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Significance of Technology and Vocational Education in Promoting Sustainable Economic Development in Nigeria

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ABSTRACT: Economic sustainable development of any nation propels her to greatness because her people and work of the nation and governance quality are elevated. The future of any country thus hinges on how youths and the cream of the population develop and are inspired. Nigeria is clearly facing a serious unemployment saga where the youths are the most affected. This paper therefore opined that technology and vocational education is a potent tool that assuages the dearth of skills needs. When youths acquire practical saleable skills through vocational education training, they would be occupied in utilizing the skills to work thus improving economic development in the country. The proper execution of technology and vocational education is hampered by certain factors such as inadequate curriculum and lack of requisite tools and equipment for proper prosecution of TVE in the skill intuitions. The paper suggested that if these problems are alleviated, TVE would be a significance tool for reaching sustainable economic development in Nigeria.

KEYWORDS: Significance, technology, vocation, promoting, sustainable, economic development, education, skills.

I. INTRODUCTION

Today, the world is in dire need of practical skills that would be applied by youths to reduce poverty, increase and sustain economic development and reduce insurgencies. The significance of technology and vocational education in procuring sustainable development in Nigeria in particular and the world at large cannot be overestimated. Technology and vocational education trains youths on practical skills in various occupations to the degree that the society would benefit when these skills are applied on productive ventures. These productive ventures consequently lead to growth and economic gains, and sustained development. [1] affirmed that Technology and Vocational Education fosters the acquisition of skills and provides the bases for promoting both community and national sustainable economic development.

Economic and social life could be tacitly sustained through adequate implementation of technology and vocational education. [2] pointed out that technology and vocational education equips individuals with practical skills, understanding, attitudes, as well as knowledge relating to varied economic and social life sectors for sustainable development. Poverty and unemployment are negative factors to sustainable development. To this end, [3] opined that unemployment is bad for sustainable economic development because it leads to disillusionment and frustration, something that is likely to result in drug abuse, or crime in an attempt to run away from pain, as well as, humiliation associated with poverty. Lack of practical skills and consequent unemployment prevalence has worsened among graduates at all levels. These have led to various insurgencies. insecurity and poverty in Nigeria.

The hall mark of technology and vocational education is manpower training. Manpower training embodies training of skills in such areas as agriculture, engineering, technologies, home economics and entertainment industries.

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Specifically, technology and vocational education involves the acquisition of techniques, methods as well as application of scientific knowledge to enhance the surrounding or environment of man in solving the practical problems confronting him. [4] posited that making light of technical and vocational education in areas as financial support, personnel, facilities geared towards encouraging technical and vocational training is robbing the nation of particular contributions that graduates could have made to sustainable economic development today.

Nigerian educational system could also pose problem to vocational education. To this end, [1] considered theoretical contents of Technology and Vocational Education, white collar jobs orientation and general education concentration. The programme of Technology and Vocational Education was not abinitio designed to foster Technology and Vocational Education programme in Nigeria. The transparent lack of requisite skills among the cream of Nigerian youths was led to insurgencies, prostitution, armed robbery and insecurity. These vices are directly related to poverty and unemployment and lack of economic sustainability. This paper therefore, focused on evaluating the significance of Technology and Vocational Education development in promoting sustainable economic development in Nigeria. To accomplish this discourse, concept of Technology and Vocational Education, Technology education and sustainable development in Nigeria, challenges facing Technology and Vocational Education, reduction of poverty and various steps to be employed in using Technology and Vocational education to achieve sustainable economic development were discussed.

II. TECHNOLOGY AND VOCATIONAL EDUCATION

Technology refers to the application of scientific knowledge in solving the problems of man and his environment, while vocation can be regarded as one's work role in the world of work. Technology and Vocational Education comprehensively involve the training of individuals on skills acquisition. [5] regarded Technology and Vocational education as those aspects of 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 related to occupation in various sectors of economic and social life. Skills acquisition and gainful employment are closely associated with Technology and Vocational Education. To this end, [2] pointed out that Technology and vocational education is further understood as part of education system that provides courses and training programmes related to empowerment with the view to enable the transition from secondary education to work for young trainees and supply the labour market with component apprentices. Therefore, technology and vocational education deliberately organizes and executes curriculum content geared towards impartation of practical skills to learners.

Orientation of learners to the actual world of work is also another imperative task of technology and vocational education. To this end, [6] opined that one of the most important features of technology and vocational education is its orientation towards the world of work and the emphasis of the curriculum on acquisition of employable skills which can be delivered at different levels of sophistication. Technology and vocational education is result oriented because it brings about training of persons technologically to become abreast with current manpower required for employment in industries and also provides continuing training for those already qualified so that they can keep up with modern methods of undertaking the requisite skills leading to sustainable economic development of the nation. The significance of technology and vocational education would be fully manifest when requisite practical skills are acquired by the youth for sustainable economic development giving rise to unemployment and insurgencies reduction in Nigeria.

