

THE AWARENESS OF CONSTRUCTION CRAFTSMEN TO BODIES REGULATING CRAFT-SKILL PRACTICE IN ZARIA AND KADUNA

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Abstract

It is universally accepted that the construction industry covers half of fixed capital accumulation and it accounts for about 50% of fixed capital products in Nigeria. Current shortages of skilled manpower are posing challenges of coping with full workload for construction firms. Also, the diversification of craft occupations has increased the challenges of skilled workforce training. The governments inadequate emphasis on technical education, inadequate regulatory organs and poor awareness to the existing ones suggest grave barriers to the industry's attainment of its objectives and obligations. This paper examined the training and regulation of construction craftsmen in Nigeria. Convenience sampling was employed where 120 questionnaires were distributed to three trade types (masons, carpenters and iron fixers) on nine construction sites within Zaria and Kaduna metropolis. Descriptive statistics was used to analyse data collected. With a return rate of 93 %, 67% of the respondents had not undergone any re-training after their initial basic training. 60% of the respondents were aware of any crafts union and regulatory body. This suggests a serious deficit in the continual supply of skilled workforce. This paper concludes that the unwillingness to improve on the trade knowledgebase by Nigerian craftsmen is responsible for the influx of foreign craftsmen. It recommends that the government and the industry must encourage craftsmen to affiliate themselves with relevant trade organs or professional bodies. Furthermore, sensitisation mechanisms must be devised for the development of the construction trades.

Keywords: Construction craftsmen, craft-skill practice, Kaduna, Zaria

Introduction

The construction industry has a strategic role in all developed and developing countries (Kazaz, Manisali & Ulubeyli, 2008). It is one of the major development drivers in any economy and therefore, constitutes the most important single sector of capital formation in any national economy (Ayandele, 2006; Awe, Stephenson, Blain, & Griffith, 2011). It is highly fragmented and diversified with construction contractors and consultants ranging from a few giants who employ thousands of people to the majority of contractors that employ less than ten operatives (Fagbenle, 2000). It is however, a labour-intensive industry and its output relies heavily on the availability of skilled trades' people (Awe, Stephenson, Blain, & Griffith, 2011). Furthermore, construction labour productivity is of critical importance to the profitability of most construction projects (El-Gohary & Aziz, 2014) especially in developing countries where most of the building construction work is still manual (Alinaitwe, Mwakali and Hanson, 2006). Also, the industry's continued growth in output has put extreme pressure on its labour market capacity (Dainty, Ison & Briscoe, 2005). In the same vein construction is more complex and has

to be learned through a combination of education and training (Ngowi, 1997) despite the deeply entrenched poor training culture in the industry (Abdel-Wahab, 2012). Shortages in skilled labour both in quantity and quality have the potential to disrupt the output of the construction industry, affect other sectors that are dependent on its products and a nation's economic growth especially in developing countries (Awe, Stephenson, & Griffith, 2009; Kaming, Olomolaiye, Holt & Harris, 1997).

Construction craftsmen typically receive their education in the form of apprenticeship, formal training in vocational schools and technical colleges, and attendance at workshops complemented with field activities. The various forms of construction education in Nigeria are themselves facing the challenge of becoming inadequate and in the extreme, obsolete. The age-old tradition of locally organised apprenticeships in Nigeria is facing its greatest challenge yet, where the cream of the nation's youth no longer show interest in skill acquisition; a case which is not the same with developed countries. They are more disposed to pursuing promising positions in technology or other emerging fields. In addition, the experienced tradesmen would rather prefer their children to become well educated professionals than to take to their trades (Dennis, 2004 & Ireland, 2007). This trend is pushing apprenticeship to obsolescence. Poor funding, misplaced emphasis and misdirected focus are some of the barriers to effective skill instruction in technical colleges and vocational training centers despite several government policies to address these issues. A continuation of this trend will jeopardise the much needed stock of skilled craftsmen essential to the Nigerian construction industry and the nation's economy as a whole (Awe, Stephenson, & Griffith, 2009). Abdulgafaru (2003) reported that the un-organised nature of trade unions and trade organisations of the various construction trades, and their attitude to training is just one of the several difficulties encountered in the training of construction craftsmen.

Craft/trade unions seek to improve the skills of the various trades in the industry and to protect their rights, welfare and interest. Some professional bodies also offer to at least assist in improving the competences of craftsmen by affiliation to like trades as shown by NIOB and COREN. It can however, be argued that generally, trade unions in Nigeria are fast losing their value, integrity and trust of membership because of the unwholesome practices by some of the unions (Anyim, Ilesanmi, & Alaribe 2013). Ibrahim (2010) reports that the persistent shortage of indigenous skilled tradesmen both in quantity and quality has pushed developers and contractors to 'importing' the right talent in large numbers from all over West Africa and even East and Central Africa where technical education has been given due attention. Thus, indigenous firms are ill-equipped to compete against foreign enterprises. Furthermore, the combination of the present pitiable training available to craftsmen as a result of the apparent lackluster approach to technical education by the government, coupled with the craftsmen's attitude to training on one hand, and poor awareness to and effective regulatory organs for craftsmen suggests grave barriers to the industry's attainment of its objectives and obligations in the face of rapid development in construction technologies and methods as well as providing adaptive, innovative and capable services to its customers. The aim of this paper is therefore to assess the training and regulation of construction craftsmen in Nigeria.

Labour in the Construction Industry

Labour and production are interrelated terms. According to Kazaz, Manisali & Ulubeyli (2008) labour is only a factor of production and yet indispensable because it has a strategic role for productivity increase in any organisation making it essential for industrial competition. Edicha (2006) articulated some of the characteristics of labour as an active force of production; it is perishable; it cannot be separated for the labourer; it can be viewed as the start and finish of production; differences exist in the efficiency of labour; and that a labourer sells his labour and not himself. The construction industry is a labour dependent and labour intensive industry (El-Gohary & Aziz, 2013; Shehata, & El-Gohary, 2012; Shehata & El-Gohary, 2011; Awe, Stephenson, Blain, & Griffith, 2011; Anigbogu 2002; Agapiou, Price & Mccaffer, 1995). The construction industry provides a substantial source of employment for artisans as well as unskilled labour that cannot readily find jobs elsewhere in the economy.

The semi-skilled to the skilled cadre work predominantly on construction sites and are typically engaged in aspects of the industry other than design or finance. These include bricklayers, carpenters, plumbers, painters, steel fixers and welders among others. Construction employers tend to recruit their workforce from the locality of projects and that appropriate recruitment, training and retraining strategies depend on local labour supply factors (Agapiou *et al.*, 1995). Competition between construction firms and the quality of services offered depends, among other things, on the quality of the workforce that companies employ.

However, there are concerns about shortages and skill inadequacies of construction craftsmen in the Nigerian construction industry and even in the developed nations (Awe, Stephenson, & Griffith, 2009; Kaming, Olomolaiye, Holt & Harris, 1997; Kashiwagi & Massner, 2002; Abdel-Wahab *et al.*, 2008; Agapiou, Price & Mccaffer, 1995). Lill, (2004) revealed a number of factors which have combined to induce a construction skills shortfall. These include the introduction of new technologies which have redefined the skills required; the growth in self-employment and the use of labour-only subcontractors which have reduced the commitment and investment in training within the industry; the poor image of the industry which unfavourably affects its popularity as a career choice; the high mobility of construction workers as a result of the unattractive image, unsafe working conditions, the lack of respect and inadequate opportunities for training; dissatisfaction with the way in which labour is organised, especially the unstable workload which has been cited as the principal reason for release by relieved workers; and the migration of the workforce to countries offering better wages. The combination of these factors has led to a labour market reliant upon a casual workforce, incorporating high levels of self-employment, low levels of training investment and hence, low quality skills (Kashiwagi and Massner 2002). The indirect consequences are indeterminate productivity and quality of constructed product and the ability to satisfy clients' needs. Direct consequences include time and cost overruns, poor work quality, increased health and safety hazards and generally negative image for the industry (Gunderson 2001).

