

Full Length Research Paper

## Technical and vocational skills depletion in Nigeria and the need for policy intervention

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The study was carried out to assess the impact of erosion of technical and vocational education and training (TVET) on technological capability building in Nigeria by commercial motorcycling transportation mode. The study used primary and secondary data sources. The number of respondents sampled was 500. Structured questionnaires were administered on commercial motorcyclists. This was supplemented with field observations and interviews. A total of 500 questionnaires were administered on the respondents with 72% response rate. The data were analysed using descriptive statistics. The study showed that the active population was heavily involved in commercial motorcycling which has no technical value addition to the nation's economy. About 8% of the commercial motorcyclists had at least a University Degree (Masters and Bachelor Degrees), about 54% of them had at least a senior secondary school education, 36% had junior secondary education and below, while about 2% had no formal education. The study also revealed that majority (about 85%) of the commercial motorcyclists were tradesmen or craftsmen before: auto-mechanics (25.88%), carpenters (14.12%), bricklayers (8.24%), painters (7.06%) and panel beaters (5.88%). Of these, more than half had graduated from their chosen trades or crafts, while 15% were civil servants. However, the respondents who are now commercial motorcyclists make at least twice the income they made in their former trade per day, hence the drift. The study concluded that drift from crafts and trade to commercial motorcycling will speedily erode the indigenous technology capacity of Nigeria if there would not be urgent government intervention to reverse the situation.

**Key words:** Training, vocational, technical, education, motorcycling.

### INTRODUCTION

#### Background

Few decades back, Okada Air was the most popular Nigerian local airline. The commercial motorcycle transporters were nicknamed after the airline, because they could manoeuvre through the heavy traffic of Lagos, and take passengers to their destinations in a timely manner, in the same way as the airline. The ironic humour of an airline's name being used for commercial motorcycling, as well as the local familiarity with Okada

Air, caused the nickname of Okada to outlive the airline from which it originated, and which many Nigerians no longer even remember. Until about 20 years ago, commercial motorcycling, popularly known as *Okada* was alien to the South-western part of Nigeria. Taxi cabs and mini buses were the common means of commercial transportation. Though individuals owned motorcycles, they were not used for commercial purposes. With the stringent economic climate, which necessitated the government policy of structural adjustment programme

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(SAP), many vehicle owners could not replace them, and coupled with the gradual degradation of roads and the need of communities to access non-motorable areas, commercial motorcycling became a necessity.

Commercial motorcycling has been accepted by the populace and is gradually being integrated into the urban life of the country. This mode of transportation has continued to enjoy increasing acceptance relative to the other modes (Ogunsanya and Galtima, 1993; Adesanya, 1998; Layode, 1998a,b; Fasakin, 1999). An estimated 25% of total traffic in major roads within South-western Nigeria is represented by commercial motorcycling. One thing that enhances the sustainable operations of the commercial motorcyclist is the relatively high level of daily profits usually posted by operators compared to daily operational cost (Layode, 1998).

However, apart from the immediate profits it brings, commercial motorcycling has very little or no impact on the indigenous technological capability building in the country. This is because there is no value addition coming out of this business. On the contrary, it has reduced the quantity of workmanship in technical and vocational education and training (TVET) in Nigeria. A few decades ago, technical and vocational education and training (TVET) formed a central part in the development strategies of many developing countries. Due to the emphasis on basic education TVET became marginalised within the educational landscape, and constrained by negative perceptions, which portray TVET as a low status, low quality educational pathway (Asogwa and Diogwu, 2007; Edukugho, 2004; Oranu, 2010).

