakeholder attributes of power, legitimacy or urgency for their claims upon the project (Olander and Landin, 2005).

There are essentially two categories of stakeholders: internal, who are those actively involved in project execution; and external stakeholders being those affected by the project in a significant way, but not directly involved in execution of the project (such as neighbours, the community, the general public, as well as trade and industry) (Gibson 2000). There is a traditional view that the formal planning process, via rules and legislation concerning the design and location of a facility, represents the management of external stakeholder interests. However, there is a growing tendency for various stakeholder groups to try to influence the implementation of a construction project (Boholm et al. 1998). Different stakeholders have different levels and types of investments and interests in projects in which they are involved (Atkin and Skitmore, 2008).

Today almost every project takes place in a context where stakeholders play a major role in the accomplishment of the tasks. Often the project is sensitive to actions and decisions taken by the stakeholder (Karlsen, 2002). Its professionals need to be capable of coordinating relationships with diversified stakeholders, especially with the growing tendency of stakeholder groups to try to influence the implementation of construction projects according to their individual concerns and needs (Atkin and Skitmore, 2008; Olander and Landin, 2005).

Stakeholder perception

It can be clearly indicated that acceptance level sets the stakeholders perception towards the project and defines the extent and direction of the clients influence. The level of acceptance depends on two basic considerations: the needs and concerns of clients and the stakeholder involvement in the establishment of construction industry development agency, i.e. how they have been treated. An analysis of the consensus building idea (e.g. Susskind and Cruikshank 1987; Susskind and Field 1996) as compared with the measures taken in the City tunnel project to provide an indication of the central points to consider in an external stakeholder management process. Incorporating the other studied projects, allows an extended analysis of the concept of stakeholder acceptance to be made. From this analysis the acceptance level towards the project is based on the ability of the project manager to acknowledge the concerns of stakeholders and maintain or increase the acceptance level through an effective stakeholder management process.

The main aspects of this process are:

- build and maintain a base of trust;
- communicate all positive and negative consequences about the project; and
- implement the project in such a way that the potential negative impacts are minimised.

The challenge for the project manager is that of communicating and implementing the construction project in such a way that the perceived benefits and the negative impacts are presented realistically. This will minimise the effects of negative impacts and, maximise the benefits for all affected stakeholders including clients.

2.6 STRATEGIES FOR SUSTAINING THE ESTABLISHMENT OF CONSTRUCTION INDUSTRY DEVELOPMENT AGENCY

From the above, it can be inferred that, within the construction industry, the process dubbed the procurement system/ route, defines how projects are managed. These processes are briefly discussed in the following sub-section.

Firstly, the government should establish and ameliorate the system of laws and regulations in the construction industry. As Research Group (2000) pointed out, the government should draft new construction laws and regulations, which matches operational standards within the construction industry. In addition, the government should constitute essential policies with the aim to open the Ghanaian construction market. The government should also offer financial support such as bank loans, guarantee funds and insurance mechanisms to facilitate the development of construction industry development agency (Cui, 2001). Moreover, they should take measures to promote those institutions that have comparative advantages, or are leading the industry. These measures include organizing and providing market information services, facilitating technology transfer and strengthening professional training through collaboration between Ghana and foreign educational organizations (Cui, 2001).

In order to improve labour productivity and reduce project costs, Ghana construction industry development agency should attach importance to the reformation of management and technology through collaboration with educational institutes, universities and research departments and set up effective technology transfer systems (Chen and Mohamed, 2002). Meanwhile, as the tariffs are reduced with the accession of the industry, the cost for some advanced materials and equipment, which needs to be imported, will be reduced. In order to acquire new technologies and international management expertise, the Construction Industry Development Agency can undertake project-based joint ventures or other forms of alliance with international firms (Li, 2001). For those comparatively small-scale enterprises, being specialized and developing through mergers are good ways to survive in the fiercer competitive market. Moreover, in order to resist the challenges Ghana Construction Industry Development Agency should enlarge their investment in technical research and implement international standards and management systems (Research Group, 2000). The range of skills shown in both the public and private sectors in the procurement and delivery of construction projects is comparable (Ireland, 2002). Feedback from the supply side is that, there are departments who show a high level of skill, but that this is not the case for all Government Construction industry development agencies. Given the scale of the public sector construction programme, it ensures that Government commissioning teams are consistently equipped with the necessary high level of skills appropriate to specific projects and programmes.

Working with the Board members, the Cabinet Office ensure the establishment of appropriate governance structures for all construction projects consistent with the requirements of the Integrated Assurance and Assessment Process of the new Major Projects Authority, giving transparency to management accountability. To this end, construction industry development

agencies make available on their websites details of project/ programme governance structures for funded construction projects and the individuals accountable for them as Senior Responsible Owners and Project Sponsors. The Cabinet Office adapts the Project Secure Control Delivery System to track departmental construction projects. In collaboration with the Government Construction Board, the Cabinet Office also define the necessary skills for given roles in the governance structure, with a view to rolling them out across Government and initiating the tracking of capability (Newcombe, 2003).

2.7 THE ROLE CLIENTS PLAY IN CONSTRUCTION INDUSTRY DEVELOPMENT

A client can be private or public. The main difference between a private construction project and public construction project is that the client and the beneficiary are the same in private construction project while in public construction, reconstruction housing project the main initiator is the government and benefit accrues to the community affected (Siriwardena et al., 2010). In Ghana the government as a client is represented by the Ministry of Road and Transport (MRT) (for road works) and the Ministry of Water Resources, Works and Housing (WRWH) in giving out projects. In recent times the various Ministries such as Local Government and Rural Development, Ministry of Health etc. are quite autonomous and act as Clients when infrastructural development are within their domain. This department or organization help fund construction projects by sometimes using internal generated fund to support activities in project delivery.

The overarching Client responsibilities and roles are: The decision, by a wide range of local, regional, and national governments in countries as client, place some or most of their economic development activities under the operational control of appropriately regulated and supervised

agency structures, rather than to manage them from a municipal platform (Agbodjah, 2008). One of the means cited to improve economic development is the establishment of funds towards Construction Industry Development Agencies which would be local government-led or partnership led agencies, with a remit to lead and co-ordinate local economic development interventions. It reflects an established consensus that economic development activities are unlike the other roles and responsibilities of the local governments. These are primarily 'market facing' and involve 'long term' and 'wide area' thinking, and market-based interventions and transactions rather than public service delivery. Client also involves activities with companies or institutions (employers, investors, developers, for example wide range of stakeholders most of whom do not have votes in local governments because they are either not residents (commuters, visitors, students, entrepreneurs, and innovators who live elsewhere) (Vulink, 2004). The Client has multiple responsibilities, and it is normal to divide these amongst several individuals so that the appropriate management structure can be implemented and conflicts of interest avoided (Wells, 1986). Project roles should be allocated in such a way that everyone in the Clients' team is committed to successful delivery of the project. Responsibilities should be given to those individuals who have the appropriate ability, resources and level of responsibility to carry out their roles effectively. With this strategical role of the clients' term, donors and fund providers have confidence in the project success therefore giving out fund to construction industry development agencies for the project execution. It also makes fund providers aware of the organizational structures put in place for execution, hence, enhancing funds delivery on time. Clients can play crucial role in establishing CIDA that is by providing financial and technical assistance to them (Hurs and Ben, 2000).

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 INTRODUCTION

A very important part of a research work is the choice of methods, techniques, procedures and processes for the study. The methodology has an important impact on the result of the study because the outcome of the research is dependent on relevant and verifiable data.

This chapter therefore concentrates on the Research design, Population/Sampling, Sampling techniques, Data collection method, Data analysis, Statistical tool and Presentation of data used in collecting the necessary data for the purpose of the study.

3.1 STUDY AREA

Ho Municipal is one of the twenty five (25) Municipalities and Districts in the Volta Region of Ghana. The Municipality is also the administrative capital of the People of the Volta Region. The Municipality lies between latitudes $6^{\circ} 20'7''N$ and $6^{\circ} 55' N$ and longitude $0^{\circ} 12'7'' E$ and $0^{\circ} 53' E$. The Municipality shares boundaries with the Republic of Togo to the east, to the west with Ho West District, to the north with Hohoe Municipality and to the south with Agotime-Ziope. The Administrative capital of the Municipality is Ho. Ho municipality is chosen because it is the capital town of Volta region for which many clients can be accessed for the administering of the questionnaire. There have been ongoing construction project which involves CIDA. Five out of six giant buildings have been constructed at Sokode-Lokoe, the permanent site for the University of Health and Allied Sciences in the Ho Municipality of the Volta Region. The construction which began in August 2013 is being executed by Yanjian Group a Chinese Technical team at the cost of 36 million cedis. The eastern corridor road project passing through Ho municipality is

also one of the ongoing projects which involve construction industry development agencies. Most of these projects are handle by the agencies in the municipality.

3.2 RESEARCH STRATEGY AND DESIGN

Research strategy deals with how the research objectives are questioned. The two main strategies are quantitative and qualitative (Naoum, 1998). The decision to follow any particular strategy depends on the purpose of the study, the type and availability of information for the research (Naoum and Coles, 1997). There are many research designs usually employed in the field of investigations. The design used for this study is the descriptive research design in the sense that data were systematically collected, at a point in time, analyzed and presented to give a clear picture about the state of client perception towards establishment of the construction industry agency in the study area. A descriptive research is basically designed to find out the existing situation of a particular phenomenon of concern. In other words, a descriptive research is the research, which deals with the relationship among non-manipulated variables. In descriptive research, the events or conditions either already exist or have occurred and the researcher mainly selects the relevant variables for an analysis to their relationships.

