

## **Technical and Vocational Education and Training: a Sine Qua Non for Alleviating Poverty and enhancing Sustainable Industrialization in Nigeria**

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### **Abstract**

*Despite the rich mineral resources in Nigeria today, industrialization is very slow and poverty is increasing at a geometric rate and having devastating effect on less privileged masses. Over 60 percent of Nigerians continue to live in absolute poverty, unable to meet their most basic needs, and surviving on less than a dollar a day, the World Bank's international poverty line. The current poverty situation in Nigeria poses a threat to national, socio-economic and technological development in all ramifications. This has given birth to various brands of crimes in our nation especially among the youths and the unemployed who are the worst hit. This paper through literature review, discussed critically and analytically under the following sub-topics: overview of poverty in Nigeria, poverty profile of Nigeria, government effort towards poverty alleviation, role of TVET in poverty alleviation, and proffered a number of recommendations necessary for effective utilization of Technical and Vocational Education and Training as a necessity for alleviating poverty and enhancing Sustainable Industrialization in Nigeria.*

**Keywords:** Industrialization, Technical and Vocational Education and Training, Poverty, Sustainable industrialization.

### **Introduction**

Industrialization is a historical phase and experience brought about by progressive changes in technological activities meant to solve human problems. According to Griffin (2010), industrialization is the period of social and economic change that transforms a human group from an agrarian society into an industrial one, involving the extensive re-organisation of an economy for the purpose of manufacturing. Industrialization is the process in which a society or country (or world) transforms itself from a primarily agricultural society into one based on the manufacturing of goods and services (Jones, 2003). Characteristics of industrialization include the use of technological innovation as well as technical expertise to solve problems as opposed to superstition or dependency upon conditions outside human control.

Sustainable industrialization connote an approach to industrialization that strives to balance different, and often competing, needs against an awareness of the environmental, social and economic limitations we face as a society as a result of industrial processes. Sustainable industrialization has become a major concept which is now central to the programmes of many

governments, businesses, educational institutions and non-government organizations around the world. This is because sustainable industrialization concerns a process of industrial change and is heavily reliant upon local content, needs and interests. Attaining sustainable industrialization in Nigeria, demand effective Technical and Vocational Education and Training (TVET) programme.

TVET is the foundation of national and industrial development in all ramifications. TVET is a type of education whose major objective is to prepare individuals for employment in chosen occupations by equipping them with the vocational skills, knowledge and attitude necessary for employment in recognized occupations. Federal Republic of Nigeria (FRN)(2013) described TVET 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 occupations in various sectors of economic and social life.

TVET is a form of education designed to develop skills, abilities, understanding, attitudes, work habits and appreciation encompassing knowledge and information needed by a person to enter and make progress in self or paid employment on a useful and productive basis. TVET gives individual the skills to live, learn and work as productive citizen. It reduces the over dependence of graduates on government for employment. TVET is offered in technical colleges, polytechnics, monotronics, and colleges of technology among others. Technical colleges are regarded as one of the principal TVET institution in Nigeria for the training of craftsmen and women.

The National Policy on Education (FRN, 2013) revealed that the goals of TVET shall be to: provide trained manpower in the applied sciences, technology and business particularly at craft, advanced craft and technical level; provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development; give training and impart the necessary skills to individuals who shall be self-reliant economically. According to FRN (2013), Technical and Vocational Education and Training (TVET) is further understood to be: an integral part of general education; a means of preparing for occupational fields and for effective participation in the world of work; an aspect of lifelong learning and a preparation for responsible citizenship; an instrument for promoting environmentally sound sustainable

development; and a method of alleviating poverty. Olaitan, Ali, Onyemachi and Nwachukwu (2000) defined poverty as the inability of individuals, groups or society to provide for their basic necessities of life such as food, clothing, shelter, basic education among others. While poverty alleviation according to Hornby (2014) is to reduce economic and financial hardship to bearable level and improve human welfare.

The Federal Government in realization of the role of TVET in poverty alleviation mapped out the following goals for technical colleges, that trainees completing technical college programmes shall have three options:- secure employment either at the end of the whole course or after completing one or more modules of employable skills; set up their own business and become self-employed and be able to employ others; and pursue further education in advance craft/technical programme and in post-secondary (tertiary) technical institution such as science and technical colleges, polytechnics, college of technology, colleges of education, monotechnic and universities (FRN , 2013). Beside the national objectives, the central goal of TVET is to produce technical manpower to meet the needs of the industry and enhance sustainable industrialization in Nigeria.