Broadly defined, TVET is concerned with the acquisition of knowledge and skills from the world of work (Grunwald *et al.*, 2004a,b; Grunwald *et al.*, 2005). TVET can be defined as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life (UNESCO, 2010). Technical education is the theoretical vocational preparation of students for jobs involving applied science and modern technology; compared to vocational education (which focuses on the actual attainment of proficiency in manual skills). Technical education emphasises the understanding of basic principles of science and mathematics and their practical applications; delivered at (usually) upper secondary and lower tertiary levels to prepare students for occupations that are classified above the skilled crafts but below the scientific or engineering professions (Tripney *et al.*, 2012). Vocational education is organised activities designed to bring about learning as preparation for jobs in designated (manual or practical) trades or occupations usually, non-theoretical and focused on the actual attainment of proficiency in manual skills. It is usually considered part of the formal education system thereby

falling under the responsibility of the Ministry of Education (Tripney *et al.*, 2012). Vocational training, on the other hand, prepares learners for jobs that are related to a specific trade or occupation (Tripney *et al.*, 2012). On-the-job training refers to workplace-based training that uses real jobs as a basis for instruction and for practical purposes while apprenticeship training combines on-the-job training for a highly skilled craft or trade (from someone who is already a skilled leader in the field) with academic/theoretical instruction; also called dual-training programmes (Tripney *et al.*, 2012).

A key requirement for development in the modern technological age is a population that is well educated and trained in science and technology and capable of being readily mobilized to meet changes in technology (ILO, 2004). The prime example of this is seen in the technological and industrial might of Japan. TVET may be seen both as a vehicle for the development of marketable and entrepreneurial skills and as an engine for development (ILO, 2004, 2005).

According to ILO (2004), the total number of young people within 15-29 age group in developing countries increased by 12.4% between 1993 and 2003, while youth employment rose by just 0.6%. This is a serious unemployment situation but unemployment can possibly be reduced by facilitating and promoting job-seekers' access to the formal and informal labour market through technical and vocational education and training (Bennell, 1999; IIEP, 2006).

It is important for Nigeria to include a variety of courses for disciplines such as technical, vocational, professional, agricultural, and so on, in the education curriculum so as to achieve development. To achieve this development, the vast population of Nigeria must contribute to economical growth by participating in all professions through TVET. Therefore, TVET systems play a crucial role in the social and economic development of a nation (Grootings and Nielsen, 2006; King and Palmer, 2006). TVET provides students with "life skills" to become productive entrepreneurs as it engenders creative and innovative ideas, enlarges the economic pie, and increases personal freedom. Most of the expatriate engineers who are being paid millions of dollars to build Nigeria's roads and bridges are graduates of technical and vocational colleges abroad.

### The problem

The government, over the last few decades, has disused TVET. This situation, coupled with the migration of skilled technicians to commercial motorcycling poses a dangerous situation for the future. Subsequently, society is deficient in skilled technicians: bricklayers, carpenters, painters and auto-mechanics; laboratory and pharmacy technicians, electrical/electronic technicians and skilled vocational nurses, etc. The major difference between the

nations of the North and the South is essentially disparities in the levels and degrees of technological (indigenous and imported) progress. Economic development in our context is the process of accumulation of real capital brought about by the application of indigenous and advanced production methods which raise productivity and, thus, income and investment possibilities. Without the development of indigenous technologies and adoption of imported technologies, it is difficult to imagine how the problems of economic, social and political development can be solved within a reasonable span of time.

Literature has shown that enrolments in vocational education and level of economic development are related (Olaitan, 2010; Famiwole *et al.*, 2012). In Nigeria, the demand for vocational education remains very low and the economy remains low. However, demand for vocational education seems to exist in catching-up countries, with growth and diversification of industrial structure. Much growth in vocational education took place in countries like Korea during early industrialisation processes, when employment opportunities could increase. Unemployment rates in the East Asian economies remained low essentially because the population possessed employable vocational and technical skills (Jin, 2008; Haq and Haq, 1998; VanArk, 1992). However, this paper acknowledges that the relationship between demand for vocational education and economic development may not be linear. This paper, therefore, assesses the impact of the gradual erosion of technical and vocational education and training (TVET) on technological capability building in Nigeria by commercial motorcycling transportation mode.