The rationale for descriptive survey may be seen as:

- Telling what a situation is in a systematic manner;
- Involving collection of accurate data for the purpose of determining the current nature of the subject of study; and
- Involving hypothesis formulation and testing or research questions and answers describing the situation using logical methods for inductive-deductive reasoning to arrive at generalizations (John-Coker 2010).

The descriptive research follows specific procedures and makes possible interpretation of data collected. Here, research questions are raised and answered in a descriptive way. Any other person therefore can follow the same procedure and come out with the same results. The descriptive survey minimizes personality values; beliefs and predisposition of the researcher since there are laid down procedures to follow. The descriptive survey also provides the researcher with instruments, which are easier for the collection of data for the study.

Notwithstanding, these strengths, descriptive research has its own weaknesses. The main weakness of the descriptive survey is that, it is not sufficiently comprehensive to provide answers. Secondly, the descriptive survey cannot establish cause and effect relationships. Moreover, the researcher cannot deduce conclusively the cause of the phenomena or predict what the future phenomena will be. Furthermore, descriptive survey is costly when considered in terms of time and money when the target population is scattered. The choice of quantitative methodology can also be justified based on the fact that it is concise and sample is usually representative of a large population (Yin, 2002).

3.3 DATA COLLECTION AND INSTRUMENTATION

3.3.1 Sampling Frame

The target populations for this research are both public and private clients in the Ho municipality. The rationale for selecting the municipality was because of the already existing and ongoing construction projects. It is the capital of Volta region of which many of our respondents are mainly based. A sample is a subset of a population selected to participate in the study, it is a fraction of the whole, selected to participate in the research project (Brink 1996; Polit & Hungler

1999). In this survey, a sample size of 100 were selected out of the entire population of people living in the Municipality.

3.3.2 Sampling techniques

The sampling technique used for the research was convenience sampling. This is the type of sampling whereby the researcher selects the easiest population members from which to obtain information. In such situations the selection of sampling units is left to the interviewer.

3.3.3 Data Sources

The approach for collecting data involves desk study and field survey. The desk study (literature review) forms an essential aspect of the research since it sets the pace for the development of field survey instruments using questionnaires, and interview (Fadhley, 1991). The field survey deals with the collection of empirical data. A multiple approach to data gathering is adopted for the purpose of this research which includes; in-depth exploratory interview and survey questionnaires. Having conducted a thorough literature review and positioned the study within its theoretical context the adoption of the in-depth exploratory interview helped to elicit relevant information from the respondents, preceding the main questionnaire survey.

3.3.4 Questionnaire Design

Before the questionnaires are developed, it is important to first establish the information to be gathered so that relevant questions are solicited (Oppenheim, 1996). The questionnaires was designed to include; close-ended questions and scaled-response questions. Where close-ended questions have more than one response options, the Likert response scale will be employed to measure the strength or intensity of respondent's opinion. Attempt was made to keep the questions in the questionnaire in simple language, void of technical terms to minimize potential

errors from respondents. Similarly, the number of questions in each set was kept low as much as possible to encourage respondents to take their time in answering the questions. The format of the questionnaires will be guided by considerations of appeal to respondents and ease of reading.

3.3.5 Content of the Questionnaires

The quality of the responses and response rate is affected by the type of questions and the way in which questions are articulated and presented. Anchored on this premise, it was important to ensure that the right questions were asked, well understood and asked in the right way (Wahab, 1996). Overall, maximum 50 questions were asked, with the aim of exploring client perception of establishment of the construction industry development agency. The first set of questions was asked to acquire the background data about the respondents, which included information such as age, education level and position of respondents. The next set of questions which was mainly closed-ended type was asked to inquire about the performance, strength and weakness of the construction industry. The last set of questions which was also closed-ended type with open-ended type was asked to generate empirical data about the regulatory and development agency.

3.3.6 Data Analysis

The data was quantitatively presented in tables. Descriptive statistics (mean, standard deviations and median) was employed to analyze the collected data. The data collected was coded into the computer and edited to ensure consistency and checked for any omission, non-responses, validity and reliability of the responses. The software used for these analyses is Statistical Package for Social Science software (SPSS version 17) for the statistical analysis of the data and Microsoft Excel 2007.

3.4 DATA PRESENTATION AND STATISTICAL CONSIDERATION

3.4.1 Presentation of data

For accurate and reliable conclusions and to make relevant recommendations, data obtained from administration of questionnaires and personal interviews was presented in the form of tables, chapters, and graphs. Additionally, brief statements regarding interpretations of statistical tables will be made by the researcher.

3.4.2 Statistical Consideration

Descriptive statistics

Descriptive statistics summarise or describe the data (Tan, 2002). Descriptive statistics for surveys include:

1. *Counts (numbers or frequency);*
2. *Proportions (percentages);*
3. *Measures of central tendency (the mean, mode and median); and*
4. *Measures of variation (range and standard deviation) (Fink, 2006).*

The most common descriptive statistics are the mean and standard deviation for the data each category along with non-parametric tests was considered the main data reporting. Descriptive statistics was used in this research to analyse data related to different questions by computing counts (numbers or frequency) and proportions (percentages) used as appropriate. Statistical analysis techniques considered in this study was non-parametric procedures. A pragmatic view will be considered in the analysis to answer the research questions meaningfully

CHAPTER 4

DATA ANALYSIS AND DISCUSSION

4.0 INTRODUCTION

This chapter presents the analysis of data collected on the client's perception towards the establishment of construction industry development agency, taking Ho municipality into consideration. The results come in a form of descriptive statistics summaries (quantitative) and open-ended questions are presented as narratives and quotations (qualitative). It also presents the data in the form of tables and bar charts, by the use of frequencies and percentages, to show analysis between variable and for easy understanding.

4.1 SOCIO-DEMOGRAPHIC CHARACTERISTICS

In all 70 respondents were captured, 60 of the respondents were male representing 85.7% whiles 10 of the respondents were females representing 14.3% suggesting that the area of study is a male dominated field. The table 4.1 below depicts the evidence that the respondents were mainly male's whiles the female got the lowest count.

TABLE 4.1 Distribution of Respondents Gender

Gender	Frequencies	Percentage %
Male	60	85.7
Female	10	14.3
Total	70	100.0

Source: Field Survey 2014

TABLE 4.2Distribution of Respondents level of Educational Qualification

Level of Education	Frequencies	Percentage %
Basic/MSLC	7	10.0
Sec/Voc/Tech	14	20.0
HND/Degree	26	37.1
Post-Graduate	23	32.9
Total	70	100.0

Source: Field Survey 2014

Tohib (2011) concluded in his research entitled “Experience does it better” pg. 63 that “Experience of a learned person contribute greatly to problem solving”. When the right people are contacted they provide responses that are very meaningful. Essentially, as presented in Table 2 above, out of a total of 70 respondent interviewed, a total of 7 respondent representing 10 percent are Basic/MSLC, those having Sec/Voc/Tech qualification are 20 percent of the total number 32.9 percent are Post Graduate the qualification with the highest respondent are

HND/Degree recording 37.1 percent. This emphasized the perceived influence that the respondent would have on the survey since 70 percent of the respondent is having their Degree and Postgraduate indicating the level of experience they have acquired. According to Cassar (2004), the level of qualification of a respondent has a great influence on the response that is provided.

TABLE 4.3; Category of client’s that belong to the construction industry

Response	Frequencies	Percentage %
Government (Public)	25	35.7
Owner-occupiers (Private)	45	64.3
Total	70	100.0

Source: Field Survey 2014

Table 4.3 above, indicate that, 35.7 percent of the respondent are from the Government (public), while 64.3 percent represents Private (Owner-occupiers) even though private (owner-occupiers) client shows the higher percentage, a reasonable percentage representing the Government client indicate that the response is not going to be skewed to one side. Since diverse contribution from both sides would make it’s understanding better than a one sided story. However, Karley (2001) and Fugar (2009) argued that a fair sample of a group of people represent the group in totality.

TABLE 4.4 Types of project client's engage in the construction industry

Response	Frequencies	Percentage %
Road Construction	20	28.6
Building construction	50	71.4
Total	70	100.0

Source: Field Survey 2014

As presented in Table 4.4 above, In order to put the discussion in context, the respondents were asked to indicate the type of projects they are engaged in, majority of the respondent representing 71.4 percent were Building construction leaving 28.6 percent of the respondent being Road construction. Bansa (2007) stated that, you may be able to target the best institution for your research, but as to whether the right individuals in that institution are contacted is more important since the people that matter most are the once that are able to provide us with all the needed responds. Bodriguez (2008) indicated that the place the person is working form a great part in every response that comes from that person. For instance if a Procurement Officer and a District Engineer are asked the same question like how long would it take for the construction of a market. The response to this question would defer since they all belong to different background. It seems credible to conclude that ~~those who~~ responded to the survey are sufficiently experienced in issues relating to the Construction industry to provide data which is realistic.

