

Repositioning Research and Innovation for Sustainability in Human Development: A Sine Qua Non for Tertiary Education in Nigeria

Dr. Okafor Obiefuna A.

Department of Hospitality Management and Tourism,
School of Applied Science and Technology
Federal Polytechnic Oke
obiokafor1960@gmail.com
08028283398

Abstract: *The position occupied by tertiary education as a transformative agent for achieving development in any individual and a nation cannot be overemphasized. The current dwindling state of Nigeria's tertiary education leaves much to desire, with fears of its capabilities to meeting the need of future generations. All these, is as a result of long-standing culture of neglect, poor funding, mismanagement, and poor mindset on research which birthed the recent brain-drain syndrome has stunted her competitiveness globally. This paper argues that the above has stunted sustainability of the nation's abundance in human and material resources. In lieu of this, it becomes imperative to shift focus to research and innovation which has proved a guarantee to increase employment, social welfare and quality of life of both developed and developing countries of the world. The main objective of research and innovation is to discover answers to pressing societal challenges by undertaking careful and systematic approach, devising new methods/applications to remedy the situation. The paper contends that a shift in focus on research and innovation in tertiary education could be the answer to achieving sustainability in human capital development in Nigeria. Therefore, there is a need to accord research and innovation priority and attention to repositioning the Nigerian tertiary educational sector for greater heights. In order to achieve these, the paper recommends among other things that policies, and investment in the educational sector should be aimed at repositioning research and innovation to promote human development*

Keywords: Tertiary education, Human development, Research & Innovation, Sustainable Development.

1. INTRODUCTION

Education is a key instrument for bringing about continual change or development in any individual or nation. It is a long-held conviction that education is sine qua non for development. The truism that education is the surest way to sustainably developing any people or society needs no contention. This is because education plays a key role in the ability for self-sustaining growth and development (Todaro and Smith, 2009). According to the United Nations World Commission on Environment and Development, development is sustainable if "it meets the needs of the present without compromising the ability of future generations to meet their own needs. The level of development of any nation is hinged on the strength of her human resources (people). People are the real wealth of a nation. All development is ultimately about expanding human potential and enlarging human capabilities. Therefore, sustainable development can be achieved only when people are educated to develop attitudes, values, skills and knowledge to make informed decisions for the benefits of themselves and others, now and for the future. Yet four years after 2015, many Africa countries including Nigeria still falls short in achieving the Millennium Development Goals (MDG) for education.

It will be too narrow to define the term education as the acquisition of knowledge, skills, attitude and experiences from institutions of learning this is because learning is obtainable outside the school environment though this research work is focused on the former. Education is generally classified into Formal, Informal and Non-formal education. Formal education is a classroom-based educational model provided by trained teachers with a pre-defined curriculum. In Nigeria, formal education encompasses the primary, secondary and tertiary education. Tertiary education is otherwise known as higher education in some society. Tertiary education, more commonly referred to as postsecondary education, refers to both undergraduate and graduate degree program undertaken after secondary education in a tertiary institution of learning. Tertiary institutions are established to impart knowledge and skills into learners in order to meet the educational manpower and development needs of a nation. Whatever skills acquired must be translated into practicality for it to benefit the individual and the society at large.

Achieving some of the seventeen (17) United Nations Sustainable Development Goals for all countries such as (i) Goal 3: ensuring healthy lives and promoting well-being for all ages; (ii) Goal 8: promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all; (iii) Goal 9: building

resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation, depends on the success of Goal 4: ensuring inclusive and equitable quality education (especially tertiary education) and promoting lifelong learning opportunities for all. According to Isuku and Emunemu (2009) tertiary education exercises a direct influence on national productivity, which to a very large extent determines the country's standard of living and help in stimulating local economy as an engine of growth. Increasing productivity, enhancing socio-economic wellbeing, infrastructural development, enhancing quality of local produce for both local and foreign markets and the likes remains the hallmark of a well thought out research carried out in institutions of higher learning.