## LITERATURE REVIEW

### The concept of TVET

Technical and Vocational Education and Training (TVET) has been misunderstood in the Nigerian context to mean that type of instruction and training given to people that could never study science or arts in the school system and are therefore regarded as drop outs from the system or those that are not intelligent enough to pass good examinations for entry into higher institutions such as universities. Olaitan (2010) defined TVET as education given to an individual in order to enable him or her to develop the creative and scheming potentials inherent in him or her for the use of man. According to Olaitan (1996) it is established that formal Western education in Nigeria started with vocational education when the first Europeans that came to Nigeria employed our ancestors as gardeners, laundry men, carpenters, cooks, stewards, tailors and even house builders etc. Although these new trades or occupation were not called vocational, they form a major part of what we know today as vocational

education (Famiwole *et al.*, 2012). Then these forms of skill training were given to the handicapped, physically or mentally retarded people. The missionaries provided them with training in handicraft, shoe-repair, broom-making, etc. This was a critical land mark in the development of vocational education because those that were handicapped were trained in skills and gainful occupations. Ever since, such trainings given were associated with the handicapped; and hence vocational education was therefore professed to be the education for the handicapped or mentally retarded individuals (Famiwole *et al.*, 2012). As a result of this misconception, the meaning and definition of what vocational education is all about have not been clearly understood by majority of people. The assertion here, therefore, is that the confusion and problems encountered in vocational education in Nigeria today be it organizational, administrative, educational or otherwise; seem to emanate from the lack of understanding of the concept of vocational education and its purposes (Famiwole *et al.*, 2012).

TVET is usually defined as the type of education that emphasizes the application of skills, knowledge and attitudes required for employment in a particular occupation or cluster of related occupations in any field of social and economic activity (Fien *et al.*, 2009). The role of training in human capital development for economic growth cannot be overemphasized. Nowadays, work place training is recognized as highly important while previously vocational education is now relegated to the background. However, there is strong argument that the skills needed in a developing country like Nigeria, especially in the development of indigenous products and in new processes, cannot be got through formal education, which further shows that TVET may be the primary contribution to poverty reduction and economic development efforts (Fien *et al.*, 2009).

### TVET for education for sustainable economic development

To build and sustain economic development in third world countries, it is important to combine human capital (technical knowledge) with social skills (Wals, 2009). TVET is expected to equip the people with the life-skills necessary for the labour market and also to provide technical support to keep up with the fast changing market by expanding necessary skills and competencies. This type of education is seen as a means to ensure sustainable lifestyles and occupations through the development of knowledge and skills that can meet the needs for a specific position in the labour market and result in an overall improvement of the quality of life of people. The more sustainability concepts that workers are exposed to, the better chances they will have to increase their productivity at their workplace. This

orientation must be given at the start of a profession and continuous training must be done while in the profession in order to up-skill and retain workers (UNESCO-UNEVOC, 2009). For example, the UN's International Centre for Technical and Vocational Education and Training (UNEVOC) highlights the importance of TVET combined with education for sustainable development: *"The dynamics of the world of work, due to industrialisation and technological innovation, stress that TVET develops a skilled, committed and motivated workforce that understands how global changes impact upon local opportunities for business and industry and how these changes impact upon the quality of local social, economic and environmental conditions"* (UNESCO-UNEVOC, 2009).

### **Technical and vocational education and training systems**

TVET systems are increasingly becoming recognized by governments as very important to economic development through their agenda on skills for the labour market. They are also seen as policy instruments for social inclusion, e.g. the poor and the uneducated (Basu, 1997). TVET is also recognized as an effective means of empowering young people to engage in productive activities to earn livelihoods (UNESCO, 2005). In this framework, TVET refers to deliberate interventions to bring about learning which would make people more productive in designated areas of economic activity e.g., economic sectors, occupations, specific work tasks (Lauglo, 2009).

