



RESEARCH IN NIGERIA HIGHER EDUCATION AND THE CHALLENGES OF SUSTAINABLE DEVELOPMENT

AINA, JACOB KOLA, PhD; & ABDULRAHMAN ABDULGAFAR OPEYEMI

School of Science Education, College of Education (Tech.) Lafiagi, Kwara State, Nigeria.

Abstract

The review is on corruption. It was researched in Nigerian higher education and the impacts on the sustainability of Nigeria nation. The script critically reviewed some challenges confronting research studies in Nigerian universities: few of these are inadequate facilities, funds, and

Keywords:

Research, sustainable development, corruption, postgraduate, higher education.

INTRODUCTION

Research is the bedrock of any sustainable development worldwide (Fayomi, Okokpujie & Mfon, 2018). The critical position of research in sustainable development is a significant reason for collaboration between researchers of different countries (FONA, 2009). According to Bachiorti (2016), achieving sustainable development in the world requires knowledge through good research. Research and education bring solutions to challenges nations face on their sustainability (Ibrahim, 2017). The research function of academia remains a prime source of knowledge (Kearney, 2009). Research is critical to sustainable

concludes with is the overhauling of postgraduate suggestions of ways Nigerian universities' programmes. forward; among these

development in education (Lemon, Lambrechts, Fleming & Lee, 2016). Research in higher institutions is essential for many reasons: such as to enhance the image and reputation of the institution, to contribute to the knowledge base (Mafenya, 2014). Research remains a critical function of the higher institution globally (Nwakpa, 2015). Research is undoubtedly considered significant academic tasks; it is viewed as the crucial aspect of the academic system of career advancement (Turk & Ledić, 2016). Despite this, countries worldwide are confronted with increased demand to grow their research and knowledge production (Kearney, 2008).

However, research in Nigeria higher education is yet to be in the same position as developed countries and some developing countries. Quality and relevance have been the challenges of research globally (Kearney, 2008), including in Nigeria. The quality and relevance of research studies in Nigerian institutions to the needs of society is a challenge. Conducting adequate research that would be relevant to the needs of the 21st century require fund. Research is expensive and often includes some unseen financial burdens for higher education institutions (Meek and Davis, 2009). There is an increasing recognition of the significance of research in a global knowledge-based economy in all nations of the world (Meek & Davis, 2009). Research capacity is vital for all countries because of their economies and for the requirements of effective management and sound policy-making in their governments (Johnstone & Marcucci, 2007).

This review paper will be considered under the following headings: challenges of conducting sound research in Nigerian Universities, sustainable development in Nigeria, sustainable development in Nigeria, the ways forward, and conclusion.

Challenges of Conducting Research in Nigerian Universities

According to Mogaji (2019), there are one hundred and seventy-four (174) universities in Nigeria. The author gave this figure based on the

information obtained at the NUC website in August 2019. The total number comprises both public and private universities. Several documented reports show that to conduct adequate research in any of these universities are facing challenges (Yusuf, 2012). Studies revealed that the standard of research in Nigeria universities is low compared with universities in developed countries (Nwapka, 2015; Desmennu & Owoaje, 2018) due to some challenges. Many of these challenges are peculiar to Nigeria as a nation, while some are global issues.

Talebloo and Baki (2013) identified the challenges facing postgraduate students in Malaysia's university as facilities, social environment, and the academic system. The universities in Nigeria may not be different from this as research facilities in Nigeria are also very bad. Supporting this, Anifowose and Lawal (2013) lamented the inadequacy of physical facilities in the Nigerian universities with particular emphasis on the Federal University of Technology Minna. The facilities to conduct world-class research are inadequate in most Nigerian universities (Nwakpa, 2015), which has hindered research activities in these institutions. The challenges postgraduate students often encounter in most of these universities are inadequate research facilities (Desmennu & Owoaje, 2017).

