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Vocational Skill Mobility and Its Effect on Occupational Engagement Among Tradesmen and Craftsmen in Building Sector

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ABSTRACT
Building sector in Nigeria has suffered skill erosion overtime. Foreigners with special skill has mobilized their skill into the sector and there had been mass exodus of imported skills into the sector thereby forcing citizens to jettison idea of engaging indigenous artisans in the face of superior skills and knowledge. The aim of the study is to appraise the vocational skills and competence of the indigenous and foreign artisans, vocational mobility in building sector, job mobility pattern among artisans, sectors involved, attendant effects, both favorable and unfavorable, and possible ways of addressing identified threat.
The study engaged 120 questionnaire using random sampling technique. The questionnaire was designed in Likert scale, structured on sematic rating scale 1 to 5. The study identified the following reasons among others reasons behind the disparity in occupational engagement among artisans in Nigeria building sector, the reasons include: inadequate skill and knowledge by indigenous artisans, no vocational focus, half -baked knowledge of the work, poor workmanship and poor finishing and poor education background or lack of former education among others.
The study recommended the following factors as panacea to the problem; reinvigoration of artisans competence, continuous training of the artisans, value reorientation of artisans, promoting technology transfer among indigenous artisans and foreign artisans.

Key words: Vocation, Value, Orientation, Mobility. Engagement.

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1. INTRODUCTION

Construction sector determines pattern of economy of nation, it is reputed to have been major provider of employment in a nation workforce. Construction industry is widely acknowledged as the capital intensive active sector through execution of capital project thereby diffusing money into system. However, in recent times there have been labour shortages in various segment of the industry.

Notwithstanding labour shortages, there have been strict competition thereby mounting pressure on the sectors in the industry. Many workers are inter switching from one sector to the other thereby creating differential availability of workforce across board. In lieu of the overbearing pressures in meeting manpower needs, training of workforce was inevitable, therefore, tradesmen, artisans, skilled labour semi-skilled labour and low-skilled migrant workers are often allowed into the sector.

This method has tendency of reducing manpower difficulty. However, in most of the construction sector all over the world without prejudice to Nigeria construction sector, migrant-transnational workforces from Togo, Ghana, Cameroon and Republic of Benin are variously employed at much lower rates of remuneration also often with less better working conditions, sometimes are engaged on temporary work visas or without any visas restriction because of ECOWAS pact of no restriction in trade and bilateral relation. However, the industry resolve to augment labour shortage with migrant craftsmen has created imbalance in the workforce gradually pushing the local skill men and artisan out of trade in the face of migrant craftsmen and artisan superior skill. It is to this end that the study appraised the vocational skills and competence of the indigenous and foreign artisans, vocational mobility in building sector, job mobility pattern among artisans, sectors involved, attendant effects, both favorable and unfavorable, and possible ways of addressing identified threat.

1.1. STATEMENT OF PROBLEM

Building construction companies in recent times have suffered severely at the hands of poor performing indigenous artisans and craftsmen. This has caused distrust among various stakeholders in the building construction industry and in some cases forced companies out of business (Beach 2003). Nowadays, construction companies in Nigeria have resulted to seeking for better performing artisan and craftsmen form neighbouring West African countries. This is as a result of poor work carried out by indigenous artisans and craftsmen. According to Buchanan, Baldwin & Wright 2011; D'Arcy, Gustafsson,Lewis & Wiltshire (2012) also Bill, Mitchell & Welters, (2007), indigenous craftsmen and artisans have for long failed to perform optimally as required. The poor performance of craftsmen has for a long time had tremendous negative effect on the projects and this has become worrying. According to Kinetic Group (2012a), most construction firms in Nigeria are very narrow, because they seem to focus on the financial gains forgetting the people that make the job and money. This might also be a factor that has led to the decline of artisan and craftsmen performance and it would be evaluated so as to devise strategies for improvement.

The various challenges faced in the training of artisans and the types of trainings they undergo would be thoroughly evaluated. This would enable us determine the root cause and provide strategies for improvement.