Unfortunately, TVET has failed to achieve the level of social recognition that is needed to establish a profession in many countries. The reason for this may be connected with the fact that teaching has always had problems gaining professional recognition and has been referred to as a semi-profession (Etzioni, 1969). Attracting qualified staff into teaching and teacher training in technical and vocational education was a problem for most countries (including Nigeria), often because salaries and work ergonomics were better in the industry (Hostmark, 1988). To salvage the status quo, several countries had therefore taken steps to improve the salaries of this category of teachers. Some governments also allow technical and vocational education teachers to undertake consultancy services that may raise their capacity building of knowledge and skills, keep them up-to date, and supplement their incomes sufficiently to make them more satisfied with their salaries (Kerre, 1997). Hence, the employer plays a vital role in helping to meet the need of effective technical and vocational education and technical and vocational teacher education (UNEVOC, 1997).

Since the objectives of TVET were to raise the standard of formal education and to provide professional skills, teacher trainees should be given a more adequate

cultural foundation (mother tongue, modern languages, social sciences, etc). There should also be more emphasis on pedagogical skills. This is not to say that TVET can substitute for effective classroom teaching, particularly in catering for the wide range of abilities and backgrounds characteristic of classes today (Banks, 1996). The problem of how technical and vocational teachers could best keep their professional skills up-to-date became more intractable with the increasing pace of technological change. In the extreme case teachers had to be totally re-trained because the profession changed radically or even disappeared (Newman, 1994).

One of the most profiting approach to make available in-service training for teachers was to give them direct industrial or commercial training and experience. This also had the advantage of raising teacher's motivation and self esteem. However, such industrial experience should not be too narrowly tied to a particular commercial product, and in-service training should be better linked with initial training. Therefore, it could be better to draw attention to the types of TVET teacher training and their qualifications (UNESCO, 2005; UNEVOC, 1997).

### **Categories of TVET teachers**

The term teacher in vocational training and trainer in initial vocational training are used loosely to refer to two large occupational groups: the teachers, who work mainly in technical or vocational institutions, and the trainers, who work in firms or in non-academic training institutes (Cordova *et al.*, 1995). In Germany, teachers work mainly in technical or vocational schools, while trainers are skilled workers in enterprises, who provide trainees with the knowledge and practical skills required for an occupation (Schneider *et al.*, 2009). According to Hortsch (1999) teachers can be divided into three groups as follows:

#### **Teacher of theoretical lessons**

This category gives theory and general job-related lessons in classes. The qualification for a teaching appointment of this kind is a course of study followed by an examination for a senior teaching appointment and a two years post qualification teacher training period (Cordova *et al.*, 1995). The teacher here must be capable of imparting knowledge of sciences relevant to the subject being taught to the trainees, precise information on vocational practice is also required to enable the teacher to draw on the occupational experience of trainees and assess practical impact of the vocational theory that is being taught. According to Schneider *et al.* (2009) those teachers provide young people with the necessary subject-specific theoretical knowledge and with in-depth and extended general education in the

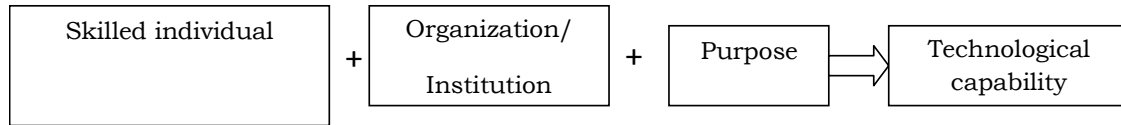


Figure 1. Technological capability building theory (Enos, 1991).

context of their future occupation. They teach both vocational subjects (e.g. metalworking techniques, electrical engineering, home economics, and healthcare) and general subjects (e.g. German, English, mathematics, politics, and physics).