Besides, funding is critical to research activities in all universities of the world. Mafenya (2014) observed that funding is one of the challenges facing higher education research in South African universities. The financing of research in Sub-Saharan Africa universities has been challenging for both government-aided and private universities because of financial constraints (Kyaligonza, Kimoga & Nabayego, 2015). Research funding in most developed countries and a few developing countries is allocated to universities and individual researchers (Bloch & Sørensen, 2013). There are financial challenges everywhere, including the industrialized nations: however, this challenge is of greater magnitude in Africa (Teferra, 2013).

Research activities in Nigerian institutions have not received the proper attention it deserves due to insufficient funding (Baro, Bosah & Obi, 2017). Making funding available to lecturers for research in Nigerian universities is inadequate, and the conditions for accessing the fund where available are stringent (Akpan, Archibong & Undie, 2010).

Nigerian universities lack prestige and under-perform on research (Mba, 2019). The author cited the Time Higher Education world university rankings that only the Covenant University and University of Ibadan were among the world's top one thousand in 2019. The author cited that Nigerian universities produce only 44% of the scholarly output of South Africa and 32% of Egypt, even with more universities in Nigeria than these countries. This might not be unconnected with inadequate facilities and funding. Research funding should not be left only to the government as it is done in most western world. A country like South Africa has robust research grant opportunities compare to Nigeria for lecturers and students in various universities. According to Luruli and Mouton (2016), South African universities annually receive funding amounts calculated based on students, staff, and infrastructure. These grants are not only from the government but from different agencies. The Nigerian government's commitment to research development in Nigeria is primarily from the TETFund, which is highly commendable (Oraka, Ogbodo & Ezejiofor, 2017; Ibrahim, 2017). However, much is yet to be realized through this government agency because of corruption.

Corruption is one of the enemies of research development in Nigeria higher education. The TETFund would have made the same impart the National Research Foundation of South Africa made in funding research if not for corruption. Most heads of Nigerian institutions collaborate with lecturers to diverts research funds. Many lecturers collect money for conferences but fail to attend such meetings. Institution-Based Research (IBR) does not thrive well in most institutions because it fails to utilize research funds after collecting the capital. Some Provosts and Rectors do not adequately release the funds to the researchers who submitted the proposal to the TETFund after approval.

Some students collect money for doctoral studies but abandon the programme. There are situations where the institutions' management fails to release funds to many postgraduate students to run the programme smoothly. A good number of these students abandoned their studies when funds are not released for the programme. In Nigeria, the participation of private agencies in financing doctoral programme is inadequate. Private agencies' involvement in financing postgraduate studies in many countries

through a Public-Private Partnership (PPP) is commendable and impacts their doctorates' quality.

The low quality of doctoral degrees in Nigerian universities is problematic. Postgraduate studies worldwide are facing challenges because of many factors (Lin & Scherz, 2014). Postgraduate education today is confronting multiple challenges in terms of quality and demand (Kearney, 2008). Critical in doctoral studies in any university is the supervision. According to Holtman and Mukwada (2014), the quality of academic research supervision is one of the significant determinants of time-to-degree and throughput rates (p.179).

The untimely completion of the doctoral programme has been a significant problem for postgraduate students in Nigeria, which many have attributed to inadequate supervision and other reasons (Desmennu & Owoaje, 2018). It is common in Nigerian universities that most postgraduate supervisors delayed their students (Oni, Onyenania & Momoh, 2017) for the best-known reasons. However, Holtman and Mukwada (2015) opined that some students' supervisor lacks experience in supervising postgraduate students.

The case of postgraduate supervision in Nigerian universities is a fundamental issue requiring every stakeholder's attention in education. Many doctoral students have been frustrated out of the programme because of their supervisors. The corruption in the Nigeria politics has found its way to academics through students' supervisors and the lazy students. Most Nigerian students are not serious for a postgraduate study, even the doctorate: these students induced some supervisors with gifts to have their ways. Unfortunately, students who could not afford such assistance suffer severe setbacks in their studies. Many doctoral students in Nigerian universities spent more than five years only on the proposal, which is very bad. Some supervisors have no time for their students and delayed the innocent students unnecessarily. This attitude of the supervisors in the Nigerian universities is adversely impacting research in higher education.