TVET is considered a sine qua non (necessity) for sustainable industrialization and poverty alleviation in Nigeria because the sustainable industrialization experienced in China, India and other industrialized nations is as a result of adequate investment in TVET programmes. Researchers, scholars and administrators alike have revealed that without adequate investment in Nigeria's TVET programmes; the national industrial development objectives could be difficult to attain and the resultant effect will sink the nation in the mud of abject poverty. Olaitan, Ali, Onyemachi and Nwachukwu (2000) identified TVET as the only potent tool and most powerful weapon to fight poverty in the 21<sup>st</sup> century. This rich educational objectives of Federal governments cannot be achieve in Nigeria in the absence of functional and efficient TVET programmes which is a major avenue for producing skilled individuals that will be enterprising, resourceful and competent enough to be able to succeed in self or paid employment to alleviate poverty; which is an enemy of man and which humiliates and dehumanizes its victim. This study therefore carried out an overview of Technical and Vocational Education and Training: a sine qua non for alleviating poverty and enhancing sustainable industrialization in Nigeria.

## **An Overview of Poverty in Nigeria**

Over 60 percent of Nigerians continue to live in absolute poverty, unable to meet their most basic needs, and surviving on less than a dollar a day, the World Bank's international poverty line. The current poverty situation in Nigeria poses a threat to national, socio-economic and technological development in all ramifications. Poverty is a condition of being poor or unproductive. Poverty could affect an individual or groups or society or community or nation. It can also be referred to as a condition in which a person or group of persons are unable to satisfy their most basic and elementary requirements for human survival in terms of good nutrition, clothing, shelter, health, education, recreation among others. To the layman, it simply refers to members of the society who cannot afford their three square meals in a day.

According to Nwachukwu (2000) poverty has two dimensions, rural poverty and urban poverty. Rural poverty is the poverty that affects rural dwellers while urban poverty is the dimension of poverty that affects urban dwellers. Poverty is also in various types based on what produces it, like: intellectual poverty, economic poverty, political poverty, technological poverty, social poverty and managerial poverty. Intellectual poverty is the poverty resulting from the inability of individuals to make use of their intellectual abilities for active participation in society. Economic poverty is the one resulting from the inability of government to provide enabling environment and policies to boost productive activities. Political poverty involves the government inability to continue empowerment of citizens in a transparent democracy. Technological poverty is the poverty resulting from the practice of using obsolete technology, which gives rise to low productivity. Social poverty is the development that does not involve active participation of the people in decisions that affect their lives while managerial poverty is the poverty resulting from lack of tactful management and strategic control of mission and vision statements of organizations.

Ajah (2013) adduced from Nigerians, three levels poverty. One, there are those who are poor but do not believe that they are so. For this group, they struggle sometimes by all means possible to find ways of keeping their bodies and souls together. They include: those begging on

the streets, those unable to feed thrice a day with good meals, those unable to cater for their own children in terms of education, health and shelter, and those languishing in the prisons for trivial offences. Two, they are those who are not poor but they believe that they are equal to the poor. This group is made up of the insatiable minds that will refuse to pay a labourer his paltry reward upon the abundance they swim in. They compete to be the greatest in wealth amassment which arithmetically translates to impoverishing more Nigerians. One of such may be gathering the fortunes of a quarter of the entire population of Nigeria. They are not limited to: some politicians, including political prostitutes and sycophants, some businessmen and women, hardened criminals involving in bank robbery, pen robbery, 419, arms smuggling, kidnapping and bunkering. And three, there are those who are neither rich nor poor and they believe in what they are. This category constitutes an insignificant number of the Nigerian population.

The main causes of poverty in Nigeria are slow industrialization, unemployment, ignorance, poor governance, corruption, high inflation, environmental degradation, high population growth, among others. Scarcity of industries and unemployment among Nigeria graduates at various levels of schooling was considered by Aisha (2014) as a major cause of poverty in Nigeria. Unemployment is one of the macro-economic problems which every responsible government is expected to monitor and regulate in a globally depressed economy. The higher the unemployment rate in an economy the higher would be the poverty level and associated welfare challenges. Fajana (2000) described unemployment as a situation where people who are willing and capable of working are unable to find suitable paid employment.