**Teachers of theoretical-inter professional teaching**

Teachers have got special professional educational courses aimed at becoming a TVET-teacher – the concurrent model. Students choose already at the beginning of higher education TVET-teaching as their career and to be a TVET-teacher is the primary and maybe only aspect of these teachers’ professional identity (Moos *et al.*, 2006). Their task is to provide young people undergoing in-company training with subject specific practical teaching.

**Teachers teaching occupation-related practical subject**

Hortsch (1999) described the third category of TVET teachers as mostly master craftsmen or technicians with additional further training imparting practical skills. They teach in industrial/technical and home economics schools and in business schools. In vocational schools (industrial/technical schools), state-examined technicians or certified masters are used to teach vocational practice. In home economics schools, specialized teachers teach home economics and crafts. In business schools, specialized teachers are trained to teach word processing and office management (Schneider *et al.*, 2009).

**Challenges facing the implementation of TVET in Nigeria and other developing countries**

Some of the challenges facing implementation of TVET in most developing countries as identified by Famiwole *et al.* (2012) are:

i. Local governments’ inability to prioritize community needs: Every community in Nigeria has so many problems per time e.g. unemployment, poor electricity, bad roads, lack of skilled labour etc. The available centres cannot take off with all these at the same time. Therefore, the standard suggested will be a guide to

enable the community identifies the most essential in the short term, which they can conclude shortly, so as to generate fund for another project of a longer term. When these objectives are achieved within a definite period, all other programmes will be made functional.

ii. Lack of entrepreneurial spirit: It has been a difficult task to identify people with good leadership skills to manage the entrepreneur-oriented projects in Nigeria without politicking. Effective management of an occupational centre requires less politicking but high quality leadership, and entrepreneurial management skill by the administrator.

iii. Funding: The TVET centres in Nigeria are often underfunded. Since the project is community-based, the community as well as the government (through insurance cover on the equipment that could be used for training for production) should fund the TVET centres.

**METHODOLOGY**

The main methodical concept adopted for this study is based on what has been established in literature on technological capacity building. The development of a model brings a concept into focus as a model is a simplification of an abstraction. The build-up to the model employed for this research is developed from Enos’ (1991) work where he stated that an individual with skills requires an organization or institution, and purpose to express himself. This has been expressed diagrammatically in Figure 1 with the output being technological capability (TC).

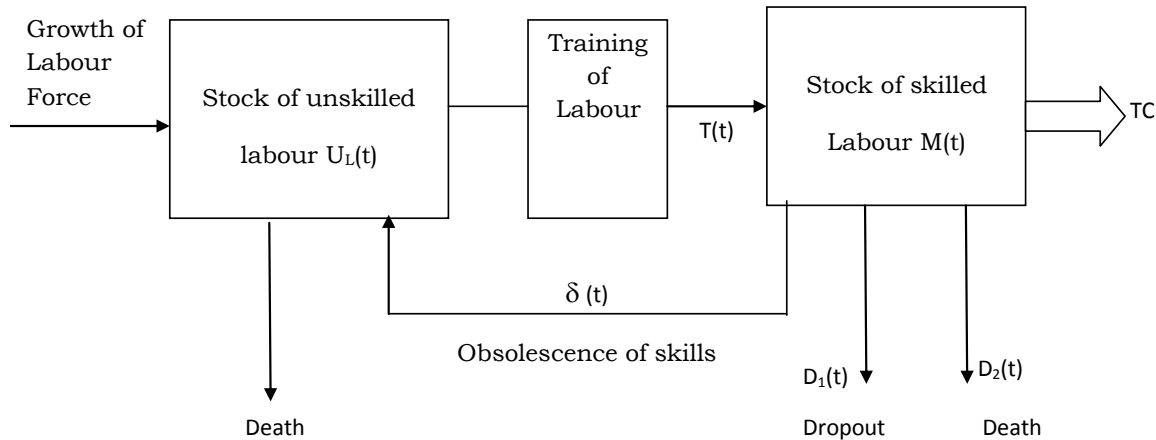
Enos’ model for technological capability is adopted with some modifications. The modifications are in the form of adding Dropouts  $D_1(t)$  as leakages apart from Death  $D_2(t)$ . This is premised on the assumption that it is not only death that may create depletions in the training of labour and stock of skilled labour. This model is shown in Figure 2.