INDICATED PRINCIPLE ON PERFORMANCE OF THE CONSTRUCTION INDUSTRY

TABLE 4.5; Extent to Which Respondents rate the following Performance Indicators in the Ghanaian Construction Industry

Response	Frequencies/Percentage					Total
	Strongly agree	Agree	Uncertain	Disagree	strongly disagree	
VARIABLES	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)
Cost Performance	8(11.4)	11(15.8)	5(7.2)	16(22.8)	30(42.8)	70(100)
Time performance	5(7.2)	14(20.0)	10(14.4)	24(34.3)	17(24.3)	70(100)
Quality of workmanship	36(51.4)	18(25.7)	4(5.7)	9(12.9)	3(4.3)	70(100)
Safety and health	4(5.7)	10(14.4)	6(8.6)	20(28.6)	30(42.8)	70(100)
Environmental performance	5(7.2)	15(21.4)	11(15.7)	13(18.6)	26(37.2)	70(100)
Resource productivity	16(22.9)	34(48.6)	8(11.4)	9(12.9)	3(4.3)	70(100)

TABLE 4.5 Extent to Which Respondents rate the following Performance Indicators with respect to the Construction Industry in Ghana. Continuation

Meeting functional requirements	15(21.4)	32(45.7)	6(8.6)	13(18.6)	4(5.7)	70(100)
Client satisfaction	10(14.4)	12(17.1)	9(12.9)	10(14.4)	29(41.4)	70(100)
Satisfaction of beneficiaries	34(48.6)	17(24.3)	7(10.0)	10(14.4)	2(2.9)	70(100)
Profitability	40(57.1)	10(14.4)	3(4.3)	8(11.4)	9(12.9)	70(100)
Quality of work life	6(8.6)	5(7.2)	15(21.4)	19(27.1)	25(35.7)	70(100)

Source: Field Survey 2014

From Table 4.5 above, it reveal respondent's responses when they were asked the extent to which they are happy with the performance of the construction industry in Ghana with respect to the indicated criterion. Based on the cost performance, 8 of the respondents representing 11.4 percent strongly agree, 8 of the respondents representing 15.8 percent agree, while 5 of the respondents representing 7.2 percent are uncertain 16 of them representing 22.8 percent disagree. Also concerning working on time, 7.2 percent of the respondents strongly agree, 15.8 of the respondents agree, 14.4 percent of them are uncertain, 34.3 of the respondents disagree while the remaining 24.3 percent of the respondents strongly disagree. More so, talking of the quality of workmanship, 36 of the respondents representing 51.4percent strongly agree, 18 of the respondents representing 25.7 percent agree, 4 of them representing 5.7percent are uncertain, 9 of the respondents representing 12.9 percent disagree while 4.3 percent of the respondents have strongly disagree.

Furthermore, concerning the Health and safety, 5.7 percent of respondents strongly agree to the statement, 14.3 percent of the respondents agree to the statement, 8.6 percent of the respondent are uncertain, 28.6 percent of the respondents disagree while 42.8 percent of the respondents have strongly disagree. More also, concerning the environment, 7.1 percent of respondents strongly agree to the statement, 21.4 percent of the respondents agree to the statement, 15.7 percent of the respondent are uncertain, 18.6 percent of the respondents disagree while 37.2 percent of the respondents have strongly disagree. With Resource productivity, 16 of the respondents representing 22.9 percent strongly agree, 34 of the respondents representing 48

percent agree, 8 of them representing 11.4 percent are uncertain, 9 of the respondents representing 12.8 percent disagree while 3 of them representing 4.3 percent strongly disagree.

More also, concerning meeting functional requirements, 21.4 percent of respondents strongly agree to the statement, 45.7 percent of the respondents agree to the statement, 8.6 percent of the respondent are uncertain, 18.6 percent of the respondents disagree while 5.7 percent of the respondents have strongly disagree. Regarding the Client satisfaction, 14.3 percent of respondents strongly agree to the statement, 17.1 percent of the respondents agree to the statement, 12.9 percent of the respondent are uncertain, 14.3 percent of the respondents disagree while 41.4 percent of the respondents have strongly disagree. About to Profitability, 57.1 percent of respondents strongly agree to the statement, 14.3 percent of the respondents agree to the statement, 4.3 percent of the respondent are uncertain, 11.4 percent of the respondents disagree while 12.9 percent of the respondents have strongly disagree. Lastly, with respect to the Quality of work 6 of the respondents representing 8.6 percent strongly agree, 5 of the respondents representing 7.2 percent agree, 15 of them representing 21.4 percent are uncertain, 19 of the respondents representing 27.1 percent disagree while 25 of them representing 35.7 percent strongly disagree.

This is unambiguous that mainstream of the respondents strongly disagree with the Cost of construction, Health and safety of life, Environmental protection, Client satisfaction and Quality of work that is currently undertaken in the country. 24 percent of respondent also disagree to the duration (time) used for the completion of project. Project implementation has itself been characterized by extensive cost and time overruns and poor quality (Anvuur et al., 2006; Westring, 1997). Within the corporate social responsibility (CSR) cordons, the construction

industry has been aware of the need to consider the environmental impact of its products (Petrovic-Lazarevic, 2008). Community relations have also been an integral part of construction since buildings and various infrastructures of the built environment usually have large impact on society, on local, national and even international scale.

From the research, it is observe that the respondent attach more importance by agreeing to the following criterion, the Quality of workmanship, Resource availability, Meeting functional requirements, beneficiaries satisfaction and profitability. People are compromising business standards or values all in the name of profit (Nancy, 2005). It means even though they have quality workmanship and quality resources at our disposal, they compromise the standard, in order to reduce the cost forgetting the environmental impacts on the health of our life (SatijaKalpana, 2009). It is worth noting that people do all sort of things all in the name of making profit.

TABLE 4.6 Extent to Which Respondents Agree or Disagree on Factors that Causes Poor Performance on Construction Projects in Ghana

Frequency/Percentage						
Response	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree	Total
Variables	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)	Freq. (%)
Poor design	30(42.9)	18(25.7)	2(2.9)	15(21.4)	5(7.1)	70(100)
Poor procurement processes	34(48.6)	21(30.0)	3(4.3)	10(14.3)	2(2.9)	70(100)
Exceptionally low bids	14(20.0)	29(41.4)	10(14.3)	10(14.3)	7(10.0)	70(100)
Poor project management	33(47.1)	16(22.9)	3(4.3)	11(15.7)	7(10.0)	70(100)
Poor regulation of construction process	28(40.0)	20(28.6)	8(11.4)	9(12.9)	5(7.1)	70(100)
Shortages of materials	23(32.9)	30(42.9)	4(5.7)	12(17.1)	1(1.4)	70(100)
Lack of skilled workers	16(22.9)	6(8.6)	12(17.1)	14(20.0)	22(31.4)	70(100)

TABLE 4.6 Extent to Which Respondents Agree or Disagree on Factors that Causes Poor Performance on Construction Projects in

Ghana. Continuation

Low level of technology	31(44.3)	19(27.1)	5(7.1)	13(18.6)	2(2.9)	70(100)
Inadequate contractor resources	33(47.1)	20(28.6)	9(12.9)	7(10.0)	4(5.7)	70(100)
Delays in payments by clients	15(21.4)	19(27.1)	13(18.6)	14(20.0)	8(11.4)	70(100)
Frequent changes in design	13(18.6)	21(30.0)	7(10.0)	25(35.7)	4(5.7)	70(100)
Corruption	22(31.4)	29(41.4)	8(11.4)	10(14.3)	1(1.4)	70(100)
Inadequate commissioning	17(24.3)	23(32.9)	11(15.7)	13(18.6)	6(8.6)	70(100)

Source: Field Survey 2014

The performance of construction in Ghana and many developing countries is poor (Anvuur, et al. 2006). Contracts for both works and consultancy services take very lengthy periods to reach financial closure and are subject to unnecessary delays (Westring 1997). In fact, Westring (1997) attributes the causes of the poor performance of the construction sector in Ghana to delays in the release of funds, shortages of materials, low level of technology, shortage of materials, extensive post-award negotiations, delays in the preparation of technical specifications and drawings, delays in evaluation, an extensive system of controls, reviews and approvals, and land ownership disputes.

Ahadzie et al. (2008) have further researched on factors that causes poor performance on construction projects in Ghana by concluding on three interesting classifications, namely; frequent changes in design, delays in payments by clients and poor regulation of construction process. According to Crawford (2005), delays in payments by clients are the main cause of poor performance of the construction sector in Ghana. As presented in Table 4.6 above, 42.9 percent of the respondents strongly agree to the fact that poor design negatively affect the performance of construction projects in Ghana, followed closely by 25.7 percent of the respondents agreeing, but 21.4 percent of the respondents disagree and 7.1 percent of the respondent disagree percent of them are, while the remaining 2.9 percent of the respondents are uncertain.

Similarly, the respondents also rate highly the following factors as the cause of poor performance of the construction sector in Ghana, they are, poor procurement processes, exceptionally low bids, poor project management, poor regulation of construction process, shortages of materials, low level of technology, inadequate contractors resources, delays in payments by clients, corruption and inadequate commissioning. On the other hand the respondents do not see lack of skilled worker as a cause of poor performance in the construction sector in Ghana since 31.4

percent and 20 percent of the respondent strongly disagree and disagree respectively to the criterion.

INDICATED PRINCIPLE ON STRENGTH OF THE CONSTRUCTION INDUSTRY

TABLE4.7 Presence of a Substantial Volume of Construction Work Which Provides Opportunities for All Firms in the Industry to Grow

Response	Frequencies	Percentage %
Strongly agree	20	28.6
Agree	17	24.3
Uncertain	13	18.6
Disagree	11	15.7
Strongly disagree	9	12.9
Total	70	100.0

Source: Field Survey 2014

Table 4.7 above indicate that, 20 respondents representing 28.6 percent strongly agree to the assertion that there is a substantial volume of construction work which provides opportunities for firms in the industry to grow, 24.3 percent of the respondent also agree, but 18.6 percent of the respondent are uncertain. On the lower side, 15.7 percent disagree whiles 12.9 percent which happen to form the least group from the total respondent interviewed, strongly disagree.

TABLE 4.8 Presence of Adequate Qualified and Experienced Personnel in All Segments of the Industry

Response	Frequencies	Percentage %
Strongly agree	28	40.0
Agree	22	31.4
Uncertain	6	8.6
Disagree	9	12.9
Strongly disagree	5	7.1
Total	70	100.0

Source: Field Survey 2014

The respondents constantly admitted to the fact that, in Ghana we have adequate qualified and experienced personnel in all segments of the industry but as to why most of the construction work in Ghana are in poor state is answered by Allinson (1998) who stated that, whenever there are options to choose from, a decision is first made. That decision would influence your choice. According to Fomni (2007), experience personnel are normally contacted because of the high cost involved in engaging the service of qualified ones. This we can observe from Table 4.8 above, which indicates that, 40 percent strongly agree which form the highest number of the respondents, 31.4 percent of the respondents also agree, 12.9 percent Disagree but 8.6 percent of the respondents are uncertain while, 7.9 percent which happen to be least Strongly disagree to the statement that exist the presence of adequate qualified and experienced personal in all segment of the industry.

TABLE4.9 Distribution on Presence of Strong Professional Institutions and Trade Associations

Response	Frequencies	Percentage %
Strongly agree	25	35.7
Agree	20	28.6
Uncertain	5	7.1
Disagree	14	20.0
Strongly disagree	6	8.6
Total	70	100.0

Source: Field Survey 2014

From table 4.9 above, it reveal that, 5 respondent representing 7.1 percent are uncertain as to whether their exist strong professional institutions and trade associations in Ghana, whiles 6 respondents representing 8.6 percent strongly disagree to the statement. Also, 14 respondent representing 20 percent Disagree to the said statement but 20 respondent representing 28.6 percent agree to the statement finally, 25 respondent representing 35.7 strongly agree that in Ghana their exit professional institutions and trade associations in Ghana. In conclusion, majority of the respondents are of the view that the problem in the construction industry in Ghana is not as a result of the lack of professional institutions and trade associations in Ghana.

TABLE 4.10 Existence of Adequate Laws and Regulations to Govern the Construction Industry

Response	Frequencies	Percentage %
Strongly agree	36	51.4
Agree	19	27.1
Uncertain	4	5.7
Disagree	8	11.4
Strongly disagree	3	4.3
Total	70	100.0

Source: Field Survey 2014

Table 4.10 above explores respondents' responses on the existence of adequate laws and regulations to govern the construction industry classification of. Out of the total 70 respondents interviewed, 36 of the respondents representing 51.4 percent strongly agree while 19 of the respondents representing 27.1 percent agree. Four (4) of the respondents representing 5.7 percent are uncertain. Eight (8) respondents interviewed representing 11.4 percent disagree with just three (3) of them representing 4.3 percent strongly disagree. It is often argued that the effect of legal framework affect the behaviour of the firm activity mostly for the better (Owusu-Manu, 2008). Notwithstanding, the independence of the construction industry would have wish to enjoy but without laws, people would do everything in the name of doing business.

However, Storey (1994) and Cassar (2004) argued that while some may consider the benefits of laws and regulations, a critical factor worth considering is the fact the laws are to be followed and respected by all instances but some people seem to be above the law which does not give a fair deal to all the sector. These findings suggest that in Ghana, like many countries, laws do

exist in the construction sector but the problem we face is the enforcement of the laws. This is not surprising because, practically, law issues are concerned with what is right, wrong, fair, just, good or bad; about what we ought to do, not just what is the case or what is most acceptable or expedient (Preston, 1996). Recently, Walker et al (2007) contributed to the scarce law debate and concluded that law is a multifaceted concept that includes regulations, the legitimacy of moral claims and basis of justification of decisions and may include: conflict of interest, fraudulent behaviours and corruption.

TABLE4.11 Distribution on Presence of Government Ministries, Departments and Agencies Which Properly Administer and Develop the Construction Industry

Response	Frequencies	Percentage %
Strongly agree	33	47.1
Agree	17	24.3
Uncertain	2	2.9
Disagree	10	14.3
Strongly disagree	8	11.4
Total	70	100.0

Source: Field Survey 2014

Table 4.11 above, suggest that, 47.1 percent strongly agree to the fact that Government has agencies and departments whose sole responsibility is to properly administer and develop the construction industry in Ghana, 24.3 percent of the respondent also agree, 14.3 percent Disagree but 11.4 percent of the respondent strongly disagree to that assertion while, 2.9 percent of the respondent are uncertain. This imply that, majority of the respondents representing 47.1 percent

strongly agree that Government has agencies whose sole responsibility is to properly administer and develop the construction industry in Ghana.

TABLE4.12; Foreign Firms from Which the Local Companies and Practitioners Can Learn

Response	Frequency	Percentage %
Strongly agree	18	25.7
Agree	10	14.3
Uncertain	14	20.0
Disagree	20	28.6
Strongly disagree	8	11.4
Total	70	100.0

Source: Field Survey 2014

Table 4.12 has reveal divert views exhibited by the respondent, it is very hard to conclude whether they agree or not even though 28.6 percent of the respondent disagrees to thepresence of foreign firms which local companies and practitioners can learn with 11.4 strongly disagreeing adding up to 40 percent but the same percent being 25.7 strongly agreeing with 14.3 percent agreeing. It therefore proves that the respondents are uncertain as to whether we stand to gain from the presence of foreign firms or not.

TABLE 4.13 Extent to Which Respondents Agree or Disagree on the Present Problems and Weaknesses of the Construction Industry in Ghana

Response	Frequency/Percentage					Total
	Strongly agree Freq. (%)	Agree Freq. (%)	Uncertain Freq. (%)	Disagree Freq. (%)	Strongly disagree Freq. (%)	
Absence of a dedicated agency charged with the development and regulation of the construction industry	34(48.6)	21(30.0)	3(4.3)	10(14.3)	2(2.9)	70(100)
Adherence to old laws and regulations which are no longer relevant to the construction industry in Ghana	30(42.9)	19(27.1)	6(8.6)	6(8.6)	9(12.9)	70(100)
Excessive bureaucracy in the administration of the construction process	33(47.1)	17(24.3)	9(12.9)	7(10.0)	4(5.7)	70(100)
Inadequate financial resources of firms in the construction industry	6(8.6)	9(12.9)	10(14.3)	20(28.6)	25(35.7)	70(100)
Corruption in the construction process	27(38.6)	23(32.9)	4(5.7)	7(10.0)	11(15.7)	70(100)
Lack of skilled human resources	11(15.7)	6(8.6)	7(10.0)	22(31.4)	24(34.3)	70(100)
Low level of technology development in the industry	17(24.3)	18(25.7)	4(5.7)	16(22.9)	15(21.4)	70(100)
Low level of application of information and communication technology in the industry	19(27.1)	16(22.9)	14(20.0)	11(15.7)	10(14.3)	70(100)

Poor procurement practices in the construction industry	27(38.6)	19(27.1)	8(11.4)	10(14.3)	6(8.6)	70(100)
Lack of transparency in construction contract award and administration	26(37.1)	25(35.7)	4(5.7)	8(11.4)	7(10.0)	70(100)
Weak classification and certification systems for registration of contractors	29(41.4)	22(31.4)	6(8.6)	8(11.4)	5(7.1)	70(100)
Presence of foreign firms in the construction Industry in Ghana	4(5.7)	7(10.0)	16(22.9)	21(30.0)	22(31.4)	70(100)
Inadequate transfer of technology from foreign firms operating in the construction industry in Ghana	9(12.9)	11(15.7)	10(14.3)	18(25.7)	22(31.4)	70(100)
Lack of evaluation of the performance of consultants, contractors and subcontractors	30(42.8)	21(30.0)	6(8.6)	7(10.0)	6(8.6)	70(100)
Delays in payment for work done on government Projects	35(50.0)	23(32.9)	1(1.4)	5(7.1)	6(8.6)	70(100)
Poor occupational health and safety practices in the industry	27(38.6)	21(30.0)	8(11.4)	7(10.0)	7(10.0)	70(100)
Poor standards of quality of workmanship in Construction	5(7.1)	7(10.0)	11(15.7)	23(32.9)	24(34.3)	70(100)
Lack of adherence to codes of professional ethics by some players in the construction industry	31(44.3)	16(22.9)	11(15.7)	5(7.1)	7(10.0)	70(100)
Lack of collaboration and co-ordination among the participants in projects in the construction industry	22(31.4)	25(35.7)	10(14.3)	4(5.7)	9(12.9)	70(100)

TABLE 4.13 Extent to Which Respondents Agree or Disagree on the Present Problems and Weaknesses of the Construction Industry in Ghana. Continuation

Poor utilities and infrastructure which makes logistics difficult and frustrates performance on projects	26(37.1)	19(27.1)	8(11.4)	9(12.9)	8(11.4)	70(100)
Inadequate co-ordination among the ministries, departments and agencies which deal with aspects of construction	30(42.8)	21(30.0)	3(4.3)	7(10.0)	9(12.9)	70(100)
Weak manufacturers and suppliers of construction Materials	8(11.4)	12(17.1)	10(14.3)	18(25.7)	22(31.4)	70(100)

Source: Field Survey 2014

Table 4.13 above make known the Present Problems and Weaknesses of the Construction Industry in Ghana according to the 70 people interviewed. Absence of a dedicated agency charged with the development and regulation of the construction industry, adherence to old laws and regulations which are no longer relevant to the construction industry in Ghana, excessive bureaucracy in the administration of the construction process, corruption in the construction process, low level of application of information and communication technology in the industry development in the industry, poor procurement practices in the construction industry, lack of transparency in construction contract award and administration, weak classification and certification systems for registration of contractors, lack of evaluation of the performance of consultants, contractors and subcontractors, delays in payment for work done on government projects, poor occupational health and safety practices in the industry, lack of adherence to codes of professional ethics by some players in the construction industry, poor utilities and infrastructure which makes logistics difficult and frustrates performance on projects.