Tertiary institutions of higher learning are the main pillars for human development, research and innovation in a knowledge society. Fawoel, Egbokhare, Itiola, Odejide and Olayinka (2006) asserted that research is a curiosity-driven activity that has the purpose of discovery and advancement of knowledge. Research remains a formal work undertaken systematically to increase the stock of knowledge, including knowledge of humanity, culture and society, and the use of this stock of knowledge to devise new applications according to Organization for Economic Cooperation and Development (OECD) (2002). Research plays a key role in bringing about innovation. Innovation, traditionally is defined as the development of new goods, services, or processes which has long been identified as an important driver of positive outcomes. Innovation needs no justification, since it's generally accepted as a primary source of competitive advantage, industrial change and economic growth (Boyne et al., 2006).

Today innovation is largely seen as the result of scientific discoveries made at public laboratories, universities or major companies. Numerous examples over the course of history strengthen this perception: the discovery of x-rays, leading to radiography; laser, a pure product of quantum mechanics, etc. Several tertiary institutions of learning around the world are renowned for the part they played in the discovery of notable inventions such as the University of Manchester, and the invention of the first working computer, others include Oxford University, Cambridge University to mention but a few. Many of these inventions which were outcomes of research conducted in the four walls of a tertiary institution which still influence presently our today and the generation tomorrow. It is believed that countries of the world with poor or inadequate research and innovation capacities will become poorer since knowledge creation is the key to sustainable socio-economic development. When the nations of the world are breaking new and fallowed grounds through their research activities, the quality of research being carried out by Nigerian academics has been adjudged to be of low standard (Emunemu, 2009).

Knowing fully well that a lot of benefits accrue from research activities, still researchers and research activities in Nigeria tertiary institutions are only seen as a basic requirement for promotion, and certification. We cannot go to sleep and fold our arms while other nations of the world strengthen the capacity of their education and thrive through an effective synergy of knowledge and technology transfer between institutions of higher learning and the government through research and innovation to facilitate sustainable development. Thus, this forms the rationale behind this research work. Therefore, this paper explores the current situation of research and innovation in Nigeria institutions of higher learning; the challenges and possible way forward. There is a paucity of information and empirical evidence on repositioning the current state of research and innovation in tertiary institutions (education) in the country for promoting and attaining all round sustainable development and that is the gap this paper aims at bridging. In order to achieve this, the paper x-rays how research and innovation in Nigeria's tertiary education can contribute to sustainable development.

2. TERTIARY EDUCATION IN NIGERIA AND SUSTAINABLE DEVELOPMENT

The Organization for Economic Cooperation and Development (OECD, 2001) as quoted by Ahenkan and Osei-Kojo (2014) defined sustainable development as the development path along which maximization of human well-being for today's generation does not lead to the decline in the well-being of the future generation. These definitions suggest that sustainable development considers the needs of the future and current generations in tandem, and it is rooted in the pursuit of the well-being and welfare of the people (Ahenkan & Osei-Kojo, 2014). In an attempt to achieve Sustainable Development, African countries have launched several strategies. In Nigeria for instance there have been many poverty reduction strategies by governments at different times and at all levels, all aimed at economic growth, human development and environmental protection and conservation. In spite of these attempts by the Nigerian and other African government, there is a growing perception that Africa could fail in achieving sustainable development.

Sustainable development in this regard, therefore involves a dynamic concept that encompasses a new vision of education that seeks to empower people of all ages 'to assume responsibility for creating and enjoying a sustainable future. The overall aim of sustainable development is to empower citizens to act for positive environmental and social changes, implying a participatory and action-oriented approach. As observed by Osei-Kojo & Ahenkan (2014), this perception is fueled by the evidence that while the world is undergoing rapid change, which is driven predominantly by technology, education, civilization and globalization, Africa remains backward, exploited and uneducated.

The role of the tertiary education is emphasized by the integration of the tertiary education indicators in various macro-indicators for smart growth, innovation and human development. Tertiary education as emphasized by the Federal Republic of Nigeria (FRN, 2004), in her national policy on education, is any education given to an individual after secondary education from universities, colleges of education, polytechnics and monotechnics. Arising from the goals of tertiary education, the National Policy on Education (2004) specifies that university education will make optimum contribution to national development by: Intensifying and diversifying its programmes for the development of high level manpower within the context of the needs of the nation, thereby;

1. Contribute to national development through high level of relevant manpower training;
2. Develop and inculcate proper values for the survival of the individual and society;
3. Develop the intellectual capability of individuals to understand and appreciate their local and external environment;
4. Acquire both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society;
5. Promote and encourage scholarship and community services;
6. Forge and cement national unity; and
7. Promote national and international understanding and interaction;
8. Making professional courses contents to reflect our national requirements;
9. Making all students as part of a general programme of all-round improvement in university education to offer general study course such as history of ideas, philosophy of knowledge and nationalism.
10. University research shall be relevant to the nation's developmental goals.

In this regard, tertiary institutions of learning shall be encouraged to disseminate their research results to both government and industries, in the opinion of Okebukola (2009), in a developed society characterized by developed economics to which Nigeria aspires; higher education plays a key role. It should provide high level of human resources for driving the economy and ensures rapid societal transformation. In view of the foregoing, if the goals of establishment of tertiary education is observed there is hope that research and innovation activities in tertiary will survive, thrive and meet global competitiveness.

But it's saddening that Nigerian tertiary institutions of learning are far too ill-equipped to train and develop new graduates suitable for the 21st century, their products are mediocre. Analysis of the situation point to the extreme level of infrastructural as well as pedagogical deficiency in Nigerian tertiary institution, this being the result of underfunding of public tertiary institutions in the country

(Nwakanma, 2010). Insufficient funding is one of the major banes of the education system in Nigeria. Also Nwoye (2002) observation revealed that federal and state governments has turned a deaf ears to financing and supply of essential scientific materials or facilities needed in higher institutions and secondary schools for effective teaching and learning. Nigeria's problem of funding tertiary education is not lack of sufficient money but that of too much money wasted through mismanagement and fraudulent practices. While decrying the poor state of education in Nigeria and the resultant effect on Nigeria, Ibrahim (2009) lamented that Nigeria was losing quite a huge sum of foreign exchange because of applicants seeking foreign university education.

3. RESEARCH AND INNOVATION IN NIGERIA TERTIARY INSTITUTIONS

Research is seen as the systemic investigation, probe, enquiry, scrutiny or analysis into and study of materials and sources in order to establish facts and reach new conclusions. Adequate research leads to the discovery of new techniques, ideas and ways of doing things which will in turn, lead to wealth creation. Research in institutions of higher learning is categorized into three linear key activities: basic research, applied research, and experimental development. Basic research seeks to advance knowledge without specific application in mind. Most research in the university is basic research. They are not initiated to solve problems and not of much use in the industries. However, applied research is initiated to address a specific need and seeks knowledge that will facilitate the process for achieving the desired result. Where development is the application of the knowledge from research directed at a specific end product which may be a device or systems.

Quantitative education that makes acquisition of useful skills, desirable values, knowledge, attitudes, ideas and competencies necessary for self-reliance can only be possible through adequate research work. When research work leads to quality education, the desired manpower required to serve in the various sectors of the economy is guaranteed. Research activities and findings liberate man from poverty and ignorance. Research findings can liberate man from the restraints and limitations of ignorance and dependency through exposure. Irrespective of the subject, research basically seeks to understand what is being researched into through observation, experimentation and analysis in order to arrive at a better understanding or a definite conclusion on the subject matter (Adebola, 2009). The variety of results that come from research will expose facts, provide evidence, discover the unknown and ultimately, expand the frontier of knowledge in the different areas of studies (Emunemu, 2009). All these will improve the standard of living, increase chances of employment, pave way for economic opportunities and upward social mobility.

Empirical evidences support the fact that what makes the difference in the level of development among these sets of nations is the degree of commitment/funding by government/corporate organizations towards research activities, attitudes/how informed are its people in appreciating and encouraging local inventions as well as the amount of synergy between research centres and government/corporate organizations. But it would appear that most of the research endeavors at the university and research institute levels in Africa and Nigeria are at the basic research level. A lack of research policy, dearth of quality researcher and inadequate funding, has accentuated the situation.

The promotion of the research and innovation as basis for the know ledge-based development requires appropriate competences and skills for the workforce. Before research, innovation, development and entrepreneurship efforts can take root and impact positively on economic development reforms to correct the weaknesses in the system must be addressed. To achieve this, a multi sectorial approach is required for effective collaboration among all stakeholders.

4. CONCLUSION

The tertiary education and the research and innovation activities represent the core of the knowledge economy. The actual financial crisis reinforces the need of finding innovative solutions for the sustainable development and for ameliorating the negative effects of the crisis. The proper environment for research is not yet available in Nigeria. The vicious circle of the lack of public investments for education and research should be broken and new bridges between public and private areas should be built in order to support the intellectual capital development. A conducive environment is needed for growth and utilization of research. Tertiary institutions in Nigeria cannot afford to pay mere lip service to research and innovation but must stand up to justify the purpose of their establishment and existence by getting involved in ground-breaking researches. This therefore calls for better reforms, free and compulsory education in primary and secondary school levels is not enough this should be extended to the tertiary institutions to make positive strides and impact in development of human capital in the nation.

5. RECOMMENDATIONS

Based on the findings in this paper, the following recommendations are made:

- Government at all levels in Nigeria should change its poor attitude towards the funding of education especially at tertiary level.
- There should be a shift in focus from the ideology of research as a means for promotion and certification among researchers and in our tertiary institutions.

REFERENCES

- Adebola, B. E. (2009). A logical approach to research proposal Development. In A. O. Ajayi (ed). *Institutionalization of research and development*. Ibadan: Oduprints.
- Ahenkan, A. & Osei - Kojo A (2014) *Achieving sustainable development in Africa: progress, challenges and prospects* International Journal of Development and Sustainability 3 (1) 162 - 174.
- Ayodele - Bamisaiye, O. (2005). Philosophical aspect of educational research. In D.F. Olaturoti and J. O. Osiki (eds). *The 2001 First post-graduate research workshop to all categories of Higher Degree Students*. Ibadan: Faculty of education, university of Ibadan.
- Fawole, I., Egbokhare, F. O., Itiola, A. O., Odejide, A. A., and Olayinka, A. I. (2006). Definition, spectrum and types of research. In A.I. Olayinka, V. O. Taiwo, And I.P. Faral (eds). *Methodology of basic and applied research (2nd edition)*. Ibadan; The Postgraduate School, University of Ibadan.
- Federal Republic of Nigeria (2004). National policy on education. Lagos. NERDC
- Isuku, E. J. and Emunemu, B. O. (2009). *Economic relevance of widening access to higher education in Nigeria*. Journal of sociology and Education in Nigeria. Vol 9, No2, June: 157-173.
- Nwoye, Z. I. (2002). Human research development: biological and economic implications. In M. A. Akele (ed). *Science, Technology and Mathematics Education in Africa. 43rd annual conference of SAN an Inaugural Conference CASTME African proceeding*.
- Soubbotina, T. P. (2004). Beyond Economic Growth: An Introduction to Sustainable Development. *Second Edition*, Washington D. C.: The World Bank.
- Todaro, M. P. and Smith, S. C. (2009). *Economic Development Tenth Edition*. Essex: Pearson Education Limited.
- Peretomode, V. F. (2010). *What is Higher in Higher Education? Abraka: Delta State University Press*.