2. RESEARCH METHODOLOGY

Random sampling technique was used in this project, contingency approach was deployed using composite approach, and the approach involves the use of qualitative and quantitative methods to examine the intricacies of skills and migration in the construction industry,

Similarly, A profile of the industry over a 4 year period from 2012 to 2015 was compiled using data from Bureau of employment this toes the line of submission of Morgan (2004), It was combined with interview survey of small and medium-sized construction companies and indigenous construction firms.

a) Sampling Method: Samples are picked at random using Random sampling method with a sample of 80 students. The sampling was done from population frame of students offering technical-based courses.
b) Sample size: Sample size of 80 students of technical based courses and programme was adopted in the study
c) Data Collection Instrument: A structured questionnaire in Likert scale was administered on student of technical based discipline, Eighty (40) questionnaires was administered on the students to harvest their perspective. The responses were further collated, analyzed with SPSS software, processed with Mean Item Score method and presented in tables and charts (Amusan, Oluwunmi, Owolabi and Joshua 2013)
d) Methods of Data Analysis: Mean item scores was used in processing the summarized questionaire. Simple percentages was used to present percentage composition of student performance, number of male and female graduating from programmes and percentage of male and female over the period of three years winning award in the technical related programmes.
Also, academic performance index factor was processed with mean item scores. Data were presented in tables and other modes. A scale 1 to 5 was adopted for questionare calibration,with 1 representing "strongly disagree (SD)" 2 – being disagree (D) 3 – being neither agree nor disagree (N), 5- being strongly agree (SA). Agreement index of the respondents was generated using the relation M.A.I = 5S.A + 4A + 3S.D + 2D + 1N/5(S.A+ A+S.D+D+N).

$$M.A.I = \frac{1\sum(Aij)}{N\sum(Aij)}$$

. . where M.A.I = Mean Agreement Index A=
Agreement variable i = Lower boundary, j = Upper boundary
N = Frequency of Variable Σ = Summation Notation.

3. SCOPE AND LIMITATION OF THE STUDY

The study and the data used are limited to the frequency of migrant tradesmen, craftsmen, skilled labour and semi-skilled labour.

4. RESULTS AND DISCUSSIONS

In this section results of the analysis is presented in tables. The following measured variables are
analyzed and commented; vocational skills and competence of the indigenous and foreign artisans, vocational mobility in building sector, job mobility pattern among artisans, sectors involved, attendant effects, both favorable and unfavorable, and possible ways of addressing identified threat.

4.1 CROSS SECTIONAL COMPONENT OF RESPONDENTS

S/N	RESPONDENT IDENTITY	FREQUENCY	PERCENTAGE(%)
1	Professional	30	25.00
2	Masons	10	8.33
3	Tilers	10	8.33
4	Plasterer	10	8.33
5	Roofers	10	8.33
6	Concreters	10	8.33
7	Carpenters	10	8.33
8	Steel workers	10	8.33
9	Plumbing	10	8.33
10	Painting	10	8.33

Table 4.1 presents the component of the respondents. 30 percent was allocated to professionals while 8.3% was allotted to each of the trades. The selected trades includes; mason, plasterers, tillers, roofers, concreters, carpenters, steel workers, plumbing and painting. Highest percentage was allocated to professionals because of the fact that they are more knowledgeable about all the trades. Equal percentages was allocated to other trades in turns for fair and equal opportunity.

4.1 VOCATIONAL SKILLS AND COMPETENCE OF THE INDIGENOUS AND FOREIGN ARTISANS

S/N	VOCATIONAL SKILL	Indigenous[%]	Ghana[%]	Togo[%]	Republic of Benin[%]	Cameroun[%]
1	Project management	80	5	4	6	5
2	Masonry	45	40	5	5	5
3	Tilling	25	3	4	65	3
4	Plastering	45	40	6	4	5
5	Roofing	45	40	5	5	5
6	Concreting	60	30	5	5	-
7	Carpentry	47	23	10	10	10
8	Steel work	45	40	6	6	3
9	Painting	45	7	40	3	5
10	Plumbing	60	25	5	5	5

Vocational skills and what each of the countries are noted to be popular for are presented in table 4.1 above. 80% of the respondents belong to project management cadre and they are indigenous professionals, that is, Nigeria. The following trend was observed, Indigenous masons and Ghanaian masons shared he masonry sector in 45 and 40 percent respectively. It was observed that Ghanaians are competing with Nigeria in this sector. Similar trend was observed in Plastering,Roofing,Steel work and Painting. Also, Beninois competed with Nigerian in sharing Tilling jobs in the Tilling sector, while Togolese competed with Nigerian in executing jobs in Carpentry and painting sector.