Inadequate co-ordination among the ministries, departments and agencies which deal with aspects of construction were strongly agreed scoring 48.6percent, 42.9 percent, 47.1percent, 38.6percent, 27percent, 38.6percent, 37.1percent, 41.4percent, 42.9percent, 50percent, 38.6, 44.3percent 37.1percent and 42.9 percent respectively were highly score by the respondent. But low level of technology development in the industry was agreed by the respondent with a highest percentage of 25.7 as well as lack of collaboration and co-ordination among the participants in projects in the construction industry was also agreed highly by the respondent with 35.7 percent. But the following were not regarded as problems and weaknesses of the construction industry since it was strongly disagreed by the respondent, inadequate financial resources of firms in the construction industry, presence of foreign firms in the construction industry in Ghana, inadequate

transfer of technology form foreign firms operating in the construction industry in Ghana, poor standards of quality of workmanship in construction, and weak manufacturers and suppliers of construction materials with 35.7 percent, 31.4 percent, 31.4 percent,34.3 percent and 31.4 percent respectively.

Clients Suggestions on the Formation of Regulatory and Development Agency for the Construction Industry

TABLE 4.14; Distribution on whether Respondents Agree that a Construction Industry Regulatory and Development Agency Should be Established

	Yes	No	
Value	Freq. (%)	Freq. (%)	Total (%)
Yes, such an agency should be set up	60(85.7)	10(14.3)	70(100)
No, there are already too many government ministries and departments 'managing' aspects of the construction process and construction industry	25(35.7)	45(64.3)	70(100)
No, it will add to the bureaucracy in the construction Process	20(28.6)	50(71.4)	70(100)

Source: Field Survey 2014

From Table 4.13 above, out of the total number of 70 respondent interviewed, 85.7 percent agreed that construction industry regulatory and development agency should be established in spite of the existence of the government own department whiles 14.3 percent disagree to the same statement, meanwhile, 28.6 percent of the respondent argue that it will add up to the bureaucracy in the construction process in the country but 71 percent of the respondent disagree to that. Contrasting these with the findings by Ofori and Hinson (2007) who found that institution under the supervision of the private authority is normally productive in its works than those under the authority of the state.

TABLE 4.15; Distribution on What Should the Broad Ambit of the Agency's Operations

Value	Yes Freq. (%)	No Freq. (%)	Total (%)
It should be a developmental agency, leading the expansion of the capacity and enhancement of the capability of the industry only, like the Construction Industry Development Boards in Malaysia and South Africa	54(77.1)	16(22.9)	70(100)
It should be a developmental and regulatory agency, leading the expansion of the capacity and enhancement of the capability of the industry as well as formulating regulations for building control, approving building plans and controlling the commissioning of buildings like the Building and Construction Authority in Singapore.	62(88.6)	8(11.4)	70(100)

Source: Field Survey 2014

TABLE4. 16; Main Functions of the Agency Be

Value	Yes Freq. (%)	No Freq. (%)	Total (%)
To lead the development of the construction industry through the formulation and implementation of policies and programmes	60(85.7)	10(14.3)	70(100)
To regulate the construction industry through the administration of appropriate laws, regulations, codes and standards	55(78.6)	15(21.4)	70(100)
To provide incentives to companies	28(40.0)	42(60.0)	70(100)
To register consultants and contractors	46(65.7)	24(34.3)	70(100)
To register all construction projects	20(28.6)	50(71.4)	70(100)
To collect information on the construction industry and impose sanctions on those failing to comply	49(70.0)	21(30.0)	70(100)
To undertake research on relevant aspects of the construction industry	44(62.9)	26(37.1)	70(100)

With respect to the function of the agency, table 4.14 presents the response of the respondent. To lead the development of the construction industry through the formulation and implementation of policies and programmes, To regulate the construction industry through the administration of appropriate laws, regulations, codes and standards, To register consultants and contractors, To collect information on the construction industry and impose sanctions on those failing to comply, To undertake research on relevant aspects of the construction industry scored a yes of 85.6 percent, 78.6 percent, 65.7 percent, 70 percent and 62.9 percent respectively indicating that the respondent attached more importance to the above functions while To provide incentives to companies scored 60 percent of No and 71.4 percent of the respondent said no “To register all construction projects” as being a function of construction industry. A large number of researches reveal that construction agency should be form to regulate the industry through the administration of appropriate laws and also to seek the welfare of both the client and the institution (Field, 2005).

TABLE4.17; Institutional Arrangement for the Agency

Value	Yes	No	Total (%)
	Freq. (%)	Freq. (%)	
It should be an executive agency, with programmes of its own, like the CIDAs in most countries	65(92.9)	5(7.1)	70(100)
It should be an advisory unit which helps the ministries to adopt the right policies	58(82.9)	12(17.1)	70(100)

Source: Field Survey 2014

Table 4.15 reveal that, the respondent want the institutional arrangement of the agency should be an executive agency, with programmes of its own, like the CIDAs in most countries and it should be an advisory unit which helps the ministries to adopt the right policies.

TABLE 4.18; Which Parent Ministry Should the Agency Be Placed Under

Value	Yes	No	Total (%)
	Freq. (%)	Freq. (%)	
Ministry of Water Resources, Works and Housing	66(94.3)	4(5.7)	70(100)
Ministry of Roads and Transport	61(87.1)	9(12.9)	70(100)
Ministry of Lands and Mineral Resources	52(74.3)	18(25.7)	70(100)
Ministry of Local Government	20(28.6)	50(71.4)	70(100)

Source: Field Survey 2014

It has been suggested by the research that, the parent ministry of the agency be placed under the Ministry of Water resources, Works and Housing, this can be seen from table 4.16 above since Ministry of Water resources, works and Housing has been accepted by 66 respondents representing 94.3 percent of the total respondent. Fantu (2001) stress that, the ministry of local government has no expertise to supervise the work of the agency. The local government has a lot of responsibility which they have been task to perform within a stipulated time it is with this reason why the ministry of local government has been rejected by the respondent with a 71.4 percent No.

TABLE4.19; Key Players in the Agency

Value	Yes	No	Total (%)
	Freq. (%)	Freq. (%)	
Relevant government ministries	17(24.3)	53(75.7)	70(100)
Municipal, district and local councils	22(31.4)	48(68.6)	70(100)
Professional institutions and trade associations	57(81.4)	13(18.6)	70(100)
Labour unions for the construction trades	26(37.1)	44(62.9)	70(100)
Tertiary educational institutions	11(15.7)	59(84.3)	70(100)

Source: Field Survey 2014

The respondent, seek professional institutions and trade associations to be the key player of the agency this can be seen from table 4.17 above. This response is quite similar to what Albert (2003) has in his research to him if it would be done well then government should not be a major player in the agency, for when government is involve way has been pave for politics to set in when that happen, people would argue on things that are not importance whiles this group sees it as bad the other group thinks opposite. Is not the best but it is the reality of our today.