III. CHALLENGES OF TVE IN PROMOTING SUSTAINABLE ECONOMIC DEVELOPMENT

To promote sustainable economic development through the application of technology and vocational education is very imperative. However, it is sad to acknowledge that due to a variety of reasons, TVE faces a myriad of challenges in meeting its tasks.

IV. DEARTH OF TEACHERS

No educational institution will be greater than the teachers that operate the system. Teachers are therefore the hub or pilot on which any successful education programme rotates. [7] pointed out that many technical teachers lacked the

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pedagogical and technological competence required for effective teaching of technology and vocational education courses in the institutions. Effective skills teaching that would enable learners in technology and vocational education to be competent and contribute to sustainable economic development must be taught by teachers that are masters of the occupation they are called upon to teach. Teachers with tacit pedagogical skills are therefore required. A situation where teachers of technology and vocational education are not well prepared to render result oriented instruction in the system does not auger well for raising sustainable economic development

V. PUBLIC PERCEPTION OF TECHNOLOGY AND VOCATIONAL EDUCATION

Vocational education presently possesses poor image in the society. A lot of citizens still conceive Technology and Vocational Education as the type of training for those who cannot enroll in real academic programme of any kind in the schools. The early western education in Nigeria favoured only clerical training and not manual or skill training. [8] pointed out that the western education brought about class differentiation in Nigeria as those who went through primary school and got into white collar jobs soon became special persons, while those who did manual work of any type were looked down upon. The early personnel trained in skills to carry out manual dexterity of any kind were mainly disabled persons and that was the reason that made a lot of youths to regard vocational education as a an education for the invalid. This trend needs to be revised for better promotion of technology and vocational education as a sustainable economic development catalyst. To this end, [5] opined that the perception of the public and even parents on TVE as a vocational track fit only for the academic less endowed has to change quickest. In addition, Government's educational policy in the contemporary Nigeria should change in favour of TVE for sustainable national economic development.

VI. TECHNOLOGY AND VOCATIONAL EDUCATION CURRICULUM

The world is essentially a dynamic system. For TVE to accomplish the role of offering saleable skills to the youths; the curriculum must be dynamic and apt for successful application in teaching current skills and not obsolete ones. It is unfortunate that the revision and updating of TVE curriculum lingers for unnecessary long periods to the extent that many skill areas taught are not applicable in the contemporary times. TVE curriculum was last reviewed in 1985 and this had given credence to poor care and provision for TVE. [4] stated that Nigerian Government has continued to maintain several technical and vocational colleges that are presently ill-equipped, ill-staffed and badly positioned to pursue their primary assignments of offering saleable practical skills to youths in order to reduce unemployment. When the curriculum is static, instructional materials are also static and soon become obsolete. [9] also noted that obsolete and irrelevant curriculum is militating against our educational system in Nigeria, and that education is not static but dynamic and should be reviewed frequently in order to reflect current experiences in educational practice. Relevant curriculum of technology and vocational education is one that connects learning to the youth's environment and makes learning meaningful, interesting and offers saleable practical skills. These skills when productively employed in the society in recognized institutions and self reliant ventures can lead to economic sustainable development in the country.

VII. PROBLEM OF FUNDING

Technology and vocational education is a capital intensive venture. The smooth operation of technology and vocational education has hitherto witnessed financial set back. [3] reported that inadequate funding especially in the state and private schools result in ill-equipped libraries, laboratories, workshops among other financially connected problems. These handicaps have direct bearing adverse situation on teaching and learning of skills in technology and vocational education. Since Technology and Vocational Education is of immense relevance to the youths and the society in general, resources should be made available to sustain it. [10] pointed out that technology and vocational education is a subject of great interest for government and citizens of this country, but there are numerous problems jeopardizing the teaching of the subject nowadays. These problems obviously include lack of fund to employ requisite staff, purchase and installation of relevant tools and machines for teaching TVE courses, lack of motivation of interest of students and poor remuneration of teachers of technology and vocational education.

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VIII. STEPS FOR EMPLOYING TVE TO ACHIEVE SUSTAINABLE ECONOMIC DEVELOPMENT

Improving the utilization of TVE to achieve sustainable economic development in the contemporary society is very imperative. Technology and vocational education had been earlier understood to be an integral part of general education; means of preparing for occupational fields and for effective participation in the world of work, an aspect of life long learning and preparation for responsible citizenship and instrument development for promoting environmentally sound sustainable system and the methods of facilitating poverty alleviation in the country. It is therefore necessary to seek a way of making TVE remain relevant in enabling the youths acquire skills in order to realize economic development. Presently the graduates produced are not adequately suited for labour market requirements. This was corroborated by [11] that noted with regret that less than 1% of secondary education in Nigeria is oriented forwards technical and vocational skills. Worst still, workshops for TVE at tertiary education level are in this bracket of the showcase of outmoded and obsolete tools and machines that cannot be utilized to teach the contemporary needed skills. To make the required turn in revitalizing TVE to produce updated skilled man power in the youths for economic development; the under mentioned practical steps could be employed:

I. SKILLS RELEVANT TO WORK PLACE

It had earlier been stated that TVE lacks effectiveness and relevance of the work place. In many construction industries where TVE youths are required for employment, they lack the competence to hold such opportunities; neither do they survive the competition of self-reliance. Adequate training should be given to youths to enable them fit into work needs in the contemporary society.