Based on Figure 2, the various conditions governing the model output, TC, are expressed below.

If:

1.  $M(t) - (D_1(t) + D_2(t)) > (D_1(t) + D_2(t)) = TC +$
2.  $M(t) - (D_1(t) + D_2(t)) < (D_1(t) + D_2(t)) = TC -$
3.  $M(t) - (\delta(t) + D_1(t) + D_2(t)) > (\delta(t) + D_1(t) + D_2(t)) = TC +$
4.  $M(t) - (\delta(t) + D_1(t) + D_2(t)) < (\delta(t) + D_1(t) + D_2(t)) = TC -$
5. If  $(D_1(t) + D_2(t)) = 0$   
 $M(t) - \delta(t) > \delta(t) = TC +$   
 $M(t) - \delta(t) < \delta(t) = TC -$

The study focused on three states (Osun, Ogun and Lagos) in South-western Nigeria. These states were randomly selected. The main research instrument was a set of structured questionnaire designed to collect information from the targeted commercial



**Figure 2.** Model expressing the creation of technological capability (Modified after Enos (1991)).

motorcyclists. Others included guided interviews and field observations. The questionnaire was designed to obtain information on the socio-economic backgrounds of the commercial motorcyclists, their educational/vocational backgrounds, duration of training in previous jobs, income in previous jobs versus income in commercial motorcycling job, and their reasons for leaving the vocations they were trained for. The data collected were subjected to content analysis and benchmarked with existing literature. A total of 500 questionnaires were administered on the commercial motorcyclists, randomly selected in the three states; a total of 355 questionnaires which were completed with accuracy were used in the analysis. Data were analysed using descriptive statistics.

**RESULTS AND DISCUSSION**

The empirical and qualitative findings of this study are discussed in this section. First, the socio-economic backgrounds of the respondents are outlined. Then, the empirical findings on their professional backgrounds and their income (in both present and past vocations/jobs) are discussed. These findings are based on detailed quantitative studies that draw extensively on the interview of commercial motorcyclists in the study area.

Table 1 shows that majority (above 85%) of the respondents which are all males fall below 40 years while very few of them (less than 15%) fall above 40 years. This study corroborates previous findings in Ibadan where it was discovered that about 73% of commercial motorcyclists fall below 40 years (Adesanya, 1998). This shows that the active population are heavily involved in commercial motorcycling which does not have so much knowledge addition for the economy. Table 1 further shows that about 8% of the respondents have at least a university degree (Master and Bachelor’s Degrees), about 40% had above secondary school education while not less than 85% had primary school leaving certificates and above. This indicates that the bulk of the people, primarily youths, that are involved in commercial motorcycling are people who have some levels of

absorptive capacity to be trained formally and/or informally for jobs with value addition in the informal sector. In addition, not less than 95% of the respondents indicated that they can read and write. This shows that a large proportion of the educated youths that are without office jobs are involved in commercial jobs that are of no value addition to the nation.

It can be deduced from the study that majority of the commercial motorcyclists were creative people who have been trained in various vocations. Table 2 shows that as many as 68% had learnt a trade or craft before embarking on commercial motorcycling; the period of learning the trade mostly ranging between 3 and 4 years. These respondents which now operate as commercial motorcyclists were formally engaged in trades and crafts such as auto-mechanic (25.88%), carpentry (14.12%), bricklaying (8.24%), painting (7.06%) and panel beating (5.88%). Only about 15.29% were formerly civil servants, an indication that majority (about 85%) were tradesmen or craftsmen before. Of these, more than half had graduated from their chosen trades or crafts while some left before the completion of their trades.