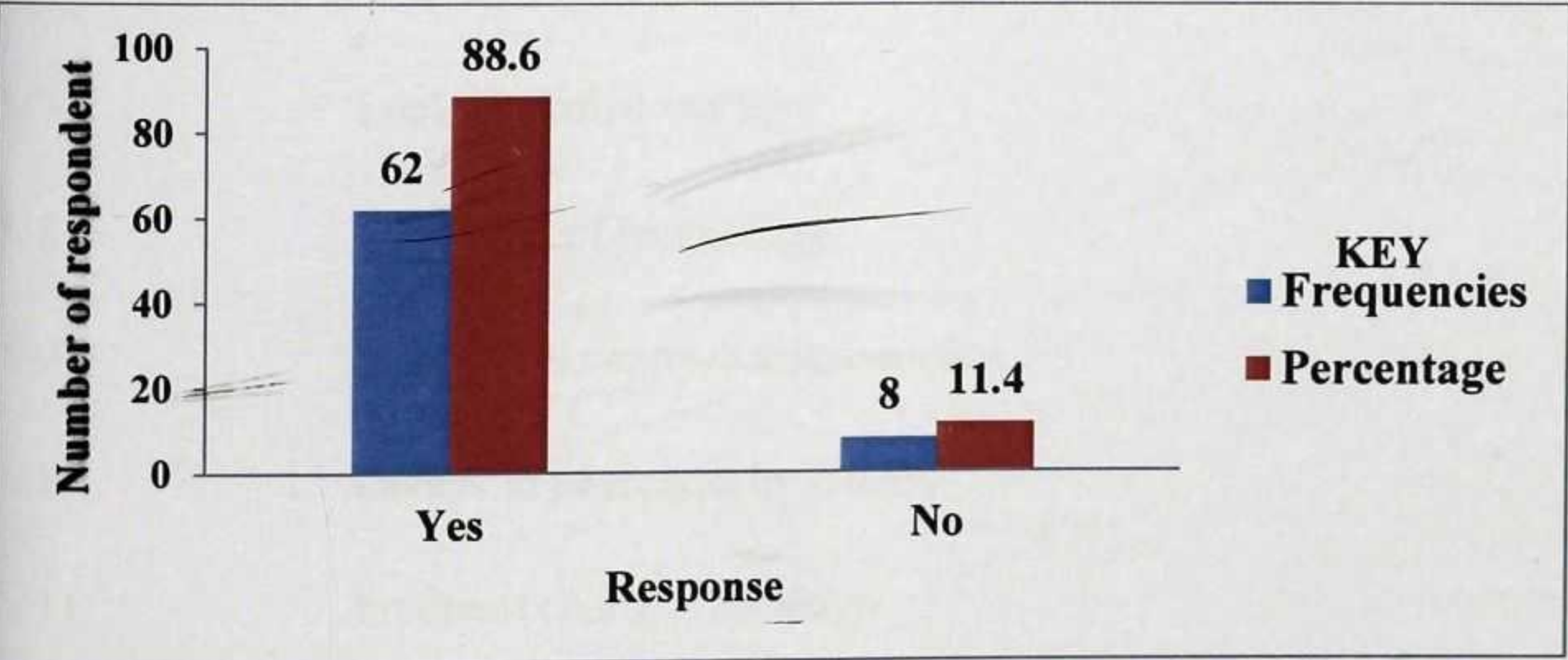
TABLE 4.20; Distribution on the Structure the Agency should have

Value	Yes	No	Total (%)
	Freq. (%)	Freq. (%)	
A board with membership appointed by the minister on merit only (ie, the board members do not represent any particular constituent parts of the construction industry).	58(82.9)	12(17.1)	70(100)
A board with membership appointed by the minister, representing constituent parts of the construction industry	16(22.9)	54(77.1)	70(100)
A central agency based in Accra only	30(42.9)	40(57.1)	70(100)
A central agency in Accra, with regional branches.	27(38.6)	43(61.4)	70(100)

Source: Field Survey 2014

Table 4.18 above indicate that a board with membership appointed by the minster on merit only (ie, the board members do not represent any particular constituent parts of the construction industry.

CHART 4.1; Bar Chart Showing Responses on Whether They Think the Construction Industry Development Agency Will Have a Sustainable Future



Source: Field Survey 2014

Figure 4.1 above presents the responses of the firm’s contribution to “whether they think the construction industry development agency will have a sustainable future”. As depicted by the figure, whilst 11.4 percent of the respondent indicated that the construction firm has no future the remaining 88.6 percent of the respondent over warmly think the construction industry development agency has a sustainable future in Ghana.

Descriptive Analysis

Descriptive statistics on factors that causes poor performance on construction projects. The variables are coded for easy interpretation.

CODE	VARIABLE
V1	Poor design
V2	Poor procurement processes
V3	Exceptionally low bids
V4	Poor project management

CODE	VARIABLE. Continuation
V5	Poor regulation of construction process
V6	Shortages of materials
V7	Lack of skilled workers
V8	Low level of technology
V9	Inadequate contractor resources
V10	Delays in payments by clients
V11	Frequent changes in <u>design</u>
V12	Corruption

Table 4.21

Factors	Mean	Standard Deviation	Rank
V1	1.13	.44	5 th
V2	1.01	.16	1 st
V3	1.37	.34	12 th
V4	1.04	.18	3 rd
V5	1.20	.51	7 th
V6	1.15	.59	6 th
V7	1.34	.37	10 th
V8	1. 09	.57	4 th

Factors	Mean	Standard Deviation	Rank
V10	1.36	.50	11 th
V11	1.39	.48	13 th
V12	1.26	.58	8 th
V13	1.31	.52	9 th

Source: Field Survey 2014

The descriptive statistics table above showed the mean and standard deviation of the various factors. It was indicated that V2, V9, V4, V8, V1 and V6 were having the least mean showing how important they are considered by the respondents respectively. V2 was highly rated among all the respondents' whiles V11 was the least rated.

The standard deviation also showed that there exist variations in the choice of the factors rated by the respondents. It was observed that, the variation in V2 among all the respondents were very insignificant but very significant when compared with other factors such as V5, V6, V8, V10, V12, and V13.

Inference to determine whether clients are satisfied towards establishment of construction industry development agency in Ghana.

Table 4.22; Across Tabulation on whether Clients’ are satisfied towards the establishment of construction industry agency in Ghana.

Sex	Very satisfied	Satisfied	Dissatisfied	Total
Male	34	16	10	60
Female	5	3	2	10
Total	39	19	12	70

Source: Field Survey 2014

A cross tabulation above displays clients satisfaction towards the establishment of construction industry development agency in Ghana. Out of the 70 respondent interviewed, 19 of them are satisfied with Government departments and agencies on development of the construction industry whiles 39 of them are very satisfied with clients’ perception towards establishment of construction industry development agency in Ghana. 34 out of the 39 respondent very satisfied with clients’ perception towards establishment of construction industry development agency in Ghana is male whiles the others are females. Again out of the 12 respondent who are dissatisfied

with the clients' perception towards establishment of construction industry development agency in Ghana 8 of them are male while the others are female.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.0 INTRODUCTION

This dissertation focused on clients' perception towards establishment of construction industry development agency in Ghana. The main introduction to the research was covered in Chapter One. Chapters Two discussed the theoretical/conceptual maps of project management and the context within which the research was conducted. In Chapter three, methodological issues were considered and appropriate research approaches were selected and justified. Chapter four presented analysis and provided detailed discussions on the results. In this last chapter, the research is brought to a close by summarizing the issues addressed throughout the study. The chapter follows the structure below: a summary of how the key objectives were satisfied is elucidated and discussions on the achievement of the research objectives are provided to highlight the contributions of the research. The chapter concludes with recommendations for further research that can be conducted based on the conclusions and limitations of the study.

5.1 REVIEW OF RESEARCH OBJECTIVES

Recapping what was earlier discussed in Chapter one of this thesis, the aim of this research was to explore the ~~construction industry~~ development environment with emphasis on client perception in order to devise strategies for their involvement in establishment of the construction industry development agency and its agenda. Seven research objectives were set for this study.

Objective 1: to uncover the key factors required for the performance of the construction industry.

From the research, it is observe that the respondents attach more importance by agreeing to the following criterion, the Quality of workmanship, Resource availability, Meeting functional requirements, beneficiaries' satisfaction and profitability. People are compromising business standards or values all in the name of profit (Nancy, 2005). It means even though we have quality workmanship and quality resources at our disposal, we compromise the standard, in order to reduce the cost forgetting the other impacts on the construction industry. (Satija Kalpana, 2009). The way forward is using our qualified workmanship, quality resource and not compromised quality for profit.

Objective 2: to identify the causes of poor performance in the construction industry

In Ghana construction industry face some challenges due to causes of poor performance. In conclusion, majority of the respondent are of the view that poor design, poor procurement processes, poor project management, shortages of materials, low level of technology and inadequate contractor resources are the cause of poor performance of the construction industry.

Objective 3: to assess the principles required for developing a robust construction industry

Every institution or industries require some level of principles that would guard the activities of their operation. It can be observed that respondents strongly agree that there must be Presence of a Substantial Volume of Construction Work Which Provides Opportunities for All Firms in the Industry to Grow. Also there must be Presence of Adequate Qualified and Experienced Personnel in All Segments of the Industry who would guard the activities of their operation. It is also believe that Presence of Strong Professional Institutions and Trade Associations and

Existence of Adequate Laws and Regulations to Govern the Construction Industry can help develop a robust construction industry.

Objective 4: to unravel the existing weaknesses of the construction industry

Construction industry goes through some obstacles due to existence of some weaknesses. It can be concluded that majority of the respondents are of the view that delays in payment for work done on government projects, absence of a dedicated agency charged with the development and regulation of the construction industry, adherence to old laws and regulations which are no longer relevant to the construction industry in Ghana and lack of adherence to codes of professional ethics by some players in the construction industry are the weaknesses of the construction industry in Ghana.

Objective 5: Identify the key issues required for the establishment of a regulatory and development agency for the construction industry

Every institution or industry needs some kind of regulatory body for policy and decision making in order to streamline and set standard for its operation. It was observe that majority of the respondents accepted the establishment of the construction industry development agency.

Objective 6: to uncover the approaches for establishing construction industry development agency in construction sector

The respondent want the institutional arrangement of the agency should be an executive agency, with programmes of its own, like the CIDAs in most countries and it should be an advisory unit which helps the ministries to adopt the right policies. The respondent, seek professional institutions and trade associations to be the key player of the agency. This response is quite

similar to what (Albert, 2003) has in his research to him if it would be done well then government should not be a major player in the agency.