4.2 VOCATIONAL MOBILITY IN BUILDING SECTOR

S/N		Masonry	Tilling	Plastering	Roofing	Concreting	Carpentry	Steel work
1	Masonry	------	Yes	Yes	----	Yes	Yes	------
2	Tilling	Yes	------	Yes	-----	Yes	------	------
3	Plastering	Yes	Yes	------	-------	Yes	------	------
4	Roofing	--	---	---	-------	------	Yes	Yes
5	Concreting	Yes	Yes	Yes	Yes	--------	Yes	Yes
6	Carpentry	------	-----	----	Yes	Yes	--------	------
7	Steel work	-------	------	-------	------	Yes	Yes	--------
8	Painting	Yes	Yes	Yes	yes	-----	Yes	---
9	Plumbing	-----	Yes	-----	------	Yes	-----	-----

Table 4.2 presents extent of mobility of different vocations presented among the sampled artisans on site. The survey cut across different nationals. This borders about inter-operability of different vocations. The implication of this is that a trade could be practiced by more than one tradesmen. For instance, in table 4.2, a mason, tiller and plasterer, are working as tiller, plasterer, concreter and carpenter. Similarly, concreter, mason and plasterers also works as tiller, carpenters and steel worker, while plasterers are working as painter. The reason could be that the trades are interdependent on one another. In construction work the operations are executed in sequential order and one trade sometimes have to wait on other trade to complete their task before continuing, in this way on-job learning and skill transfer usually take place. Another reason is scarcity of job or trade in a sector that could lead to trade migration (Buchanan, Baldwin & Wright 2011; D'Arcy, Gustafsson,Lewis & Wiltshire 2012).

4.3 JOB MOBILITY PATTERN AMONG ARTISANS AND GEOGRAPHICAL SPREAD (COMPARATIVE ANALYSIS)

S/N		GEOGRAPHICAL SPREAD (%)					
	Occupational Engagement	Nigeria	Togo	Ghana	Cameroun	Benin Republic	Others
1	Masonry	15	64	5	5	5	6
2	Tilling	11	79	5	3	2	--
3	Plastering	10	10	10	10	60	-
4	Roofing	30	10	50	5	5	-
5	Concreting	64	10	10	6	7	-
6	Carpentry	60	10	10	10	5	5
7	Steel work	50	10	5	79	5	5
8	Painting	74	5	6	5	5	5
9	Plumbing	70	5	7	6	5	7

Closely related to presentation in table 2 about job mobility is table 3 which is about pattern of job mobility among artisan within the geographical spread. Comparative analysis of the geographical spread of the artisan was presented within the context of their occupational engagement. In masonry, masonry and tilling work was prevalent among the Togo and Benin republic migrant tradesmen in Nigeria on 64%, 79% and 60%. From the table it was discovered that, in masonry and tilling 64% and 79% of the tradesmen are from Togo respectively and while 15% and 11% are from Nigeria. Also, in roofing and steel work, 50% and 79% was occupied by Ghana and Cameroun respectively. However, tradesmen from Nigeria had higher percentage than other nationals in the following trades: concreting,carpentry, painting and plumbing.

4.4 SECTORS INVOLVED IN JOB MOBILITY

	Occupational Skill	M.I.S Score	Rank
1	Masonry	4.0	1st
2	Tilling	4.2	4th
3	Plastering	4.1	5th
4	Roofing	3.9	6th
5	Concreting	4.0	1st
6	Carpentry	3.9	4th
7	Steel work	3.8	6th
8	Painting	3.5	7th
9	Plumbing	4.0	1st

In table 4.4, the component of available skills in the survey and sectors involved was presented in table 4.4, masonry, concreting and plumbing sectors has high level of mobility with mean item score of 4.0 respectively and are ranked first. Tilling sector was second sector that has high level of migrant incursion with mean item score of 4.2 and ranked fourth alongside carpentry. Plastering was ranked fifth, while roofing and steelwork ranked sixth and painting ranked seventh with mean item score of 3.5.

4.5 ATTENDANT INFLUENCE OF JOB MOBILITY ON CRAFTSMEN

	Factors	M.I.S	RANK
1	Depression	4.43	1st
2	Lost of job engagement	4.42	2nd
3	Loss of craftsmanship overtime	4.41	3rd
4	Decayed knowledge	3.88	6th
5	Lopsidedness in job spread	3.99	7th
6	Tendency for violence	4.35	5th
7	Sense of worthlessness	4.40	4th

Attendant influence of job mobility on occupational engagement among tradesmen and craftsmen was presented in table 5. It was discovered that there is tendency for depression to occur on account of job migration, depression was ranked first with M.I.S value of 4.43. Loss of job engagement was ranked second with M.I.S value of 4.42, loss of craftsmanship over a period of time was ranked third. Also, Tendency to have decayed knowledge has M.I.S value 3.88 and ranked fourth. Lopsidedness in job spread, tendency for violence and sense of worthlessness has M.I.S values 3.88 and 3.99 and ranked sixth and seventh respectively. Loss of job engagement and depression top the list of the attendant challenges that follows the lopsided mobility, joblessness can create a chain reaction that can spark up further problems, there it should be prevented on account of good job spread.

