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THE EVOLUTION OF INDIGENOUS CONTRACTORS IN GHANA

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This paper provides some preliminary insights into the emergence and development of indigenous general contractors in Ghana. General contracting is the means by which an individual or organisation takes responsibility for supplying all of the materials, labour, equipment and services necessary for the construction of a project. Whereas the development of general contracting in places like the UK is well documented, the evolution of contractors in Ghana is not clearly articulated in the literature. Therefore, the main question in this paper is: How did indigenous contractors evolve in Ghana? To examine and analyze the research question, a literature review on similar developments elsewhere was first carried out. This was followed by discussions and unstructured interviews with experienced construction practitioners in Ghana most of whom were Quantity Surveyors. Most interviewees narrated their knowledge of contractor development in Ghana dating back to around 1945. From the explanations given, it was possible to develop a general understanding of the research question and to make a qualitative interpretation of the respondents' comments and to draw some conclusions. General contractors emerged rapidly in the Gold Coast (now Ghana) shortly after World War II. Most were Italian master craftsmen in Ghana who were capitalized by the British colonial government to develop infrastructure in the Gold Coast following devastating effects of the war. Some of the indigenous people learned from the Italians and also established construction firms. Thus, general contracting in Ghana has a relatively short history in comparison to countries like Britain where the profession developed rapidly in the early part of the 19th century in response to the industrial revolution. Although they may possess sufficient technical expertise, many indigenous contractors in Ghana today lack the capacity to carry out major projects because of low capitalization and poor organisational structures. The current construction market in Ghana is dominated by foreign contractors. To become major players in the market, indigenous Ghanaian contractors should build strong organisational structures and pursue mergers and joint venturing to boost their financial, technical and managerial capacity.

Keywords: contractor, general contracting, Ghana.

INTRODUCTION

The purpose of this paper is to provide preliminary insights into the emergence and development of general contracting in Ghana. General contracting is described in most part of the literature in construction management as the means by which a firm or individual takes responsibility for supplying all of the materials, labour, equipment and services necessary for

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the construction of a project (as explained in a standard construction contracts textbook by Murdoch and Hughes, 2008: 27-9). Whereas the evolution and development of general contractors in countries like the UK is well documented in studies like a historical overview of technological change in the construction industry by Hughes and Hillebrandt (2003) and a historical overview of construction in Britain by Winch (2000), the evolution of general contractors in Ghana is not a subject that is articulated in the literature. Therefore, the main question in this paper is: How did general contractors evolve in Ghana? This paper aims at addressing that question by providing some initial ideas that can be developed further through future research. This will help to position general contracting in Ghana in the context of general contracting in a wider and international sense. Local or indigenous construction firms are those established and owned by locals and citizens of a country whereas foreign firms are owned by foreign nationals. In order to examine and analyze the research question on the evolution of general contractors in Ghana, a literature review on similar developments elsewhere was carried out. This was followed by interviews and discussions with experienced construction practitioners in Ghana most of whom were Quantity Surveyors. Most of them narrated their experiences of contractor development in Ghana dating back to the pre-independence era (Ghana gained independence from British colonial rule on the 6th of March 1957). From the explanations given, it was possible to develop a general understanding of the subject matter in question to make a qualitative interpretation of the respondents' comments and to draw some conclusions.

GENERAL CONTRACTING

The concept of 'general contracting' refers to the professional practice or system where an organisation or individual undertakes to supply the resources and services required to construct a project (as explained in a standard construction contract textbook by Murdoch and Hughes, 2008 and a procurement textbook prepared on behalf of practitioners by Hackett et al., 2007). General contractors are often responsible for the means and methods to be used in the construction of a project in accordance with the contract documents. In order to achieve their aims, it is common for general contractors to subcontract part of the work to other persons or firms that specialize in different types of work. Such specialist contractors are often referred to as subcontractors (as explained in a study on the changing role of subcontractors in construction carried out for the CIOB by Gray and Flanagan, 1989). A study on institution reform in British construction by Winch (2000: 148) noted that "one of the most important distinguishing features of the British construction industry compared to its European counterparts is the very early emergence of general contracting during the first half of the 19th century, while in the rest of Europe, it is much more associated with the period following World War II". Thus, general contacting dates back to the early part of the 19th century and practices has reformed over the years as a result of factors including government-led reform initiatives, changes in government procurement strategies, and increasing competition in the market. How general contracting evolved in the UK is also explained in a historical overview of technological change in the construction industry by Hughes and Hillebrandt (2003).