II. PUBLIC-PRIVATE PARTNERSHIP

Rich individuals in Nigeria should be encouraged by the government to invest in training youths by establishing well equipped vocational schools in their states or Local Government Areas in the country. A demand-driven and out come based TVE requires a strong partnership between TVE institutions and enterprises, because building a competent workforce can only succeed if both sides collaborate. All stakeholders of TVE should therefore be involved in funding and promoting TVE.

III. CURRICULUM FOR LABOUR MARKET NEEDS

Both private and public sectors charged with TVE success should be proactive in constantly gauging the effectiveness of the curriculum and revising it in consonance with the current skill needs of the society. This will prevent training youths on obsolete skills that are not required by labour force.

IV. CURRENT EQUIPMENT

In order to acquire saleable practical skills, updated equipment for such skills training is very imperative. [12] points out that gaps in equipment, workshop and teaching materials are common in most TVE schools and that equipment is often too inadequate that the learner cannot have sufficient hands-on skills for a success in their future occupation. Update skills training equipment should be provided by TVE stakeholders to foster easier acquisition of practical saleable skills by learners.

V. ADDITIONAL STUDENTS' APPRENTICESHIP

It has been generally the real practice that students must after passing all their courses in the regular school period, obtain their certificates. It is imperative that while students are still undertaking their regular lectures, they should apprentice themselves to masters' craftsmen in their areas of specialty. This will enable the concerned students acquire on the job experiences in addition to the types taught in the regular classroom. In this method the concerned student will develop more insight, interest and commitment in his area of specialty than just undergoing through regular curriculum where he may not afterwards be an expert in his occupational area.

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VI. TEACHER PREPARATION

Teachers' performance in both skills and pedagogical preparations should be upper most to educators and government. It had earlier been stated that no educational institution will rank higher than the teachers that implement the curriculum. When teachers' competence improves, students would learn better skills that if applied to productive ventures would procure to youth's sustainable economic development.

VII. MANAGEMENT OF TECHNOLOGY AND VOCATIONAL EDUCATION

Technology and vocation education and institutions that offer general education are often in conflict about schools administration. General education managers most often insist that they too should control vocational education and since they are not knowledgeable in TVE, it always constitute a set back when such situations prevail. Inappropriate management of TVE institutions, the missing link with the potential employers and the lack of school monitoring and performance evaluation are the main reasons for schools' insufficient contribution to the development of much needed capital (skills). When TVE schools management significantly improve, better skills acquisition will be realized by the youth leading to sustainable economic development of the nation.

REFERENCES

- [1] Uwaifo, O.V., Technical education and it's challenges in Nigeria in the 21st century. "*International Nigeria Journal*", 5(2), 40-44. 2010.
- [2] Moustata, W., "Vocational Technical education and development". Retrieved on 26/02/2010 from <http://www.nigerianbestforumcom/blog/?p=38404>. 2010.
- [3] Oluka, N.S., Constraints to the Teaching of Basic Technology in secondary schools in Enugu state zone. "*Journal of Research science and Technology Education (JORSTED)*", 5(1), 197-198. 2015.
- [4] Aina, O., "Technical and vocational Education in Nigeria the way forward". A paper presented at the EtF Zonal sensitization workshop on revamping technical and vocational education, Lafia Technical and Vocational Education in the right footing. *The Nigerian Education Times*, p. 9-10. 2016.
- [5] Chukwukanwosa, L. I., Strategies for Revitalizing Technical and Vocational Education and Training (TVET) for Sustainable Manpower Development in Nigerian Industries. "*Journal of Nigerian Association of Teachers of Technology (JONATT)*", 11(3), 53-54. 2017.
- [6] Aworanti O., "NABTEB boss charges policy makers on technical education". The tribune. Retrieved from <http://tribune.com.ng/index.php>. 2011.
- [7] Miller, I.O., Professional improvement needed of metal work teachers in colleges of Education in South West Nigeria. "(Unpublished Master's Thesis)", University of Nigeria, Nsukka, Nigeria. 2006.
- [8] Nwachukwu, A.G., "*Exploring of work opportunities*. Lagos" Comprehensive Press Ltd. 1989.
- [9] Ajayale, O.S., Curriculum relevance in career education. Ibadan: Ben Quality Prints, 2007.
- [10] Ejiofor, A.N. Technology and vocational education, way forward. Lagos: BMP Press Ltd., 2015.
- [11] United Nations Educational Scientific and Cultural Organization. "*Terminology of Technical and Vocational Education (revised ed)*". Paris: UNESCO. 1986.
- [12] Wapmuk, S.L., Technical and vocational Education for Sustainable Industrial Development in Nigeria. "*Proceedings of 24th Annual National Conference of NATT, Umun 2011*", 18-20. 2011.