Ivory Tower Research and National Development: Emerging Issues

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Abstract

A Nation's development depends on its ability to improve the lives of the citizenry. Basically, the development of every Nation is basically measured by the quality of its research output. The main importance of research is to proffer solutions to human problems through well-defined methods. Research brings about new insights deriving from knowledge, it is also acknowledged as a systematic and objective search for knowledge, to establish theories and methods. National development is measured by the ability of a country to improve the social welfare of the people, in terms of providing social amenities like quality education, potable water etc. Indeed, it embodies all attempts to improve the conditions of human existence in a sustainable way such that today's consumption does not imperil the future. The method deployed in the study was the key informant interview (KII) to ascertain the nexus between ivory tower research and national development. The systems and social exchange theories were used as explanatory tools to explain the phenomenon. The article posits that there exist many researches in different fields of study and development can be applied to political, social and technological progress which is critical and essential to the sustenance and growth of any nation. The development of a country depends on the method of research employed, which can either be Basic research or Applied research. The academic community should realise that in knowledge society there is a need to marry theory with practice to achieve a better society.

Key Words: Ivory tower; Research; National development; Basic research; Applied research.

Introduction

Since the emergence of Universities in the 12th century, they have been called upon to perform certain functions. However, rather than being in the fore front of shaping human development, Universities have been followers of global development agendas (Tandon, 2008). To face the emerging issues of development, universities should be Ivory Towers of thought, reflection and creativity working in tandem with industries to create wealth and engender better well- being through ground breaking researches. Evidence from engaged

universities has shown that there are universities dedicated to ground breaking researches. Such universities contribute to social change by expanding the existing notions of knowledge generation and its effects.

However, the dilemma of the Ivory Tower research stems from the framing of research agenda to attract industry interests which invariably will culminate in research grants to facilitate such researches. Education in general and higher education in particular, are fundamental to the construction of a knowledge economy and society (Saint, Harnett, & Strassner, 2003). The universities are charged with the creation of knowledge and it is one of their primary mandates. In creating knowledge, a lot of research has to be undertaken by both the universities and research centres. The number of universities has grown astronomically in Nigeria especially with the emergence of state and private universities to 153 consisting of 84 public universities and 69 private universities. The increased number of universities has not translated into increased generation or creation of knowledge. Anya (1999) asserted that Nigerian universities have not contributed to the enlargement of the productive base of the economy through innovation and wealth creation; nor have they fostered the necessary attitudinal shifts and values relevant to sustain economic growth. One agrees with Anya (1999) because knowledge has become the most important factor for economic development in the twenty-first century and nations can only ignore it at their own peril. The developed countries believe in Research and Development (R and D) and consequently, they invest heavily on it. It is the huge expenditure of developed countries like the United States and Europe on R and D that explains their enhanced and enviable level of industrialisation and self-reliance (Okecha, 2008). The huge expenditure on R and D by some fast developing countries like Korea, India, Brazil, Taiwan, Hong Kong and Singapore explains their current grip on industrialisation and self-reliance. Nigeria and other African countries, especially the sub-Saharan ones, are not unaware of the importance of Research and Development. The disparity manifests in other areas as they relate to research and development. The number of researchers per million populations in developed and developing countries is abysmal and it is against this backdrop that this study seeks to examine the emerging issue in Ivory Tower research and national development in Nigeria.

Statement of the Problem

In the emerging knowledge economy, universities are recognised as critical contributors to economic prosperity (Mowery & Sampat, 2005) and key institutions of innovation systems (Gunasekara, 2006). Over the years, universities

and other public research organisations have experienced substantial changes in their tasks and roles. Their main mission seems no longer to be confined to education and research, but increasingly also covers technology transfer and commercialisation of its research activities. In most developed countries, increasing attention is paid to the economic utilisation of publicly funded research. This holds particularly true for high-technology sectors with an analytical knowledge base, where scientific knowledge is of utmost importance in the innovation process (Asheim & Gertler, 2005).

In Nigeria, a fundamental problem in Ivory Tower research is the concern with scientific impact on National Development. Other concerns include recognising Universities as knowledge factories that should establish bridges with industrialists and donors to create wealth. The paper seeks answers to how Ivory Tower researches can translate to national development and challenges that undermine the building of bridges between researchers and industrialists.

Objectives of the Study

The objectives of the study are to;

- Examine the relevance of Ivory Tower research for national development
- Investigate the extent of research collaboration between Ivory Tower researchers and private sector industries for national development
- Examine accessibility to Funding for Ivory Tower research to engender national development.
- Investigate factors limiting output of Ivory Tower Research for National Development

Theoretical Framework

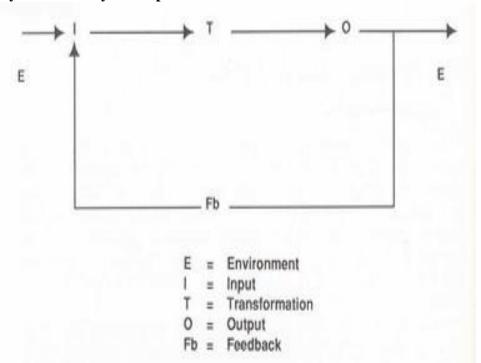
Two sets of theories are invoked in the examination of emerging issues in Ivory Tower research and National Development. The theories are Systems theory and Social Exchange theory.