Table 4.6 Factors Militating Against Adequate Skilled Labor Supply and Occupational Mobility

S/N	Factors	Professional Perception		Skilled Workers Perception	
		Mean	Rank	Mean	Rank
1	Inadequate Vocational training center	4.45	1	4.45	1
2	Non practice of traditional apprenticeship training	4.44	2	4.44	2
3	Youth no longer interested in vocational based training	4.42	5	4.42	3
4	Sense of low self esteem by construction craftsmen	4.42	5	4.42	3
5	Lack of adequate motivation by the organization and government.	4.43	3	4.42	3
6	Risk inherent in construction works	4.42	5	4.40	6
7	Low wages and income	4.40	8	3.99	7
8	Job insecurity	3.88	10	3.97	8
9	Free entry and exit nature of the trades.	3.99	9	3.88	9
10	Availabilty of quick money yielding alternatives	3.75	10	3.86	10`
11	Inclusion of private firms in artisans training	4.42	5	4.41	5
12	Lack of legislation controlling foreign migrant entry in to the trade.	4.43	2	4.42	3
13	Lack of law defining extent of occupational engagement of indigenes and foreigners.	4.43	2	4.42	3

In table 4.6, factors militating against adequate skilled labour supply and occupational mobility was presented in table 4.6. Perspective of professionals and skilled workers as regards the factors was presented. Inadequate

vocational training center with MIS value 4,45 was ranked first, followed with non practice of traditional apprenticeship training,,M.I.S value 4.44 was ranked second. Youth no longer interested in vocational based training with M.I.S 4.42 was ranked as third alongside the following factors: Lack of law defining extent of occupational engagement of indigenes and foreigners, Lack of legislation controlling foreign migrant entry in to the trade, Lack of adequate motivation by the organization and government and sense of low self esteem by construction craftsmen.

Table 4.7: Reasons for choosing to work in current location

Interview questions	**Frequency %**	Interview questions	Frequency%
1. You grew up here/have always lived here?	55	8. Family Challenge?	15
2. Family reasons?	6		
3. Employer sent you here?	36	9. An employer sent you?	13
4. Came to the area to take up this or another job?	5	10. Availability of more regular opportunities?	35
5. There are more jobs available in this area?	6	11. More jobs are available here?	20
6. Construction work is better paid in this area?	3	12. Availability of better paid jobs?	5
7. Wanted to move to the area because you like it or not?	1	13. Prefer living here?	5

Interview was conducted among the migrated tradesmen and artisans, the result is presented in table 4.7. Major reason indicated was being born at the location of the job and grew up there. This was scored 55 percent, being sent by an employee to the job location where they were found was scored 36 percent, availability of more regular opportunities scored 35 percent. Availability of job opportunity was also accepted as one of the reasons adduced for the phenomenon of labour migration this is in line with Haukka, S (2011), Amusan L.M, Oluwunmi A.O., Owolabi J.D and Joshua O(2013

Furthermore, the following reasons are also stated as one of the reasons for migrating to the location of job availability: There are more jobs available in the area; construction work is better paid in the area; wanted to move to the area because of good prospect; family challenge and availability of better paid jobs this toes line of submissions in Mavromaras. Mahuteau & Wei, (2013); Karmel, Lim, & Misko, (2011) and McGuinness & Wooden (2009).

RECOMMENDATION

The following facts are recommended as a way to proper management of vocational skill mobility and its effect on occupational engagement among tradesmen and craftsmen in building sector.

Government should enact a control law defining the extent of occupational engagement of indigenes and foreigners, enacting of law regulating entrant of foreign and migrant tradesmen into the construction sector, promulgation of protective decree for indigenous artisan.

Also, recommended includes; provision of adequate vocational training center, reopening of practice of traditional apprentice training programme, stimulating youth interest in traditional apprentice training, government and organization should adequately motivate people at the grass root for artisan training. Finally, the free entry and exit nature of the industry should be prevented and inclusion of

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