In this global internet connectivity era, the Nigerian postgraduate students are still using the 'hard copy method' to submit research manuscripts to their supervisors. In advanced countries, supervision is by electronic

method: this is the best method. It helps the supervisor to attend to students' submission anywhere without any hindrance, and the entire supervision process is seamless. The challenge to this is because many of the supervisors cannot operate computers adequately. This issue must be addressed in our universities because, according to Rensburg and Roets (2016), research outputs depend much on the production of Master's and doctoral graduates. Many supervisors delayed in given feedback to their students, which most time resulted in changing of titles. According to Grant, Hachney, and Edgar (2014), it is one of the supervisor's roles to advise the student promptly of unsatisfactory progress concerning any aspect of their candidature (p.4). Ismail, Abiddin, and Hassan (2011) often complain of erratic contact with supervisors attributed to busy administrative and teaching schedules or the university's supervisor absence. Consequently, there is a low research output in Nigeria compared with some African countries, as shown in table 1.

Table 1.

Research Output of Kenya and Comparator Countries (2010 and 2018)

| <i>Country</i> | Citable documents per 1 million inhabitants (2010) | Citable documents per 1 million inhabitants (2018) | H-Index (2018) |
|---------------------|---|---|-----------------------|
| <i>Ethiopia</i> | 9.2 | 181.6 | 125 |
| <i>Ghana</i> | 30.4 | 516.4 | 129 |
| <i>Kenya</i> | 36.3 | 565.1 | 216 |
| <i>Nigeria</i> | 31.6 | 366.2 | 166 |
| <i>Rwanda</i> | 12.8 | 173.9 | 70 |
| <i>Senegal</i> | 29.8 | 546.9 | 111 |
| <i>South Africa</i> | 229.2 | 4,233.5 | 391 |
| <i>Tanzania</i> | 17.8 | 248.3 | 145 |
| <i>Uganda</i> | 25.6 | 323.3 | 156 |
| <i>Zimbabwe</i> | 24.6 | 561.2 | 119 |

Source: World Bank (2019)

The position of Nigeria in table 1 among the countries selected based on the research output is unfortunate as a giant of Africa. The H-Index of Kenya and South Africa were higher than that of Nigeria in 2018. However, this paper does not have the output of 2019 to know the current position. The quality of publications from Nigerian tertiary institutions is equally a concern that speaks volumes about our research output. Table 1 shows that Nigeria is behind Ghana, Kenya, Senegal, South Africa, and Zimbabwe in Citable publications per 1 Million inhabitants in 2018. It might not be a surprise as it has been observed that most Nigerian scholars have challenges in writing internationally acceptable grants proposals (Baro et al.). These challenges have a critical impact on the sustainability of the country.

Sustainable Development in Nigeria

Nigeria is now sixty years from the year of independence and still contending with the challenge of sustainability (Aina, 2020). Sustainable development has different meanings with different authors (Adejumo & Adejumo, 2014; Mensah, 2019). To achieve sustainability require problem-solving, which is the fundamental function of any investigation. Sustainable development has to do with meeting the citizenry's present needs and not hindering or tamper with the posterity (Alamu, 2017). Research is an essential gradient of growth in any community of the world.

As a sovereign nation, Nigeria has not met Nigerians' present need, not to talk of the next generation. The Nigeria education sector, which is the engine that drives all other sectors, is bedeviled with catalogs of challenges due to inadequacies in our educational researches. Knowledge generated by research remains the hub of sustainable development worldwide. However, in Nigeria, many good research outcomes are not implemented by the government partly due to the lack of corruption, while some are not implementable. It implies the government fails to convert the research findings to products and services to use in society. Bornmann (2013) opined that it must be converted to benefits for any successful research findings useful for the community. Some research studies are poorly investigated, and the results are not implementable. The investment in research is a global issue because of its positive economic growth (Digital

Science, 2016). Therefore, it must be appropriately investigated and produce an unambiguous outcome that could be implemented.