The main reasons for leaving their chosen trades were low income from businesses and lack of equipment (35.6 and 33.9%, respectively). These were closely followed by lack of business or clientele which accounted for about 2%. About 8% of the respondents indicated that they dropped out as a result of financial problems, 26.09% due to masters’ highhandedness, while 10.87% left because they considered the trade difficult and a similar number left because they lost interest. The reasons why ex-civil servants left service were quite different; this was due to attainment of retirement age.

From the interviews conducted, it was found that majority (25.79%) of the part-time commercial motorcyclists were auto-mechanics, about 22% were carpenters, while as few as 14.47% were civil servants. In all, about 85% of the part-time operators were artisans,

**Table 1.** Socio-economic background of the commercial motorcyclists.

	Osun	Ogun	Lagos	Total	Total in %
Age					
Below 20	14	11	4	29	8.17
21-25	46	20	36	102	28.73
26-30	40	25	34	99	27.88
31-35	32	22	20	74	20.85
36-40	7	11	9	27	7.6
41-45	2	3	6	11	3.1
46-50	3	5	1	9	2.54
51-55	0	3	1	4	1.13
Total	144	100	111	355	100
Gender					
Male	144	100	111	355	
Female	0	0	0	0	
Educational Qualification					
Master's Degree	0	1	0	1	0.29
B.Sc/B.A./HND	8	10	8	26	7.43
NCE	9	7	3	19	5.43
Technical Certificate	9	2	4	15	4.29
Trade Test	0	0	0	0	0
Modern 3 Certificate	0	1	6	7	2.0
City and Guilds	0	0	0	0	0
WASSCE/NECO	72	42	41	155	44.29
JSSCE	14	25	27	66	18.86
Primary School	26	10	19	55	15.71
No formal education	3	0	3	6	1.71
Literacy					
Can Read	134	98	104	336	94.65
Cannot read	10	1	8	19	5.35
Can write	135	98	105	338	95.21
Cannot write	10	7	7	24	4.79

**Table 2.** Technical background of the respondents.

	Osun	Ogun	Lagos	Total	Total in %
Learning of a trade or craft before					
Those who have learnt	89	67	70	226	68.07
Those who have not learnt	48	28	30	106	31.93
Duration of Training					
1-2yr	2	16	10	28	13.08
3-4yrs	77	40	43	160	74.77
5-6yrs	6	8	11	25	11.68
Above 6yrs	1	0	0	1	0.47
Type of operator					
Full time	39	36	73	148	42.77
Part time	105	56	37	198	57.23
Full time Motorcyclists					
1.Kind of work engaged in before					
Civil Servants	0	5	8	13	15.29
Carpenter	6	3	3	12	14.12
Panel beater	0	2	3	5	5.88

**Table 2.** Contd.

	Osun	Ogun	Lagos	Total	Total in %
Mechanic	6	9	7	22	25.88
Auto-electrician	1	1	0	2	2.35
Battery Charger	4	0	0	4	4.7
Welder	1	1	2	4	4.7
Blacksmith	0	0	0	0	0
Vulcanizer	1	2	1	4	4.7
Bricklayer	2	3	2	7	8.24
Electrician	0	2	0	2	2.35
Aluminium worker	2	1	1	4	4.7
Painter	6	0	0	6	7.06
2. Graduate of trade or craft					
Graduated	29	10	12	51	57.3
Didn't graduate	10	18	10	38	42.7
3. Reasons for leaving trade					
Lack of tools/equipment	10	5	5	20	33.9
New technologies replaced old ones	0	0	0	0	0
Low income/ Lack of finances	7	7	7	21	35.6
Many competitors	0	1	1	2	3.39
No business to do	6	3	4	13	22.03
Work too difficult	0	2	1	3	5.08