Training and Regulation of Craftsmen

The construction sector as one of the major development drivers in the nation's economy cannot afford to approach the culture of training with levity (Awe, Stephenson, Blain, & Griffith, 2011). Training is vital to the future health of the construction industry (Ibrahim, 2010). A dynamic but effective culture of training and development of craftsmen is essential to address the difficulties of skill shortages, and to accomplish the industry's objectives and obligations. Although narrower in conception than either education or development, Training is a learning activity which is directed towards the acquisition of specific knowledge and skills for the purpose of an occupation or task. Training available to craftsmen and artisans is either formal (vocational schools and technical colleges) and informal (mainly apprenticeships).

Craft unions involve combining workers who are engaged in a particular craft or skill but who may work for various employers and at various locations. Formed to improve wage levels and working conditions, craft unions were established in Britain and the United States in the middle of the 19th century. They derive their power from their control over the supply of skilled labour—a control that is maintained through licensing and apprenticeship arrangements.

Role of Professional Bodies in Training and Regulation of Craftsmen

Professionals and professional bodies have a crucial role to play as part of the regulatory landscape. They have the potential to really tap into and help ignite more enthusiasm and ambition among individual teachers and trainers to develop, tone and strengthen their practice to benefit learners. The practice of professionals in the construction industry like Builders, Architects, Surveyors are being regulated by such bodies as Nigerian Institute of Architects (NIA), Nigerian Institute of Quantity Surveyors (NIQS), The Nigerian Institute of Building (NIOB) and the Nigerian Society of Engineers (NSE).

Among all other professionals, the Builder works closely with the allied skills required for the production process—the artisans and craftsmen which are invaluable to the construction process. The NIOB considers the training and development of craftsmen important. It has offered to improve artisans' skills through regular training programmes pledging to admit into a specially created membership cadre while providing a curriculum for their training scheme. The Nigerian Association of Engineering craftsmen is just one of the five cadres of engineering personal recognised and empowered by the Council for the Regulation of Engineering in Nigeria (COREN). Established in 1992 and inaugurated in 1993, its foremost objective is to promote quality and professionalism in engineering practice in Nigeria and internationally.

Methodology

Primary data was collected using a structured questionnaire designed to collect information relating to training and regulation of craftsmen. Secondary data was obtained from text books, journals, trade magazines, unpublished academic projects and theses, publications from agencies such as the National Board for Technical Education (NBTE), Industrial Training Fund (ITF), Nigerian Institute of Building (NIOB), Council for the Regulation of Engineering in Nigeria (COREN), Nigerian Society of Engineers (NSE), Nigerian Association of Engineering Craftsmen (NAEC), and relevant internet sources.

Convenience sampling was adopted for this study due to unavailability of exact data to form the study population of the respondents in the study area. Forty questionnaires each were administered to three selected trade types studied (Masons, Carpenters and Iron Fixers) making a total of 120 questionnaires. These three artisans were selected because they were the bulk of artisans readily available in the sites that the study covered partly due to the stage of works in such sites. The questionnaire was distributed among four construction sites (residential and institutional) within Kaduna metropolis and five within Zaria. These sites were chosen because of the high presence of the artisans studied that was sufficient to cover the 120 respondents intended for this study. It must be emphasised that the mode of administration of the questionnaire was in three categories:

- a. Some respondents readily read and filled the questionnaire;
- b. Some could only read but the researchers had to fill the questionnaires for them; and
- c. The questionnaire had to be interpreted to some respondents and subsequently filled (the respondent's answers to questions) for them by the researchers.

Descriptive Statistics was used to analyse data and inferences were subsequently made.

Discussion of results

Out of the 120 questionnaires distributed, a total of 101 questionnaires (93 percent) were returned: thirty two questionnaires from carpenters, thirty six from Masons and thirty three from the Iron fixers.

Training of Craftsmen

Figure 1 shows that 22 craftsmen had working experience of less than 5 years, 46 craftsmen had working experience of between 6 to 10 years, 18 craftsmen had working experience of between 11 to 15 years, 9 craftsmen had working experience of between 16 to 20 years, and 6 craftsmen had working experience of over 21 years.

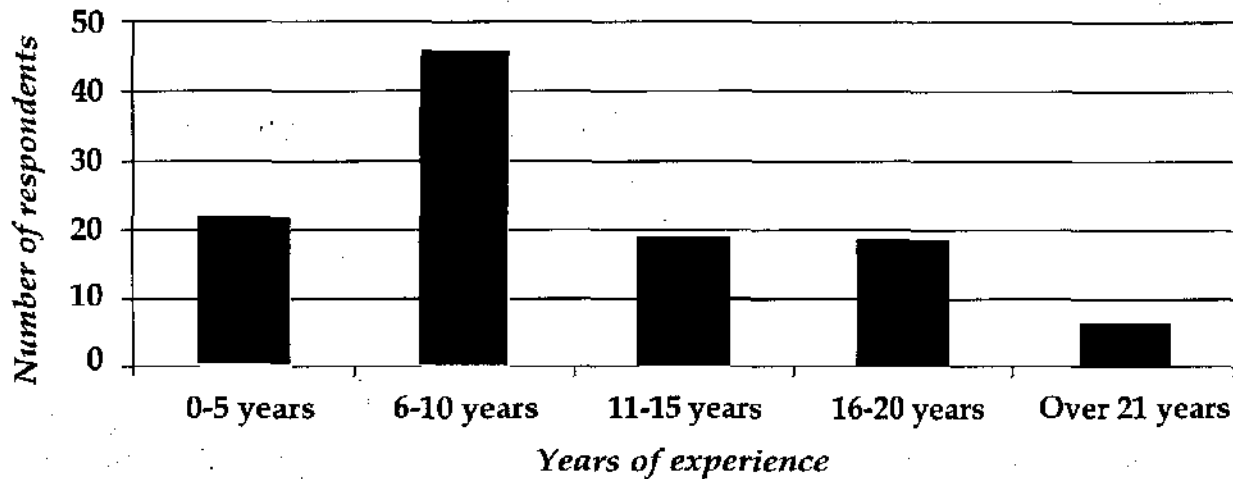


Figure 1: Years of experience of respondents

Source: Field Survey (2014)

Regarding the nature of basic training of the respondents, Figure 2 depicts that 56 respondents passed through college-based training (primary school, secondary school, technical college, trade schools, polytechnics etc), 45 passed through non-college-based training (popularly referred to as apprenticeship).

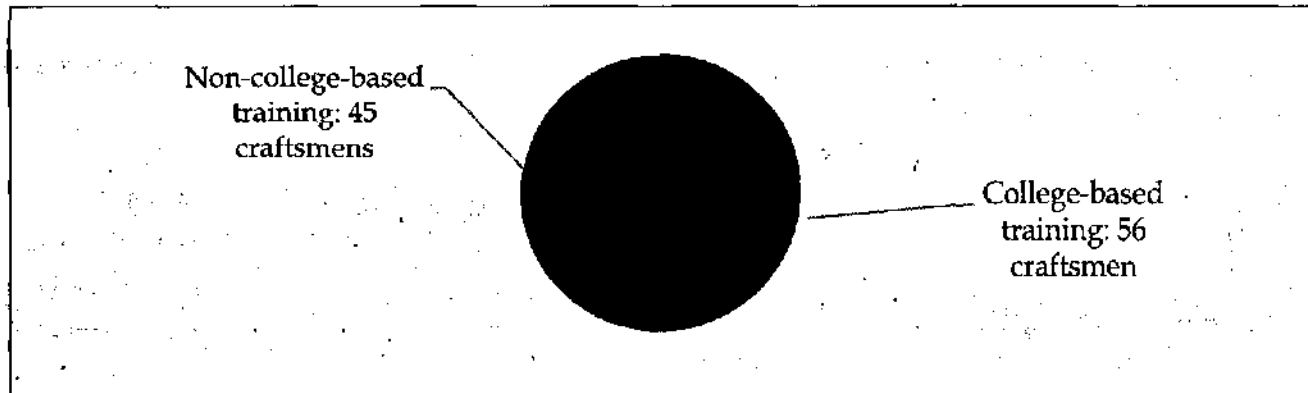


Figure 2: Basic training possessed by respondents

Source: Field Survey (2014)

Table 1 shows that over 68 craftsmen did not undergo any re-training after their initial basic training while about 26 craftsmen went through re-training at some point in time after their initial basic training.

Table 1: Re-training of craftsmen

	Frequency (N)	Percentage (%)
No	68	67.32
Yes	26	25.74
No response	7	6.93
Total	101	100

Source: Field Survey 2014

Regulation of Craftsmen

Figure 3 depicts the level of awareness of the craftsmen to crafts union and regulatory bodies.