Nigeria's present situation is terrible because many research findings for solving security problems, economic, health, agriculture, education, and others were not utilized due to poor outcomes or government failure. For instance, Otto and Ukpere (2012), Comfort, David, and Moses (2013), in their study, had recommended that Nigeria leaders should lead by example to curb corruption and insecurity. Sadly, the nation's situation is worst in corruption and security now than seven years back because our leaders are not exemplary. There are numerous successful research outcomes in education with excellent recommendations to make the Nigerian education system the same with developed countries that were not implemented. Examples are, Ngene, Quadri, Bamigboye, and Tenebe (2018) on the learning environment, Aina (2017) on the learning paradigm, and many others. The challenges of postgraduate studies in Nigerian universities remain because research studies are not implemented; for instance, Desmennu and Owoaje (2018). The examples given are just a few: there are more in health, agriculture, judiciary, and others. In light of the above, there should be ways to move forward.

The Ways Forward

There is no problem without at least a solution. Therefore, there are solutions to the challenges discussed in this paper. There may be more solutions than what this paper proffers; however, these are the few the article presents as the authors' significant contributions to the extant knowledge.

- There is a need to strengthen the Public-Private Partnership (PPP) in Nigeria to reposition Nigeria's research and development (Aina & Akintunde, 2013). This is how it is done in developed countries because government alone cannot adequately finance education.
- Collaboration is critical to research funding in higher education. There should be collaborations between universities and industries to know areas of societal needs that require modern research to grow the national economy. This is the 21st century; it is not just to go into research that will not meet the citizen's needs in this global growing knowledge economy.

- Nigerian universities should overhaul their postgraduate programme to meet the international standards. The student's supervisors should know their responsibilities and role in supervision and stop delaying their students unnecessarily. In most universities in South Africa, especially the University of Cape Town, students and supervisor sign a Memorandum of Understanding (MoU) before supervision begins. It enables both the students and the supervisors to know their roles and strictly keep to it. This help student to finish their programmes in a record time. The MoU is a document that any student can use to indict any supervisor who is deliberately trying to delay the student: it also indicts any unserious lazy student. The MoU contains both the expected supervisor and students' roles in the postgraduate programme.
- Funding is critical to any successful research; therefore, the government should always make special funds available for research in the national budget apart from the TETFund.
- There should be severe sanctions for any institution and individual who tamper with the TETFund research moneys.
- Motivation is fundamental to a successful postgraduate programme in Nigeria (Baro et al.). Supervisors in Nigerian universities should change their orientation in their perspectives of the supervisees. They should understand their pastoral/guidance role (Holtman et al.; Ismail et al.; Grant et al.). The dictatorial approach to supervision is not the norm in the developed countries and many developing nations. The Authentic Learning Model is the best way to motivate supervisees. The model supports oversight through coaching and scaffolding, not enforce undue authority over the learner. Most supervisors see their students as if they know nothing. Supervisees should be motivated by the supervisor by being accessible and friendly.

Conclusion

The article argued that knowledge generated by research remains the crux of sustainable development anywhere in the globe. However, the paper submits that there are challenges to the conduct of successful research studies in Nigerian universities, which hinders the nation's sustainable development. The script concurred that there are solutions to these challenges and recommends some antidote as ways forward. Therefore, the ways ahead highlighted above serve as recommendations of the article.