Systems Theory: Systems theory or systems science is the interdisciplinary study of systems, with the goal of discovering patterns and elucidating principles that can be discerned from and applied to systems at every level of nesting and in every field of research. General system theory is about broadly applicable concepts and principles, as opposed to concepts and principles applicable to one domain of knowledge. It is related to systems engineering. Most generally, a system may be defined as a bounded set of interrelated or interacting elements. This definition accommodates both passive structures. However, most system

theorists focus on activity systems in which structures/components interact in behaviour/processes. And many focus on social activity systems in particular.

An early focus of system theory was on homeostatic or self-regulating systems that maintain themselves in a consistent or viable state through feedback. There are designed homeostatic systems and natural ones such as the physiological systems of our body, the climate, and some ecosystems. A system consists of four things. The first consists of the parts, elements or variables within the system. The second consist of quantities and properties of the system and its objects whiles the third comprises of the internal relationships among its object. Fourth, the system exists in an environment. A system therefore is a set of things that affects one another within an environment.

Systems Theory Conceptual Model



Source: Adapted from L. Bertalanfy, (1968).

Social Exchange Theory: Social exchange theory is a social psychological and sociological perspective that explains social change and stability as a process of negotiated exchanges between parties. Social exchange theory posits that human

relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives. The theory has roots in economics, psychology and sociology. Social exchange theory features many of the main assumptions found in rational choice theory and structuralism. It is also used frequently in the business world to imply a two-sided, mutually contingent and rewarding process involving transactions or simply exchange. Self-interest and interdependence are central properties of social exchange. These are the basic forms of interaction when two or more actors have something of value to each other, and they have to decide whether to exchange and in what amounts. Homans (1961) uses the concepts of individualism to explain exchange processes. To him, the meaning of individual self-interest is a combination of economic and psychological needs. Fulfilling self-interest is often common within the economic realm of the social exchange theory where competition and greed can be common. In social exchange, self-interest is not a negative thing; rather, when self-interest is recognised, it will act as the guiding force of interpersonal relationships for the advancement of both parties' self-interest. - Michael Roloff (1981), Thibaut and Kelley (1959) see the mutual interdependence of persons as the central problem for the study of social behaviour. They developed a theoretical framework based on the interdependence of actors. They also highlighted social implications of different forms of interdependence such as reciprocal control. According to their interdependence definition, outcomes are based on a combination of parties' efforts and mutual and complementary arrangements.

Social exchange theory views exchange as a social behaviour that may result in both economic and social outcomes. Social Exchange Theory has been generally analysed by comparing human interactions with the marketplace. The study of the theory from the microeconomics perspective is attributed to Blau (1964). Under his perspective every individual is trying to maximise his wins. Blau (1964) stated that once this concept is understood, it is possible to observe social exchanges everywhere, not only in market relations, but also in other social relations like friendship.

Social exchange process brings satisfaction when people receive fair returns for their expenditures. The major difference between social and economic exchange is the nature of the exchange between parties. Neoclassical economic theory views the actor as dealing not with another actor but with a market and environmental parameters, such as market price. Unlike economic exchange, the elements of social exchange are quite varied and cannot be reduced to a single quantitative exchange rate. Social exchanges involve a connection with another person;

involves trust and not legal obligations; are more flexible; and rarely involve explicit bargaining. Thus investments serve to stabilise relationships. The greater the nontransferable investments a person has in a relationship, the more stable the relationship will be. If government and the private sector invest in research the lecturers would become more committed to problem solving research which invariably would translate to development instead of investing on research for career mobility.

Research Methods

Data for the paper were generated through key informant interviews of five small scale entrepreneurs and five academics. The research was carried out in July 2016 using respondents from the University of Lagos to represent the academic community and small and medium sized entrepreneurs to represent business owners. Employing the purposive sampling technique, two academics were selected from the Faculty of Sciences, another two were selected from the Faculty of Environmental Sciences and one was selected from the Faculty of Social Sciences, all from the University of Lagos while five entrepreneurs were interviewed making a total of ten key informants. Content analysis was used to analyse the qualitative data gathered in the study. In carrying out the content analysis, responses were recorded, transcribed and categorised into sub-themes based on the objectives and research questions of the study.

Findings

The analysis of the findings is carried out thematically based on the objectives of the study, other findings are also discussed.