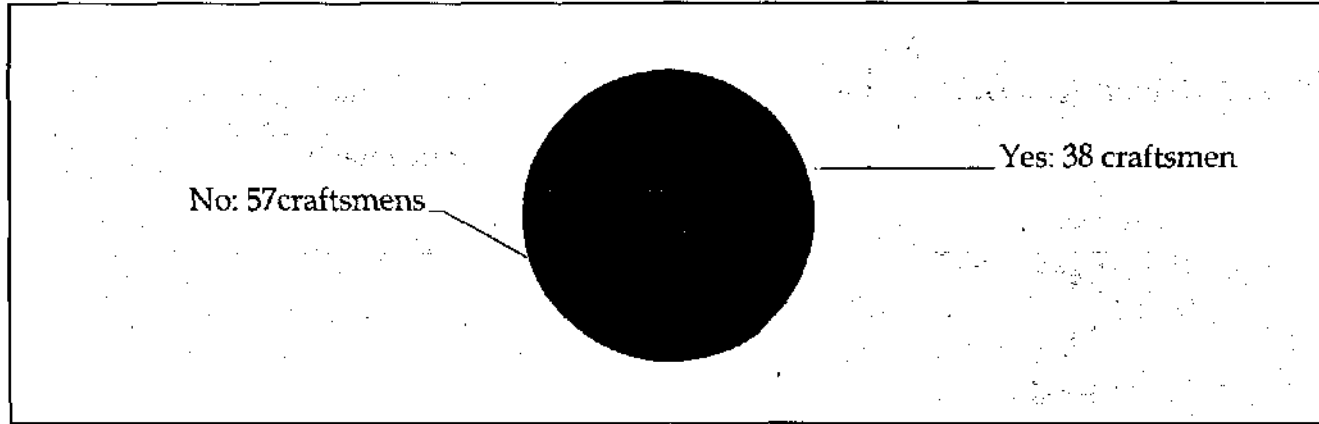


Figure 3: Level of awareness of existence of body/organ regulating craftsmen

Source: Field Survey (2014)

While 57 craftsmen were not aware of the existence of any crafts union and regulatory body in Nigeria, 38 craftsmen were aware of the existence of crafts unions and regulatory bodies in Nigeria. Six respondents did not answer this question

Out of the 38 craftsmen that were aware of the existence of crafts unions and regulatory bodies in Nigeria, 3 craftsmen indicated that their awareness in the roles of the crafts union and regulatory bodies were only to organise seminars/workshop, 24 craftsmen indicated that their awareness in the roles of the crafts union and regulatory bodies was only to regulate minimum wage charged for services and 4 craftsmen attested that their awareness in the roles of the crafts union and regulatory bodies was only carrier guidance and counseling. Seven craftsmen even though aware of the existence of crafts unions and regulatory bodies in Nigeria had no idea of the roles they played. The results are as shown in Figure 4.

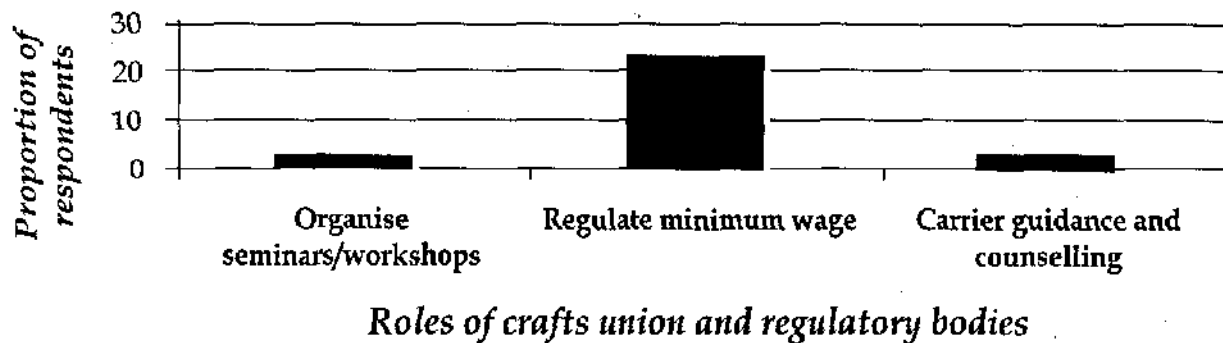


Figure 4: Perception on roles of crafts union and regulatory bodies by respondents

Source: Field Survey (2014)

When respondents were asked on their knowledge of restrictions to work that could be imposed by craft unions and regulatory bodies on non-members, 2 respondents answered that they were aware of such while 36 respondents attested they were not aware of such. The results are shown in Table 2.