EVOLUTION OF GENERAL CONTRACTING IN THE UK

General contracting in the UK has evolved from the earliest times when Monks built their early churches in wattle and daub and thatch did the work themselves (Hughes and Hillebrandt, 2003). As the work became more difficult, specialised tasks like masonry arose. However, monks still carried out simpler aspects of the work in construction and lay craftsmen performed most of the more difficult work.

In the UK and around Europe, the earliest craftsmen were masons and carpenters. With time, specialized artisans like tilers, slaters, thatchers, plumbers, glaziers, smiths, painters, plasterers and bricklayers emerged to provide specific parts of buildings. In England, some specialist craftsmen organized themselves from the beginning of the thirteenth century into a system of local craft guilds. This system was, however, not suitable for craftsmen like masons who had to constantly move from place to place in response to fluctuations in skills demand.

It was originally the practice for the client to employ each of the crafts directly (Hughes and Hillebrandt, 2003). With time, some master masons and carpenters took the step of taking responsibility for whole projects and employed their own tradesmen so that they could operate as building contractors. Thus, most of these early contractors were able to provide the design and construction but they were often employed to build only a part of the project, alongside other contractors and tradesmen employed directly by the client. In some contracts, the builder's contract was to supply materials, but in others, the employer provided the materials.

In the early part of the 19th century, Thomas Cubitt in the UK became one of the earliest general contractors (Hughes and Hillebrandt, 2003: 510-11). Cubitt employed all the craftsmen he needed and paid them regular wages. Prior to this, the usual practice was for tradesmen such as carpenters to subcontract their work to others. Thus, subcontracting is clearly an old feature of the construction industry. In medieval times, it was quite normal to encounter both labour-only subcontracting (where materials are provided for subcontractor to provide only labour) and supply-and-fix subcontracting (subcontractor provides materials and the components). Sometimes, even when general contractors have a large workforce, they still subcontract specialist items to subcontractors alongside their own workforce to deal with peaks in demand. Generally, most firms in the construction industry are small – mainly because of the size and geographic distribution of projects. Most jobs are small, even large projects lead to many small contracts because of subcontractors.

Nowadays, the financial structure of construction enterprises is very complex (Winch, 2000). A combination of government-led reform initiatives, changes in government procurement strategies, and increasing exposure to international competition has created a significant shift in the organisational and business strategy of construction firms. This has given rise to the development of large building and civil engineering contracting organisations particularly in the post World War II era.

RESEARCH QUESTION

The preceding literature shows a clear documentation of the emergence of general contractors in the UK and some parts of Europe. However, the way that indigenous contractors and general contracting evolved in Ghana is not articulated in the literature. Therefore, this study focuses on the question: How did local or indigenous contractors evolve in Ghana? This question required a pragmatic and reliable method of investigation.

RESEARCH METHOD

In order to ascertain how indigenous contractors evolved in Ghana, it was essential to talk to people with the relevant knowledge of how indigenous construction firms in Ghana have emerged and developed. As no major literature on the subject was found, the research started in 2007 and involved a period of initial discussions with Senior Quantity Surveyors in major construction firms in Ghana and in some cases Managing Directors. Many of them have worked in the construction industry in Ghana for a long time and therefore shared a first hand knowledge of the evolution of many of the major construction firms in Ghana today. These

practitioners also directed the researcher to other senior practitioners of the construction industry in Ghana whom they considered to possess sufficient knowledge about development in general contracting in Ghana. Thus, this resulted in the use of a purposive sampling approach, in that, some of the interviewees were first identified through personal contacts and they, in turn, assisted the researcher to contact other experienced construction practitioners in Ghana with relevant knowledge of indigenous contractor development in Ghana. Altogether, the data presented here was gathered mainly from interviews with 10 experienced practitioners of the construction industry in Ghana, most of whom are Quantity Surveyors, and have an average of 35 years' working experience. All interviews were unstructured in nature (similar to the format described in Denscombe, 2003: 176). The researcher introduced the topic and then each interviewee was given the freedom to recount their knowledge of the evolution of indigenous contractors in Ghana. Thus, the respondents were mainly asked to provide detailed descriptions of how indigenous contractors in Ghana have evolved. There were other questions related to the impact of different governments on contractor developments. However, these were mainly follow-up questions to some of the respondents' comments. Notes were taken as each interviewees explained indigenous contractor evolution and development in Ghana. The respondents' explanations and qualitative descriptions were collated and examined for qualitative interpretation.