Objective 7: to outline developmental agenda and strategic action for sustaining construction industry development agency

It is often argued that the effect of legal organization affect the behaviour of the firm activity mostly for the better (Owusu-Manu, 2008). Notwithstanding, the independency construction industry would have wish to enjoy. Without laws, people would do everything in the name of doing business. However, Storey (1994) and Cassar (2004) argued that while some may consider the benefits of laws and regulations, a critical factor for worth considering is the fact the laws are obey and respected. These findings suggest that in Ghana, like many countries, laws do exist in the construction sector but the problem we face is the enforcement of the laws. This is not surprising because, practically, law issues are concerned with what is right, wrong, fair, just, good or bad; about what we ought to do, not just what is the case or what is most acceptable or expedient (Preston, 1996). Recently, Walker et al. (2007) contributed to the scarcely law debate and concluded that "laws is a multifaceted concept that includes regulations, the legitimacy of moral claims and basis of justification of decisions and may include: conflict of interest, fraudulent behaviours and corruption". The way forward is to set laws for the construction sector and agencies making sure the laws are obeyed by all.

Clients are satisfied towards the establishment of the construction industry development agency in Ghana. This is not surprising because, practically, the government own institutions are very week when it comes to its functions (Preston, 1996). The call for the establishment of construction industry development agency in Ghana apart from those been own by the government is a call at a right direction.

5.2 RECOMMENDATIONS AND POLICY IMPLICATIONS

The following recommendations are therefore prescribed towards the establishment of construction industry development agency in Ghana

1. There should be a legislative instrument that will guide the construction industry in Ghana and make sure laws are obeyed by all.
2. Individuals with the required knowledge of the construction industry development agency should educate others
3. Excessive bureaucracy in the administration of the construction process must be streamlined to be manageable by few.

5.3 SUGGESTION FOR FUTURE RESEARCH

There are a number of research opportunities to explore in the future based on this study. The following suggestions are therefore made for future research:

- Future research is to explore the client perception towards the funding of the construction industry development agency; and
- Future research to explore the dynamics of possible regulations that would formalize the operations of the construction industry development agency in Ghana would be important.

REFERENCE

- Akoi-GyebiAdjei, E. (2009). Motivational Strategies to Improve Productivity in the Construction Industry in Ghana. MSc dissertation. Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
- Assibey-Mensah, G.O. (2009). Ghana's construction industry and global competition: A research note. *Journal of Black Studies*, 39(6): 974–989.
- Ayirebi-Dansoh, K. (2005). Strategic planning practice of construction firms in Ghana. *Construction Management and Economics*, 23(2): 148–163.
- Ahadzie, D.K., Proverbs, D.G. and Olomolaiye, P.O. (2008). Critical success criteria for mass house building projects in developing countries. *International Journal of Project Management*, 26(6): 675–687.
- Ahadzie, D.K. (2011). "A Study of the Factors Affecting the Performance of Contractors Working on KMA Projects", *Journal of Local Government Studies*, Vol.3 (1), pp. 50-65.
- Agbodjah, L.S. (2008). A Human Resource Management Policy Development (HRMPD) Framework for Large Construction Companies Operating in Ghana. Submitted to the School of Graduate Studies of the Kwame Nkrumah University of Science and Technology in Partial Fulfillment of the Requirements for PhD degree.
- Ashworth, A. (2004). *Cost Studies of Buildings*. (4th ed). UK: Pearson Prentice Hall.
- Ball, M; Drewer, S; Landsell, H and McCutcheon, R. (1979). Labour Mobility Study, The Employers Perspective: A Research Report prepared for the Department of the Environment. London: University College London, Building Economics Research Unit.

Construction Industry Development Board (CIDB). (2005) "Best Practice Guidelines for Labour-based Methods and Technologies for Employment Intensive Construction Works." Pretoria: Department of Public Works and CIDB. Sourced from www.cidb.org.za.

Dulaimi, M.F, Ling, F.Y.Y., Ofori, G. and De Silva.(2002). Enhancing integration and innovation in construction. *Building Research & Information*, 30(4): 237–247.

Department of Public Works/ILO.(2003) Business Plan for an Expanded Public Works Programme. Pretoria: Department of Public Works.

Development Bank of Southern Africa.(1998) Infrastructure for Development – development report. Johannesburg: Development Bank of Southern Africa.

Ferrell, O.O., J. Fraedrich and L. Ferrell (2000). *Business Ethics, Ethical Decision Making Cases*. New York: Houghton Mifflin Company.

Fellows, R., and Liu, A., (2008) *Research Methods for Construction*, Blackwell Science Ltd., Third edition.

Government of Singapore (1999) Building and Construction Authority Act 1999 (No 4 of 1999). Singapore.

Government of the Republic of Ghana (2000) Highway Network Master Plan, 2001-2020: Draft Final Report, Executive Summary. Accra.

ILO (1999) *Investing in Jobs for Development: The ILO's Employment-Intensive Programme*. Geneva: International Labour Organisation.

ILO (2001). *The construction industry in the twenty-first century: Its image, employment prospects and skill requirements: Tripartite Meeting on the Construction Industry in the Twenty-first Century*. Geneva: International Labour Office.

ILO (2005) World Employment Report 2004-2005. Geneva; International Labour Office.

ILO (2005) "Global Employment Trends: Brief." www.ilo.org/trends Accessed February 2005.

McCutcheon, R; Fitchett, A; LieuWkie Song, M and Quainoo, H. (2004) An Overview of the South African Construction Sector. Johannesburg: NALEDI.

Mitchell, R.K., Agle, B.R. and Wood, D.J. (1997). Toward a theory of stakeholder identification and salience: defining the principle of whom and what really counts. *Academy of Management Review*, 22 (4), pp. 853-887.

Ministry of Works (1977). The Local Construction Industry Report: General report. Ministry of Works, Dar es Salaam.

Newcombe, R. (2003). From client to project stakeholders: a stakeholder mapping approach. *Construction Management and Economics*, 22(8), pp. 762-784.

Ofori, G. (2000). Challenges for construction industries in developing countries. *Proceedings, Second International Conference of the CIB Task Group 29*, Gaborone, Botswana, November, pp. 1-11.

Ofori, G. (2001) Challenges facing the construction industries of Southern Africa. Paper presented at the Regional Seminar on "Developing the Construction Industries of Southern Africa", Pretoria, South Africa, 23-25 April.

Ofori, G. (1993) Practice of construction industry development at the crossroads. *Habitat International*, Vol. 18, No. 2, pp. 41-56.

Ofori, G. (2012). The construction industries in developing countries: strategic review of the book. In Ofori, G. (Editor) *New Perspectives on Construction in Developing Countries*. Spon, Abingdon, pp. 1-15. 10 Ofori (1993: 48-49). 11 TG29 is now W107 on Construction in Developing Countries

Parliamentary Debates (1999) Building and Construction Authority Bill – Second Reading. 20 January, pp. 1941-1959.

Raftery, J. et. Al. (1997) Proceedings, AsiaConstruct 1997.October, Hong Kong Polytechnic University, Hong Kong.

Shaban ASS. (2008). Factors affecting construction performance of construction project in the Gaza Strip.

Walker, D.H.T. Bourne, L.M. and Shelley, A. (2004).Influence, stakeholder mapping and visualization. Construction Management & Economics, 26 (6), pp. 463-490.

Wells, E. J. (1986). The Construction Industry in Developing Countries: Strategies for Development, unpublished PhD, University of Wales. Scottish Funding Council Documentation (all documents are available on the Scottish Funding Council Website): • Estate strategy guidance, Circular SFC/34/2007 , 20/07/2007 • Published by the Scottish Funding Council • scottish funding council capital projects :decision point process, 2009, • Guidance on the Effective Management of Space for Scotland's Colleges, • Sustainable Development Guidance for Estate Management, • Payment of Capital Grant Guidance

The Plan for Growth, Never Waste a Good Crisis, the IUK Cost Review, the James Review.

Walker, A. and You, B.H.M. (1999) Chinese policy on science and technology and technical improvements in the construction industry. Proceedings, 2nd International Conference on Construction Industry Development and 1st Meeting of CIB Task Group 29, Singapore, October, Vol. 1, pp. 258-263. 24.

United Nations (2000) Millennium Declaration <http://www.un.org/millennium/declaration/ares552e.htm> (accessed 2006/09/03)“Value for Money Assessment Guidance”.

<http://www.cidighana.org/pages/index.php?siteid=cidighana&page=about-us>

<http://www.cidighana.org/pages/index.php?siteid=cidighana&page=mission-and-objectives>

<http://www.cidb.org.za/about/mandate/default.aspx>

Ibid

http://www.cidb.org.za/Documents/KC/cidb_Publications/Leg_Regs/other_leg_regs/leg_regs_gg21755_cidb_act_38_2000.pdf

APPENDIX A

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

CLIENTS' PERCEPTION TOWARDS ESTABLISHMENT OF CONSTRUCTION INDUSTRY DEVELOPMENT AGENCY IN GHANA

(A STUDY OF HO MUNICIPALITY)

I shall be very grateful if you would help in responding to this questionnaire meant purely for an academic work for the award of MSc Construction Management. Your participation in this survey would be of very great assistance to me.

Responses to all items will be treated as confidential. All responses that relate to or describe identifiable characteristics of individual would be used only for statistical purpose and will not be disclosed, or used in identifiable form for any purpose. Your information would be combined with the information provided by others in statistical reports. No individual responses will be included in the statistical report.