Table 2: Knowledge on restrictions imposed by crafts union and regulatory bodies

	Frequency (N)	Percentage (%)
Yes	2	6
No	36	94
Total	38	100

Source: Field Survey 2014

Out of the 38 craftsmen that were aware of the existence of crafts unions and regulatory bodies in Nigeria, only 3 were affiliated and/or registered to a crafts union and regulatory body while the remaining 35 craftsmen are not affiliated and/or registered to any crafts union and regulatory body. The results are as shown in Table 3.

Table 3 Affiliation to crafts union and regulatory body

	Frequency (N)	Percentage (%)
Yes	3	7.89
No	35	92.11
Total	38	100

Source: Field Survey 2014

Findings, Conclusion and Recommendations

The findings from this research reveal that:

- a. Craftsmen in the Nigerian construction industry possess some basic training (college-based and /or non-college-based);
- b. Over 67% of craftsmen in Nigeria never went through any form of re-training from their initial basic training in their various trades in the last 5 years;
- c. Majority of craftsmen are not aware of the existence of any organ (crafts union and regulatory body) regulating their craft in Nigeria
- d. The roles of the crafts unions and regulatory bodies in Nigeria are poorly

understood by the few craftsmen aware of their existence due to the very poor affiliation of the craftsmen to the crafts unions and regulatory bodies.

It may thus be concluded that the unwillingness to improve on the trade knowledgebase by craftsmen is responsible for craftsmen from foreign countries (like Chad, Cameroun and Togo) dominating some trades in the Nigerian construction industry. This could also be attributed to the poor affiliation/patronage of Nigerian craftsmen to crafts unions and regulatory bodies that conduct continual professional development in new construction processes.

It is therefore recommended that government and construction professionals must imbibe the habit of encouraging the craftsmen they work with to affiliate themselves with these organs responsible for regulating their trade practices in Nigeria. Furthermore, the regulatory organs should devise sensitization mechanisms that will enable continual trade improvement amongst the Nigerian craftsmen.

REFERENCES

- Abdel-Wahab, M. (2012): Rethinking apprenticeship training in the British construction industry. *Journal of vocational education and training*. 64 (2), 145-154
- Agapiou, Price, A.D.F. and McCaffer, R. (1995): Planning future construction skill requirements: understanding labour resource issues. *Construction Management and Economics*. 13 (2), 149-161
- Alinaitwe, H., Mwakali, J.A. & Hanson, B. (2006): Factors affecting productivity of building craftsmen – a case of Uganda in: *Procs International Conference on Advances in Engineering and Technology* (pp277-284)
- Aniekwu, A. N., and Audu, H. O. (2010): The effects of management on productivity: a comparative study of indigenous and foreign firms in the Nigerian construction industry in: Laryea, S., Leiringer, R. and Hughes, W. (Eds) *Procs West Africa Built Environment Research (WABER) Conference, 27-28 July 2010, Accra, Ghana*, (pp 567-578)
- Anyim, F. C., Ilesanmi, A. O. and Alaribe, J. (2013): Diminishing and Disappointing Role of Trade Unions in the 21st Century: The Nigerian Experience. *International Journal of Management Sciences*. 1 (2), 2013, 58-66
- Awe, E. M., Stephenson, P. and Griffith, A. (2009): An Assessment of Education and Training needs of Skilled Operatives within the Nigerian Construction Industry. In *Proceedings 25th Annual ARCOM Conference, September* (pp. 7-9).
- Awe, E. M., Griffith, A., and Stephenson, P. (2011): Identifying and Tackling Problems Militating Against Youth Interest in Construction Crafts Careers: Panacea for Effective PPP Implementation in Nigeria. In Akintoye, A., Liyanage, C. & Renukappa, S. *Association of Researchers in Construction Management (ARCOM) Doctoral Workshop, Public Private Partnerships 12 October, Lancashire, United Kingdom* (pp45-60)
- Awe, E. M., Stephenson, P., Blain, J., and Griffith, A. (2011): Improving the culture of training in the UK construction sector through skills training strategies. In Stephenson, P, *Association of Researchers in Construction Management (ARCOM) Doctoral Workshop, 20 April 2011,*