**Table 3.** Respondents income in previous trade versus income as commercial motorcycling.

	Osun	Ogun	Lagos	Total	Total in %
Income/day (N) in commercial motorcycling					
100-500	1	7	16	24	10.53
600-1000	5	19	35	59	25.88
1100-1500	56	27	9	92	40.35
1600-2000	37	0	1	38	16.67
Above 2000	14	0	1	15	6.58
Income/day in former job					
100-500	5	19	6	30	19.35
600-1000	24	14	3	41	26.45
1100-1500	17	4	9	30	19.35
1600-2000	2	1	7	10	6.45
Above 2000	31	0	13	44	28.39

NB: N160 equivalent to US\$1.

which is similar to the values obtained from full-time operators (Table 2). The prevalence of auto-mechanics as full time and part-time operators may not be unconnected with the advantage that their experience as auto-mechanics provides in economically maintaining their motorcycles especially in cases of faults and breakdowns. The interview also gathered that most (88.69%) of these part-time commercial motorcyclists were engaged in the business to augment their jobs.

Information gathered from the survey showed that the income generated by most (about 40%) of the

commercial motorcyclists ranged from a daily income of between N1100 and N1500 (Table 3). This was closely followed by about 26% who generated between N600 and N1000 daily. Comparing these with income generated daily in former trades: about 19% generated between N1100 and N1500 while the remaining 81% generated less than N1000. This translates to the fact that about twice the percentage of commercial operators earned daily average wage of N1100 to N1500. The above fact is behind the drift from trades and crafts toward commercial motorcycling since there are quick



returns on a daily basis as majority (34.03%) of the non-owners also make between N100-N1500 daily. It is also not difficult to learn as many as 92% of the motorcyclists had experience averaging 3 years in commercial motorcycling; this is an indication of a fairly experienced group.

The drift from crafts and trades to commercial motorcycling is fast eroding the indigenous technology capacity of Nigeria. It can be predicted that the situation would have worsened by 100% in the next 5 years if there is no urgent government intervention to redress the situation.

## Conclusion

The study showed that the active population are heavily involved in commercial motorcycling which may have little or no value addition for the nation's economy. Majority (85%) of the respondents had above a primary school certificate. This indicates the bulk of the people, primarily youths, that are involved in commercial motorcycling are people who have some levels of absorptive capacity to be trained formally and/or informally for jobs with value addition in the informal sector. Only about 15.29% of the respondents were formerly civil servants, an indication that majority (about 85%) were tradesmen or craftsmen before. The main reasons for the respondents leaving their chosen trades were low income from businesses (35.6%) and lack of equipment (33.9%) respectively. Consistent higher income may explain the drift from trades and crafts toward commercial motorcycling. However, the massive continuous drift from crafts and trades to commercial motorcycling will fast erode the indigenous technology capacity of Nigeria if there is no urgent government intervention.

## RECOMMENDATIONS

There should be a clear mission and vision in articulating the role of VTE within the national education and training system. There should be a closer cooperation and greater collaboration between education and employment particularly self-employment in order to help the youngsters acquire the necessary skills from the onset. Entrepreneurship development should become part and parcel of tertiary institutions' curriculum. Teaching pre-vocational subjects in the primary and junior secondary schools should be taken more seriously to raise the interest of students for these vocational programmes. All stakeholders, especially those within the private sector, should provide more funds for the purchase of instructional facilities. The Educational Tax Fund should consider vocational education as a priority area for funding. Training and retraining of craftsmen should be well-established in the nation's education policy. There should be a stronger linkage between the knowledge

institutions and the craftsmen. Also, an attractive wage regime should be worked out among the craftsmen to discourage the current drift. In addition, there should be less emphasis on certificates/examinations in implementing the curricula content of the various programmes. Acquisition of practical skills should be stressed on the final outcome.

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