The situation of unemployment in Nigeria rises geometrically and mostly affects youths. Aisha (2014) reporting for Central Bank of Nigeria (CBN) in the month of June revealed that 70 percent of Nigerian youths are unemployed. Ngozi (2014) quoting the figures from the National Bureau of Statistics (NBS) in April unveiled that no fewer than 53 million Nigeria youths are unemployed while 1.8 million graduates enter the labour market every year. If government needed to know the gravity of the nation's unemployment rate, especially youth unemployment, the trampling of job seekers to death during stampedes at the Nigeria Immigration Service (NIS)

recruitment exercise on 15<sup>th</sup> March, 2015 across various recruitment centers in the country, presents a clear picture of the problem. That incident, alone, tells us that something needs to be done urgently to address the scourge of unemployment in the country. This accounts for one of major reason for the rising wave of various types of crime in Nigeria as the unemployed youths are potential tools for perpetrating crime in exchange for money for survival.

Specifically, in rural areas, where 85 per cent of Nigeria's poor reside, the major cause of poverty has been identified as the use of outdated and inefficient systems in agriculture and craft. Other contributory factors to low income in rural areas, according to Okoro (2006), include inadequate infrastructure, lack of credit and marketing facilities, unfavorable rural institutions especially in respect of land tenure; ignorance; illiteracy and cultural and institutional rigidities. While in urban areas poverty is caused by overpopulation on the limited opportunities and facilities due to excess rural-urban drift in pursuit of greener pasture.

Indeed, poverty is really a big challenge in Nigeria because there can be no hiding the fact, that a hungry man is an angry man. It has led many Nigerians to attach no value and regard to life itself. Poverty has numerous devastating effects such as high rate of open and secret prostitution, exposure to risks like corruption, rubbery, street life, increased unemployment, malnutrition, low level of education, low income per capital, human degradation, living in overcrowded home with poor ventilation, free living fraud (419), migration and high infant mortality. Poverty indicators are always severe on the poor people. It includes: short life expectancy due to malnutrition, and near starvation, sickness, health and mental defects, less education and less opportunities for development, and therefore less protection from hazards and danger. It leads to increase in the number of poor people in the society.

Countries like America (USA), Germany, India, China, Soviet Union (USSR) and several other industrialized European nations are currently involve in massive vocational education and training programmes geared towards equipping individuals with requisite skills necessary to alleviate poverty and hunger. Some of these countries have used vocational education in the past

to expand their economy technologically and economically and has greatly reduced poverty to an appreciable level. These nations have massively invested in TVET programmes to pave way for economic survival while Nigeria is still producing graduates without requisite skills for employment and self-reliance. There are various clogs in the wheel of TVET achievement in Nigeria. There is the need for total separation of general education from TVET; in that the population of TVET educators is very few which hinders their candid view in decision making.

As a result of this, TVET benefits little from unfathomed resources appropriated to general education. Moreover, most of our institutions running TVET courses do not have reliable learning workshops as they are equipped with conventional machines which are not in line with the trend of development and the ones they will be exposed to in the standing manufacturing companies in Nigeria. Graduates lack the requisite skills today as a result of inadequate funding of TVET because instructors, technicians and craftsmen that possess the dexterity of industrial technical arts are not available in the schools due to poor remuneration caused by poor funding of the education sector and poor attitude of government towards TVET programmes in Nigeria.

### **Government Effort towards Poverty Alleviation**

Successive governments in Nigeria both military and civilian since independence has in the past under various programmes tried something towards poverty alleviation to empower and improve the standard of living of the general populace. Some of these programmes according to Agbionu (2002), include the introduction of the National Youth Service Corp Scheme (NYSC) in 1973 which has some cushioning effect on the immediate unemployment problems of fresh graduates. The other programmes introduced at one time or the other by the past administrations includes Operation Feed the Nation (OFN). This was introduced in the late seventies by the Obasanjo Administration, Green Revolution, by the Shagari Administration in the early eighties. The Structural Adjustment program (SAP), Mass Mobilization Scheme for Economic Recovery, Better Life Programme for Rural Women and others were introduced by the Babangida Administration between the mid eighties and early nineties. Abacha like others introduced Family Support Programme and most recently the National Poverty Eradication

Programme (NAPEP) which came into existence in the wake of 2000. Despite the introduction of these programmes, poverty has neither ceased nor abated.

Using poverty indicators such as literacy level, access to safe water, nutrition, infant and maternal mortality, and the number of people living on less than \$1 a day, Nigeria is found to rank among the 25 poorest nations in the world below Kenya, Ghana and Zambia (World Bank, 2002). This is in spite of all the efforts and resources devoted for many years to fighting poverty by successive governments in Nigeria, with the support of richer nations and international development institutions. This unsatisfactory results call for a re-examination of policies and practices of poverty eradication in Nigeria.