Loughborough, United Kingdom (pp 59-68)

- Awe, E. M., Griffith, A., and Stephenson, P. (2010): An enquiry into the challenges of skills training in Nigerian construction industry. *World of Construction Project Management*, 151.
- Dainty, A.R.J., Ison, S.G. and Briscoe, G.H.(2005): The construction labour market skills crisis: the perspectives of small-medium sized firms. *Construction Management and Economics*. 23 (4), 387-398
- El-Gohary, K. and Aziz, R. (2014): Factors influencing labour productivity in Egypt. *Journal of Construction Engineering and Management*. 30 (1), 1-9
- Fagbenle, I.O Adeyemi, Y.A and Adesanya, D.A (2004): The Impact of Non-Financial Incentives on Bricklayers' productivity in Nigeria. *Construction Management and Economics*, Taylor and Francis Group. Vol.22 Pp 899-911.
- Ibrahim, K. (2010): *Training and regulation of construction craftsmen*. BSc Building project. Ahmadu Bello University, Zaria, Nigeria
- Kaming, P.F., Olomolaiye, P.O. Holt, G.D. and Harris, F.C. (1997): Factors influencing craftsmen productivity in India. *International Journal of Project Management*. 15 (1), 21-30
- Kashiwagi, D. T. and Massner, S. (2002, April): Solving the construction craftperson skill shortage problem through construction undergraduate and graduate education. In *ASC Proceedings of the 38th Annual Conference* (pp. 165-176).
- Kazaz, A.; Manisali, E. and Ulubeyli, S. (2008): Effect of basic motivational factors on construction workforce productivity in Turkey, *Journal of Civil Engineering and Management* 14(2): 95-106.
- Lill, I. (2009): Multiskilling in construction—a strategy for stable employment. *Technological and Economic Development of Economy*, (4), 540-560.
- Ngowi, A.B. (1997): Virtues of construction training in traditional societies. *Building environment* 32 (3), 289-294
- Shehata, M.E. & El-Gohary, K.M. (2011): Towards improving construction labour productivity and projects' performance. *Alexandria engineering journal*. 50 (4), 321-330

APPENDIX A

RESEARCH QUESTIONNAIRE

Dear Sir,

QUESTIONNAIRE ON AN ASSESSMENT OF TRAINING AND REGULATION OF CRAFTSMEN IN THE NIGERIAN CONSTRUCTION INDUSTRY

This questionnaire is meant solely to help gather relevant information for the research. Your response will therefore be treated with utmost confidentiality and will only be used for the purpose of this research work.

Kindly Tick the Appropriate Option in the Boxes Provided.

SECTION A: TRAINING

1. Craft Type/Trade

Carpenter Mason Iron Fixer

2. Years of experience

[a] 1-5 [b] 6-10 [c] 11-15 [d] 16-20 [e] 21 and Above

3. Type of education

a. College-based training: Primary, Secondary, Technical College,

Trade Schools, Polytechnics etc b. Non-college-based training: Apprenticeship

4. Have you ever been re-trained after your initial training?

[a] Yes [b] No

SECTION B: REGULATION

1. Are you aware of any organ (craft union or regulatory body) regulating your craft?
 [a] Yes [b] No

2. What roles do you these craft unions or regulatory bodies play? (You can select more than one)
 - a. Organise seminars/workshops
 - b. Regulate minimum wage for services
 - c. Carrier guidance and counselling
 - d. Others.....

3. Are you aware of any restrictions to work that can be imposed by craft union and regulatory bodies on non-members
 [a] Yes [b] No

4. Are you affiliated / registered to any craft union or regulatory body?
 [a] Yes [b] No