The Relevance of Ivory Tower Research for National Development

There was a consensus among respondents that ivory tower research is imperative for national development. A male respondent who is 30 years old gave his views on the relevance of Ivory Tower research for national development. According to him:

Ivory Tower research should be a major source for generating and advancing the frontier of knowledge, skills training and expertise for manpower, and therefore, the most important factor which, facilitates and accelerates economic development and improved living conditions in society. This will translate into better well-being for the citizenry especially if such knowledge is used as applied research.

Another respondent gave a similar response who is also a male and 40 years old argued thus:

There is ample evidence to show that research and development generated by higher education, more than anything else, has contributed to the rise and expansion of the world knowledge economy, and the establishment, once again, of imperial knowledge hegemony of a few countries over the rest of the world in the on-going process of globalization and its uneven development. For the Global South to catch up with the Global North, the place of research cannot be undermined. Investments in research and innovation should not only be encouraged but be made an imperative especially in the universities.

Findings from the qualitative data further revealed that the relevance of research is reflective in the fact that the main criteria for ranking the world class universities is not so much the volume of teaching, student population or community services a university could muster; but research output measured by the breakthrough findings published in first class and medal winning journals and books, which could increase to volume and rate of knowledge accumulation. This development has made knowledge accumulation to be the most important and dominant form of today's capitalist accumulation, responsible for launching the advanced countries to the top of the world, by their control of the most advanced social and human capital formation, economic development and improved living conditions.

Some of the entrepreneurs interviewed gave their views of Ivory Tower research in Nigerian universities. A male entrepreneur who is 50 years old posited that:

"The problem of what to do with commercialisable research results or inventions from university research in Nigeria stems from the inability of the universities to effectively link with industry. It is this critical linkage especially between the Ivory Tower and the productive sector that could translate research results or inventions into finished products for the benefit of the nation. However, for research results to be patentable and commercialisable, they must have quality, novelty and industrial applicability. He reiterated that often university researchers were more interested in research for career mobility and not for the benefit of the private sector."

Another male entrepreneur who is 60 years old expressed his thoughts on the issue of Ivory Tower research for national development. He argues that:

"Despite claims of inventions and breakthroughs from Nigerian universities, polytechnics and research institutes, there is no commensurate registration of patents from these institutions. A patent is a major constituent of intellectual property, which forms a cornerstone of the knowledge economy and which when commercialized can bring a lot of improvement to the economy and create jobs for people'. If universities carry out commercialisable researches, universities will earn so much money from their patents and depend less on government to run the institutions."

Research Collaboration between Ivory Tower Researchers and Private Sector Industries

Findings from the qualitative study revealed that there is research collaboration between the Ivory Tower and private sector industries. However, most of the research outputs have not translated to demonstrable national development. Some of the factors identified as responsible for this phenomenon are poor funding of Research and Development. Also, another factor attributed to this phenomenon is the failure of policy makers to implement result of research outputs. Failure to follow up and build on research outputs was also identified as a factor responsible for the failure of research collaboration to translate into national development.

Access to Funding for Ivory Tower Research to Engender National Development

There was a consensus among respondents that researchers do not have access to sufficient funding for research in Nigerian Universities. The dearth of research funds impedes the quality and research outputs and their relevance for national development. It was also found that more funding come from international organisations than from the government or national organisations. Findings from the qualitative study revealed that researchers sometimes fail to make use of research grants strictly for research purposes and this also undermines the output of research results. Some respondents opined that with the level of underfunding in tertiary institutions, there is the need to evolve some strategies that will make it possible for the universities to achieve qualitative research output. To generate more funds, there is the need to introduce the macro-economic strategy where the government needs to diversify to other sectors of the economy. There should also be partial deregulation of the education sector so as to ensure the provision of additional resources for the universities and encourage the private sector participation which will provide additional resources for the institutions. Some of the respondents mentioned that in the advanced countries university professors tailor their researches towards finding solutions to societal problems hence the

huge investments by the state on research and innovation. And this culminates in patents for the researchers and their institutions. The results from such researches have earned Nobel Prizes in addition to bringing more money into the coffers of such institutions.

Conclusion

Universities as bastion of knowledge are conflicted between pursuit of knowledge and its commercialisation, hence the inability to establish the needed synergy. The compartmentalisation of knowledge accompanied by over specialisation has hampered intra-community and multi-disciplinary collaboration. The academic community should realise that in the emerging society, boundaries between disciplines are blurred and there is a need to marry theory with practice to create a better society, generate wealth and improve the standard of living of the citizenry.

Recommendations

- The Ivory Tower as a bastion of knowledge should ensure that research output translates into action to better human condition.
- It is expedient for the industry to collaborate with the University by funding university researches and ensure that such research is crystallized into reality for the benefit of mankind
- Development anchored on research will engender national development and will invariably create wealth that will ameliorate the human condition.

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