DATA PRESENTATION ON EVOLUTION OF INDIGENOUS CONTRACTORS IN GHANA

This section presents a collation and to some extent a discussion of the interviews and discussions with interviewees on the evolution of indigenous contractors in Ghana. The research indicated that in the colonial times, there was a government department of works responsible for construction works in the country including engineering, design and construction. Construction artisans in the country were all employees of the government of Ghana, which had a structured training programme for the artisans' skills development. The present Ghana Secondary Technical School (GSTS) in Takoradi served as a training centre for middle-level construction professionals at that time. The department of works was responsible for all public works, electricity supply, road construction and water supply. The department of works had an intensive apprenticeship scheme that was used for training and categorising labour.

Shortly before World War Two (WW2) in 1939-45 contractors had started to emerge in Ghana. Most of these early builders were of Italian origin including, E. Tononi; M. Barbissoti; J. Monta; Michelleti and De Simone. However, the nature of the alliances in WW2 carried implications for the Italian builders in the Gold Coast after WW2. WW2 was organised into two opposing military alliances: the Allies and the Axis. The Allies of WW2 comprised of nations including the British Empire, the Union of Soviet Socialist Republics, and the United States of America. The Axis powers of WW2 comprised of nations including Germany, Japan and Italy. Ghana, known as Gold Coast at the time, was by then a British colony and territory. This, at least in theory, meant that Ghana was part of the Allies in WW2 through British colonialism.

As WW2 started, Ghana's colonial masters (Britain) thought that Italians in the Gold Coast might hold sympathies for their home government and act as spies for their home government and feed it with information about British Empire activities in Ghana. Therefore, most Italians in the Gold Coast were incarcerated by the British colonial government in the Gold Coast. Most of the Italians had come originally into the Gold Coast as master craftsmen in building construction. After WW2, a lot of devastation and destruction had occurred around the world. Therefore, the British colonial government in the Gold Coast decided to use the

Italians incarcerated during WW2 as master craftsmen for developing infrastructure in the Gold Coast. The colonial government provided them with the capitalization needed to achieve the objective of employing them for developing infrastructure in the Gold Coast. This, in essence, may be considered as the real start of general contracting in Ghana.

With Italian craftsmen taking the lead in undertaking the construction of projects in the Gold Coast after WW2, some local Ghanaian indigenes also started to develop the entrepreneurial capacity to undertake projects. Many of them learned the know-how from the Italian master craftsmen. Apart from Italians craftsmen who dominated the local construction market in Ghana at the time, Taylor Woodrow, a British construction firm, and A-Lang, a Swiss construction firm, were also major contractors operating in the Gold Coast. Unlike the Italian contractors who had developed their businesses in Ghana, Taylor Woodrow and A-Land came into the Gold Coast as offshoot firms from their parent firms in Europe. Thus, they were already big contractors with organisational structures very different from Italian firms which had developed locally in Ghana. Because many of the indigenous Ghanaians who took to contracting learned the trade from Italian businesses, the local Ghanaian contractors structured and developed their firms after the model of the Italians firms.

With the advent of independence from British colonial rule on the 6th of March 1957, more local people were encouraged to go into contracting. In fact, right from the time preceding independence when Dr Kwame Nkrumah became Leader of Government Business in 1951 more local people were encouraged into construction. The Public Works Department (PWD) had grown in capacity in terms of number of skilled workers and operatives. As a result, some master craftsmen and technical supervisors who were employees of the PWD decided to set up their own private construction firms. But it is only the craftsmen and technicians who ventured into this. Professional employees of the PWD like engineers and architects did not venture into the new business of contracting because of the risk factor involved in business. In those days, engineers and architects employed by the government were very well paid. Hence, most of them had little financial incentive to leave their lucrative public sector posts for private business ventures more so considered as 'menial' and below their status. Most of the indigenous people who became contractors were therefore craftsmen and technicians who had construction experience and know-how. However, many of them did not have the estimating skills and sufficient capitalization to employ the services of professional estimators into their indigenous outfits. The option left to them was to engage the services of professional employees of the PWD on an occasional basis. This practice led to the adoption of the schedule of rates as the basis of construction contracts in order to make things easier for contractual parties.

With time, indigenous Ghanaian contractors grew bigger in size, and it became necessary for them to put appropriate organisational structures in place in order to become viable. There was therefore a need for them to employ professional staff like engineers and quantity surveyors. However, skilled professionals were not available in sufficient numbers and local contractors could still not afford to remunerate them to the level of attractive salaries the professionals earned from public sector employers like the PWD. Therefore, most contractors did not have professional employees and thus could hardly perform any detailed analysis of pricing levels in bids.

As professionals were in short supply, this impacted negatively on the capacity of local construction firms and the government took the initiative to establish a Department of Building Technology at the Kwame Nkrumah University of Science and Technology in Kumasi in 1965 to train professionals for the construction sector in Ghana. The main vision for setting this up was to provide basic training in areas like building construction, structural

design, building services, building quantities and contract administration. Many of the interviewees lamented that despite the establishment of the Department of Building Technology at KNUST, Kumasi, construction professionals in Ghana have not been able to meet the rising challenges of construction activities in Ghana.

Later on in the era after independence, the PWD was subdivided under different ministries such as the Ministry of Works and Housing (MoWH), Ministry of Roads and Highways (MoRH) and Ministry of Energy (MoE) with specific tasks and functions. The PWD now became the technical wing of the two ministries of Works and Housing and Roads and Highways. Further, other state corporations like the Ghana National Construction Corporation (GNCC) and the State Housing Corporation (SHC) were also placed under the MoWH. Most construction work was awarded on a design-and-build basis. Only in a few cases was a project designed by the PWD and built by the GNCC. Even with that, the purpose was mainly to suit the political climate and government policies of the time. With time, a public owned professional services firm known as the Architectural and Engineering Services Company (AESC) evolved from the PWD to provide specialised services in architectural and engineering designs.

The years following 1966 when the socialist government of the Convention People's Party led by Kwame Nkrumah was overthrown saw a reformation of the national political ideology and orientation from socialism towards capitalism. State institutions were thus reformed and restructured accordingly although the changes took place gradually. This development provided ground for further training in both the professional and technical level personnel for the industry in Ghana. Modern forms of procurement strategies and competitive tendering procedures started to emerge. Thus public companies like the State Construction Company (SCC) now had to compete for work. As institutions like the SCC (formerly GNCC) was run professionally, tendering was equally done on a professional basis. Institutions like the SHC also set the standards in community housing and planning. The colonial government built planned settlements in areas like Cantonments, Ridge, Korle Gorno and Osu in Accra. However, other subsequent planned settlements like Dansoman estates, Kanda and Labone were built by the publicly owned construction firms like the SHC.

The state institutions thrived and performed well. The professional approach taken by most firms reflected in pricing levels, competence and reliability of the estimates. The SCC for instance had planning, estimating, plant, joinery, electrical and plumbing departments, etc. The SCC also had competent professionals including site engineers and project managers. With this professional approach, the SCC led the way in the construction of projects in Ghana. Once the management of the SCC decided that a job should be tendered for, details of the job would be sent to the estimating department which typically had about 12-15 QSs. The tender will then be assigned to about two or three estimators depending on how big the job was with the Head of Department overseeing every stage of the tender preparation process. Having arrived at a tender figure, there would be an adjudication meeting where every priced item and method will be justified to an adjudication panel. The adjudication panel typically comprised of the General Manager of the SCC, Chief Quantity Surveyor/Estimator, Planning Department Head and the Engineer heading the region where the project was to be located. The Engineer Quantities (the one who did the actual pricing) would sit with the panel and explain everything in the tender to the panel. The rationale for the adjudication exercise was to ensure that preliminary items especially plant and the method of construction envisaged would be appropriate for the works so that the estimate is not utopian. Thereafter, it will be decided whether the tender should be submitted and the senior management would give the margin of profit. Most interviewees indicated that unlike most practices nowadays, profit and overhead margins were not fixed. It depended on circumstances such as the level of

competition envisaged, how desperately the contractor wanted the job, proximity to the contractor's workshops - advantages, and possibility of serial contracts that could be negotiated at higher profit margins. Once the adjudication process was done and done well, the contingency on the price was almost negligible. The expertise and in-depth knowledge of the estimator tended to play a great role. A margin could be added for contingency if the estimator was uncertain about the price.

As the years developed, strong private construction firms started to evolve alongside the state-run SCC and SHC. The private firms grew as a result of expanding construction activity in the country. With time, some of the private contractors were able to compete and even provide better remuneration for staff in comparison to the state institutions. They were thus able to attract more skilled and experienced staff. As a result, state institutions like the SCC started to decline around the early 1990s and privately owned construction firms now dominated the construction market in Ghana.