Thank you for your co-operation.

Please, tick [✓] or fill in as appropriate

SECTION A: Socio- Demographic Characteristics

1. Gender: (a) Male [] (b) Female []

2. Highest Educational Qualification:

(a) Basic/MSLC [] (b) Sec/Voc/Tech [] (c) HND/Degree [] (d) Post-Graduate []

3. What category of clients in the construction industry do you belong?

(a) Government [] (b) Owner-occupiers (landlord's) []

4. What types of projects do you engage in?

(a) Road Construction [] (b) Building construction []

SECTION B: INDICATED PRINCIPLE ON PERFORMANCE OF THE CONSTRUCTION INDUSTRY

5.	Indicate the extent to which you are happy with the performance of the construction industry in Ghana with respect to the indicated criterion. (Please circle the relevant number with 1 being 'strongly agree' and 5 being 'strongly disagree') —	Strongly agree Strongly disagree				
		1	2	3	4	5
5.1	Cost performance.					

5.2	Time performance.	1	2	3	4	5
5.3	Quality of workmanship.	1	2	3	4	5
5.4	Safety and health.	1	2	3	4	5
5.5	Environmental performance.	1	2	3	4	5
5.6	Resource productivity.	1	2	3	4	5
5.7	Meeting functional requirements.	1	2	3	4	5
5.8	Client satisfaction.	1	2	3	4	5
5.9	Satisfaction of beneficiaries.	1	2	3	4	5
5.10	Satisfaction of project team.	1	2	3	4	5
5.11	Profitability.	1	2	3	4	5
5.12	Quality of work life.	1	2	3	4	5
5.13	Others (<i>Please specify and indicate relevant number.</i>)					
		1	2	3	4	5
		1	2	3	4	5

INDICATED PRINCIPLE ON POOR PERFORMANCE OF THE CONSTRUCTION INDUSTRY

6.	Indicate the extent to which you consider this factor to be one of the causes of poor performance on construction projects in Ghana. (<i>Please circle the relevant number with 1 being 'strongly agree' and 5 being 'strongly disagree'</i>)	<div>Strongly agree</div> <div>Strongly disagree</div>				
6.1	Poor design.	1	2	3	4	5
6.2	Poor procurement processes.	1	2	3	4	5
6.3	Exceptionally low bids.	1	2	3	4	5
6.4	Poor project management.	1	2	3	4	5
6.5	Poor regulation of construction process.	1	2	3	4	5
6.6	Shortages of materials.	1	2	3	4	5
6.7	Lack of skilled workers.	1	2	3	4	5
6.8	Low level of technology.	1	2	3	4	5
6.9	Inadequate contractor resources.	1	2	3	4	5
6.10	Delays in payments by clients.	1	2	3	4	5
6.11	Frequent changes in design.	1	2	3	4	5
6.12	Corruption.	1	2	3	4	5
6.13	Inadequate commissioning.	1	2	3	4	5
6.14	Others (<i>Please specify and indicate relevant number.</i>)					
		1	2	3	4	5

		1	2	3	4	5
--	--	---	---	---	---	---

INDICATED PRINCIPLE ON STRENGTH OF THE CONSTRUCTION INDUSTRY

7.	What are the current strengths of the construction industry in Ghana? <i>(Please circle the relevant number with 1 being 'strongly agree' and 5 being 'strongly disagree')</i>	<div>Strongly agree</div> <div>Strongly disagree</div>				
7.1	Presence of a substantial volume of construction work which provides opportunities for all firms in the industry to grow.	1	2	3	4	5
7.2	Presence of adequate qualified and experienced personnel in all segments of the industry.	1	2	3	4	5
7.3	Presence of strong professional institutions and trade associations.	1	2	3	4	5
7.4	Existence of adequate laws and regulations to govern the construction industry.	1	2	3	4	5
7.5	Presence of government ministries, departments and agencies which properly administer and develop the construction industry.	1	2	3	4	5
7.6	Presence of many foreign firms from which the local companies and practitioners can learn.	1	2	3	4	5
7.7	Others <i>(Please specify and indicate relevant number.)</i>					
		1	2	3	4	5
		1	2	3	4	5

PROBLEMS AND WEAKNESSES OF THE CONSTRUCTION INDUSTRY

8	What are the present problems and weaknesses of the construction industry in Ghana? <i>(Please circle the relevant number with 1 being 'strongly agree' and 5 being 'strongly disagree')</i>	1	2	3	4	5
8.1	Absence of a dedicated agency charged with the development and regulation of the construction industry.	1	2	3	4	5
8.2	Adherence to old laws and regulations which are no longer relevant to the construction industry in Ghana.	1	2	3	4	5
8.3	Excessive bureaucracy in the administration of the construction process.	1	2	3	4	5
8.4	Inadequate financial resources of firms in the construction industry.	1	2	3	4	5
8.5	Corruption in the construction process.	1	2	3	4	5
8.6	Lack of skilled human resources.	1	2	3	4	5
8.7	Low level of technology development in the industry.	1	2	3	4	5
8.8	Low level of application of information and communication technology in the industry.	1	2	3	4	5
8.9	Poor procurement practices in the construction industry.	1	2	3	4	5
8.10	Lack of transparency in construction contract award and administration.	1	2	3	4	5
8.11	Weak classification and certification systems for registration of	1	2	3	4	5

	contractors.					
8.12	Presence of foreign firms in the construction industry in Ghana.	1	2	3	4	5
8.13	Inadequate transfer of technology from foreign firms operating in the construction industry in Ghana.	1	2	3	4	5
8.14	Lack of evaluation of the performance of consultants, contractors and subcontractors.	1	2	3	4	5
8.15	Delays in payment for work done on government projects.	1	2	3	4	5
8.16	Poor occupational health and safety practices in the industry.	1	2	3	4	5
8.17	Poor standards of quality of workmanship in construction.	1	2	3	4	5
8.18	Lack of adherence to codes of professional ethics by some players in the construction industry.	1	2	3	4	5
8.19	Lack of collaboration and co-ordination among the participants in projects in the construction industry.	1	2	3	4	5
8.20	Poor utilities and infrastructure which makes logistics difficult and frustrates performance on projects.	1	2	3	4	5
8.21	Inadequate co-ordination among the ministries, departments and agencies which deal with aspects of construction.	1	2	3	4	5
8.22	Weak manufacturers and suppliers of construction materials.	1	2	3	4	5
8.23	Others (<i>Please specify and indicate relevant number.</i>)					
		1	2	3	4	5
		1	2	3	4	5

SECTION C: A Regulatory and Development Agency

9.	Many people have suggested that the formation of a construction industry regulatory and development agency would be the most effective move towards improving the the performance of the construction industry. (<i>Please circle the relevant number.</i>)	No	Yes
9.1	<u>Do you agree that a construction industry regulatory and development agency should be established?</u>		
	Yes, such an agency should be set up.	0	1
	No, there are already too many government ministries and departments 'managing' aspects of the construction process and construction industry.	0	1
	No, it will add to the bureaucracy in the construction process.	0	1
9.2	<u>What should the broad ambit of the agency's operations?</u>		
	It should be a developmental agency, leading the expansion of the capacity and enhancement of the capability of the industry only, like the Construction Industry Development Boards in Malaysia and South Africa.	0	1
	It should be a developmental and regulatory agency, leading the expansion of the capacity and enhancement of the capability of the industry as well as formulating regulations for building control, approving building plans and controlling the commissioning of buildings like the Building and Construction Authority in Singapore.	0	1

	<u>What should the main functions of the agency be?</u>		
	To lead the development of the construction industry through the formulation and implementation of policies and programmes.	0	1
	To regulate the construction industry through the administration of appropriate laws, regulations, codes and standards.	0	1
	To provide incentives to companies	0	1
	To register consultants and contractors.	0	1
	To register all construction projects.	0	1
	To collect information on the construction industry and impose sanctions on those failing to comply.	0	1
	To undertake research on relevant aspects of the construction industry.	0	1
		0	1
9.3	<u>What should the institutional arrangement for the agency be?</u>		
	It should be an executive agency, with programmes of its own, like the CIDAs in most countries?	0	1
	It should be an advisory unit which helps the ministries to adopt the right policies.	0	1
9.4	<u>Which parent ministry should the agency be placed under?</u>	0	1
	Ministry of Water Resources, Works and Housing	0	1
	Ministry of Roads and Transport	0	1
	Ministry of Lands and Mineral Resources	0	1
	Ministry of Local Government	0	1
9.5	<u>Who should be the key players in the agency?</u>		
	Relevant government ministries	0	1
	Municipal, district and local councils	0	1
	Professional institutions and trade associations	0	1
	Labour unions for the construction trades	0	1
	Tertiary educational institutions	0	1
9.6	<u>What structure should the agency have?</u>		
	A board with membership appointed by the minister on merit only (ie, the board members do not represent any particular constituent parts of the construction industry).	0	1
	A board with membership appointed by the minister, representing constituent parts of the construction industry.	0	1
	A central agency based in Accra only.	0	1
	A central agency in Accra, with regional branches.	0	1

10. Do you think the construction industry development agency will have a sustainable future?

(a) Yes [] (b) No []

II. If No specifies your reason and what you think must be done?

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

11. Are you satisfied towards the establishment of the construction industry development agency?

(a) Very satisfied [] (b) Satisfied [] (c) Dissatisfied []