### **Role of TVET in Poverty Alleviation and Industrialization**

Technical and Vocational Education and Training (TVET) has been recognized by great scholars in several developed parts of the world as a tool for alleviating poverty and enhancing industrial development due to its emphasis on skill acquisition and skill development (World Bank, 2002). Skill training enhances productivity and sustains competitiveness in the global economy. Worldwide, countries are renewing efforts to promote TVET because it is the only way to prepare young people for the world of work, and reach out to the marginalized and excluded groups to engage them in income generating activities. Today in Nigeria, the high incidence of school dropout among secondary school students clearly highlights the importance of career development, which is achievable through Vocational training in TVET. The students that cannot fit into the academic-oriented curriculum would need practical skills to enable them to be functional in the society.

Moreover, graduates of existing school system invariably enter the job market seeking employment that hardly exists. With a population over 150 million people and an average annual growth of 28%, most of the citizens are surviving on less than one dollar a day as calculated to be 72%, with a poverty gap of 34.9% when the scope is extended to less than two dollars a day; 90.8% of the population is categorized as being poor (Federal Office of Statistics, 2007). The

role of TVET in poverty alleviation cannot be underestimated because it is a major enabler of technological development through skill acquisition, job creation and wealth generation .It is the only form of education that equips individuals with requisite vocation skills and technical knowledge in various occupations necessary for self-reliance. It will help to empower people technically, technologically and economically. It helps its graduate to have sustainable income that will meet their needs. Through TVET , a framework for poverty alleviation and sustainable industrialization can be laid.

Since it is the desire of present Nigeria government to make this country to be among the 20 economically developed nations in the world by the year 2020, it then becomes imperative that new social economic and technological parameters be put in place in which every employable citizen is gainfully employed. TVET can contribute to sustainable industrialization, breed skilled entrepreneurs, increase domestic product, encourage gross national income, alleviate poverty, lower unemployment and increase manpower development. It can as well reduces to the barest minimum the incidence of armed robbery, kidnapping, hired assassination car-snatching, and other vices associated with idleness and absence of skills among the youths.

### **Conclusion**

Technical and Vocational Education and Training (TVET) is skilled-oriented and employment motivated, and it is very obvious that, in this era of economic recession, TVET is an indisputable means of reducing poverty and enhancing sustainable industrialization in Nigeria. This can be achieved through the acquisition of the relevant vocational skills, technical knowledge and abilities required to enter and make progress either in paid employment or self-employment. However, the means of acquiring this skills, knowledge and abilities are either lacking or in short supply due to some inhibiting factors such as inadequate training facilities, poor remuneration and motivation of TVET staff, corruption and misappropriation of TVET funds as well as inconsistency in the review of the TVET curriculum to reflect the needs and realities of modern work environment. However, these problems can be transformed to better opportunities if governments and other stakeholders develop a frame work to further widen the prospects and

ensure effective implementation of a functional Technical and Vocational Education and Training which is a necessity for alleviating poverty and enhancing sustainable industrialization in Nigeria.

### **Recommendations**

The authors therefore suggested the following strategies which when explored will help in the reduction of poverty and enhancing sustainable industrialization in Nigeria through Technical and Vocational Education and Training.

1. Vocational guidance services should be made compulsory and provided for, at all levels of vocational training to help the youth in making realistic career choices. Where this service is available, emphasis should be made on the effective and proper utilization of it.
2. TVET teachers should improve communication and awareness about vocational education programmes with schools and between schools. Parents and the business community should be acquainted with what TVET is all about.
3. Government and other stakeholders should invest heavily in the provision of modern facilities for vocational training. This will go a long way in improving the quality of graduates produced thereby reducing unemployment.
4. Development of workable training policy that will influence the training and re-training of TVET teachers in the use of techniques and new tools, and facilities aided by Information and Communication Technology (ICT).
5. The TVET curriculum at all levels of vocational training should be reviewed periodically to meet the current needs of the business world. The introduction of the entrepreneurship course at all levels of our institutions is timely and should not be abused.
6. There is the need for Federal and state governments to work collaboratively with industries for the development of our TVET institutions for turning out of high quality and self-reliant graduates that can contribute positively to the development of Nigeria's economy.
7. Also, there must be knowledge transfer between industrial and TVET experts to ensure successful implementation of a functional TVET which is a necessity for alleviating poverty and enhancing sustainable industrialization in Nigeria.

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