Thus, general contracting business in Ghana has evolved from times when Italian craftsmen were the main suppliers of construction goods and services before and after WW2 in 1939-45, to times when indigenous Ghanaian private construction firms also evolved strongly in pre-independence times soon after Dr Nkrumah became Leader of Government Business around 1951, to times when strong state-run institutions like the SCC and SHC dominated the market and constructed most projects in Ghana in the post-independence era after 1957. The emergence of strong private construction firms in Ghana led to the decline of state institutions like the SCC around the early 1990s. Nowadays, many large projects in Ghana, especially those that are one off and require a high level of expertise, are awarded to expatriate firms who come in mainly from Europe. Many of the early construction firms that came into Ghana from Europe have collapsed for example, A-Lang and ABU. However, others like M Barbissoti and Sons Ltd and De Simone Ltd have survived. One question for future research is the reasons why some firms have collapsed and others have survived. As many of the European firms in Ghana collapsed, many of the expatriates brought into the country to work for them decided to remain in the country and set up their own construction firms. Most of those new firms were set up in the early 1990s and have developed into leading firms in Ghana including firms like CONSAR Limited. Many of the leading construction firms in Ghana today are not owned by the indigenous people but mostly people of European, American or Chinese origin who register their firms with some Ghanaian partners in accordance with business registration laws in Ghana.

DISCUSSION AND CONCLUSION

The study here presents preliminary insights on the evolution of construction firms in Ghana. The research indicates that indigenous general contracting in Ghana traces back to the pre-independence era around 1945 when the colonial government capitalized local Italian master craftsmen based in Ghana in order to develop infrastructure in response to devastations from WW2. Some of the indigenous people took inspiration from the Italians and set up their own construction firms. Many more indigenes were encouraged to set up construction firms from the period when Dr Nkrumah became Leader of Government business in 1951. Thus, whereas the industrial revolution gave rise to the surge of general contractors in places like Britain, it is the devastating effects of WW2 that gave rise to the surge of general contractors in Ghana.

Today, different categories of contractors operate in Ghana. There are indigenous and foreign contractors operate in Ghana (according to a newsletter of the Association of Road Contractors (ASROC) Ghana published in 2007) operating in the road sector or the building and civil engineering sector. Construction firms in Ghana today are required to register with

the appropriate construction ministry if they are desirous of doing government projects (Eyiah and Cook, 2003). The Ministry of Works and Housing classifies building and civil engineering contractors as financial class D1, D2, D3 or D4 whereas civil engineering contractors are classified as K1, K2, K3 or K4. The Ministry of Roads and Highways classifies contractors into categories A, B, C and S. Contractors in each category are further grouped into financial classes 1, 2, 3 and 4 based on their technical and managerial expertise, financial standing, previous performance, and equipment and plant holding. The minimum requirement for classification into categories by the two ministries is well explained in studies of contractors in Ghana by Eyiah and Cook (2003) and Dansoh (2005). The ASROC (2007) publication identified problems affecting local contractors in Ghana as delays in payment, lack of adequate equipment holdings, quarry aggregates/chippings, lack of adequate supervision of contracts, inadequate preparation of projects, changes in bills of quantities, fixed contracts, presence of foreign contractors, and cancellation of advance mobilisation guarantee of Government of Ghana projects. Clearly, there are serious challenges facing contractors in Ghana. However, the contractors have no united front or common agenda to tackle the challenges. For example, Eyiah and Cook (2003) identified different contractor associations in Ghana. The Ghana Contractors Association was renamed the Civil Engineering and Building Contractors Association of Ghana (CEBCAG) in 1985. Conflict of interest resulted in the split of the association into the Association of Road Contractors and the Building Contractors Association. To become effective, local contractors in Ghana should collate their ideas and adopt a cooperative approach and attitude towards solving their problems.

Several private local construction firms have proliferated in recent times. However, many of them lack the capacity to undertake large projects. As a result, foreign contractors undertake most major projects in Ghana. There is little doubt that local firms need to enhance their capacity for carrying out large construction projects. This requires more efforts from government, in terms of enacting policies that will create an enabling environment for this to happen, and the contractor's themselves. The Association of Road Contractors Ghana has warned that there is a current threat to local construction firms, in that, foreign contractors are executing even maintenance jobs that can be done by local contractors to enhance their capacity. Foreign firms should be restricted to tendering for only major Class A1 projects which many local firms do not have the capacity to execute. Maintenance jobs should be awarded to indigenous Ghanaian contractors only. It might also be necessary to create an environment where foreign contractors who win major projects would be required to sublet some portion of the job to indigenous contractors to help in the technology transfer process and enhancement of local contracting capacity. In the meantime, local contractors can also help themselves. One of the reasons the current construction market in Ghana is dominated by foreign contractors is that although local contractors possess sufficient technical expertise, many of them lack the capacity to carry out major projects because of low capitalization and poor organisational structures. In order to become major players in the market, local Ghanaian contractors should build strong organisational structures and pursue mergers and joint venturing to boost their financial, technical and managerial capacity for major projects.

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