References

- Adejumo, A. V. and Adejumo, O. O. (2014). Prospects for achieving sustainable development through the millennium development goals in Nigeria. *European Journal of Sustainable Development*, 3(1), 33-46.
- Aina, J. K. (2020). Sustainable development challenges in Nigeria: The role of science education. *Sumerianz Journal of Education, Linguistics and Literature*, 3(4), 32-37
- Aina, J. K. (2017). An investigation of incorporating dialogical argumentation into peer instruction (PI) for pre-service teacher learning of current electricity. *Üniversitepark Bülten*, 6(1), 7-19
- Aina, J. K., & Akintunde, Z. T. (2013). Repositioning science education in Nigerian colleges of education through Public-Private Partnership (PPP). *Science Journal of Education*, 1(5), 64-67. doi: 10.11648/j.sjedu.20-130105.13
- Akpan, C. P., Archibong, I. A., & Undie, J. A. (2010). Lecturers' access to research fund in Nigerian universities: Challenges and strategies for improvement. Retrieved from <https://www.researchgate.net/publication/338801365>
- Alamu, O. (2017). Sustainable development goals in Nigeria: What role(s) for Nigeria's indigenous languages? *European Journal of Research and Reflection in Educational Sciences*, 5(4), 1-13.
- Anifowose, M., & Lawal, P. O. (2013). State of physical facilities in Nigerian tertiary educational institutions: Case study of The Federal University of Technology, Minna, Niger State Nigeria. *The Nigerian Journal of Technological Research*, 8(1), 1-7. DOI: 10.4314/njtr.v8i1.88890
- Baro, E. E., Bosah, G. B., & Obi, I. C. (2017) "Research funding opportunities and challenges: A survey of academic staff members in Nigerian tertiary institutions. *The Bottom Line*, 30(1), 47-64, <https://doi.org/10.1108/BL-07-2016-0027>
- Bachiorri, D. (2016). Research on Education for Sustainable Development: a national network at its first steps. In W. Lambrechts & J. Hindson (Eds.). *Research and Innovation in Education for Sustainable Development* (pp. 33-43), Vienna, Austria: Environment and School Initiatives
- Bloch, C. W., & Sørensen, M. P. (2015). The size of research funding: Trends and implications. *Science and Public Policy*, 42 (1), 30-43. DOI: 10.1093/scipol/scu019
- Bornmann, L. (2013). What is societal impact of research and how can it be assessed? A literature survey. *Journal of the American Society for Information Science and Technology*, 64(2), 217-233. DOI: 10.1002/asi.22803
- Comfort, O., David, I., & Moses, U. U. (2013). Addressing the insecurity challenge in Nigeria: The imperative of moral values and virtue ethics. *Global Journal of Human Social Science Political Science*, 13(2), 53-63
- Desmenu, A. T., & Owoaje, E. T. (2017). Challenges of research conduct among postgraduate research students in an African University. *Educational Research and Reviews*, 13(9), 336-342
- Digital Research Reports (2016). The societal and economic impacts of academic research: International perspectives on good practice and managing evidence. Retrieved October 10, 2020, from <https://www.digital-science.com/resources/digital-research-reports/digital-research-report-societal-economic-impacts-academic-research/>.

- Donwa, P. A. (2006). Funding of Academic Research in Nigerian Universities. *Paper Presented at the Second International Colloquium on Research and Higher Education Policy*. UNESCO Headquarters, Paris 29 November - 1st December 2006
- Fayomi O.S.I., Okokpujie I. P., & Mfon, U. (2018). The role of research in attaining sustainable development goals. *IOP Conf. Series: Materials Science and Engineering* 413, 012002 doi:10.1088/1757-899X/413/1/012002
- FONA (2009). Research for sustainable development: Framework Programme of the German Federal Ministry of Education and Research (BMBF). Berlin, Germany: Bundesministerium
- Grant, K., Hackney, R., & Edgar, D. (2014). Postgraduate research supervision: An agreed conceptual view of good practice through derived metaphors. Retrieved from <https://www.researchgate.net/publication/289980581>
- Holtman, L., & Mukwada, G. (2014). Challenges confronting the quality of postgraduate research supervision and its effects on time-to-degree and throughput rates: A case of a South African university. *Mediterranean Journal of Social Sciences*, 5(6), 179-190. Doi:10.5901/mjss.201-4.v5n6p179
- Ibrahim, S. (2017). Tertiary education trust fund (TETFund), research and development and Nigeria's higher education. *European Journal of Education*, 3(7), 800-817. doi:10.5281/zenodo.844096
- Ismail, A., Abiddin, N. Z., & Hassan, A. (211). Improving the development of postgraduates' research and supervision. *International Education Studies*, 4(1), 78-89
- Johnstone, D.B. & Marcucci, P.N. (2007). