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THE CHALLENGES OF TRANSITION OF RESEARCH TO ENTERPRISE IN THE DEVELOPMENT OF THE ECONOMY

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INTRODUCTION

The role of research in the growth and development of any society cannot be overemphasized. Widely seen as a systematic procedure of investigating societal problems, research has become almost synonymous with development the world over. Indeed, the world's industrialized and rapidly developing economies are noted for their high commitments to research investment and development. As such, it has been argued that if Nigeria's vision of becoming one of the world's 20 largest economies the year 2020 is to realized, then, research must be given its pride of place (Asarhasa & Enukpere, 2010). We live in a constantly evolving world (socially and scientifically). Thus, to adapt to the global warming and climate change, there is the urgent need for research into cleaner, renewable energy alternatives; the dreaded HI/AIDS pandemic and other life-threatening diseases plaguing mankind as well as the Boko Haram phenomenon all need urgent and quality research studies to effectively tackle them. However, there is a near-consensus that the quality of research and development in Nigeria is not only low but also, there is a big disconnect between our researches and the industry. This essay therefore seeks to examine the challenges of transmitting research into enterprise in Nigeria.

MEANING AND ROLE OF RESEARCH

According to Ajala (2002), research is the "systematic procedure for testing plausible solutions" Similarly, the Oxford Advanced Learners Dictionary, defines research as "the careful study of a subject, especially to discover new facts or information about it". Also, research and development (R&D) has been defined as any work directed towards innovation and improvement of products and processes. It follows from the foregoing definitions that a research work is usually an orderly or systematic way of investigating identified problems or issues with a view to testing formulated hypotheses, verifying existing knowledge as well as finding novel solutions to identified societal problems-innovations. Depending on the field, nature and/or methodology involved, research can be grouped into different classes or types-social, educational, scientific/applied, historical researches etc. Nevertheless, irrespective of the class or type of research, the aims and role are often almost the same-knowledge advancement, verification of facts or theories as well as finding solutions to identified societal problems. According to Oloyede (2010), every "research is aimed at advancing the frontiers of knowledge, seeking solutions to major societal and technical challenges and providing materials for evidence-based decision making".

THE CHALLENGES OF RESEARCH AND DEVELOPMENT IN NIGERIA

Oloyede (2010) opines that every research is relevant to the extent to-which its focus and findings are responsive to societal developmental needs. Despite its aforementioned role, however, research is not given its pride of place in many developing countries, Nigeria inclusive. Prime among the reasons for this rather unfortunate situation are: lack of adequate funding for research institutes, poor state of Nigerian universities, disconnect between the academia and industry, brain-drain and lack of motivation for researchers (Odisu, Azike & Uwadiae, 2011; Okpara, 2012; Oloyede, 2010; Egbogah, 2012). It is widely believed that the low quality of R&D in the country is largely due to underfunding of research institutes and the attendant poor working conditions and/or environment for researchers. For instance, Okpara (2012) reports that Nigeria's expenditure on R&D was insignificant (less than $100m) by 2011 making it (Nigeria) to be excluded from stockriters.com rating of investments by on R&D by countries. Notably, the figures cited by Okpara (2012) show that most industrialized and rapidly developing nations make huge investments on R&D.

TABLE 1: INVESTMENT ON R&D BY COUNTRIES (2011)

S/N.	COUNTRY	AMOUNT($BN)	% OF GDP
1	United States	405.3	-
2	China	153.7	-
3	Israel	9.4	4.2
4	Japan	144.1	3.3
5	Sweden	11.9	3.3
6	Finland	6.3	3.1
7	South Korea	44.8	3.0
8	South Africa	3.7	0.7

Source: Extracted from Okpara (2012).

As a result of the gross underfunding of R&D, the country now relies on foreign technologies (which products of rigorous researches) as well as loose several millions of dollars in procuring the services of expatriates to operate various key sectors of the economy, particularly in the Oil & Gas sector. This situation no doubt leads to unfavourable balance of payment just as it encourages brain-drain (Asarhasa & Enukpere, 2010; Onyekonw, 2011). Similarly, the corporate industrial firms and players have also failed to support R&D in the country thereby creating a vacuum between the industry and research institutions. Consequently, where there are researches at all, most of such researches are usually not connected to the industrial needs due to the disconnect between the two (2) sectors-research and enterprise (Okpara, 2012; Odisu, Azike &Uwadiae, 2011)

THE ACADEMIA-INDUSTRY GAP

The quality and relevance of any research are largely dependent on the focus and findings of such research as well as its ability to meet industrial or societal needs. However, it has been widely reported that there is a huge gap between the researches carried in Nigeria and the industrial needs of the nation (Okpara, 2012; Odisu, Azike &Uwadiae, 2011; Asarhasa & Enukpere, 2010; Egbogah, 2012). This disconnect is blamed on the lack of

synergy between the academia and the key industrial players. Because there is no functional partnership between both sectors, scientists who carry out researches merely focus on their areas of interest with little or no consideration for the core industrial needs. Often, researchers in our universities carry researches not necessarily to address societal/industrial challenges but basically to earn academic promotion since "contribution to knowledge" has become a major criterion for promotion in the academia.

The inability to translate research into enterprise cannot be dissociated from the moribund nature of the nation's universities. Oloyede (2010) asserts that the primary role that distinguishes a university from other educational institutions is the pursuit of research. Unfortunately, Nigerian universities seem to be lagging behind in this all-important task. Researches are not only being carried out at haphazardd, slow pace but also, most of the researches are unable to meet the industrial yearnings of the country. Again, this situation has been linked with gross underfunding of universities, brain-drain, poor-working conditions and lack of research facilities among others (Odisu, Azike & Uwadiae, 2011). This also explains why Nigerian universities have continually ranked poorly in continental and global universities rankings over the last decade! It is a common knowledge that the annual budgetary allocation to our research institutes are barely enough to pay staff emoluments let alone procure the relevant and current software and other facilities for contemporary scientific researches. Or how do we expect teachers and students in a university/department without a functional laboratory to carry out reliable and workable researches? But then, how many of our universities have laboratories at all, let alone, those that boast of modern equipment and facilities that meet global standards? Yet, a functional laboratory no doubt, remains a panacea to an effective research and development culture. Regrettably, graduates from Nigerian universities have often been branded "unemployable" as they lack the requisite empirical knowledge to effectively translate the theory learnt in school into demonstrable skills. For example, a fresh Geosciences (and indeed, many other science and technology) graduate from a Nigerian university usually spends a minimum of about 5 years post-school (in-service) training to fit into the real world Geosciences. No doubt, this is not unconnected with the lack /inadequacy of rigorous practical and/or research works in our schools today.

Similarly, governments' policies over the years have also been blamed as a major contributor to the academia-industry gap. Odisu, Azike & Uwadiae (2011) contend that most science and technology lecturers are banned from private practice while in active public service. They argue that this policy of the federal government is inimical to bridging the academia-industry gap. According to them, allowing lecturers to engage in private practice would help such professionals to meet recent challenges in their profession as well as new approach of doing things.

CONCLUSSION AND RECOMMENDFATIONS

Research and scientific innovation are imperative to the realization of Nigeria's Vision 20:2020.

However, to achieve the lofty ideas encapsulated in the Vision 20:2020 Framework, there is an urgent need to redress the current shortfalls in the R&D sector of economy. The

country cannot afford to continue loosing several millions of dollars to other industrialized countries annually as a result of lack of investment in R&D.

Arising from the above, it sin recommended that:

I. universities and other research institutes should be adequately equipped to carry out their mandates;
II. there should be a formidable synergy between the academia and industry with a view to identifying industrial needs as well as planning together and financing researches into such needs;
III. government should give incentives to researchers; and
IV. that the Students Industrial Work Experience (SIWES) should be strengthened to enhance empirical training of students as well as prepare them for university-industry transition.

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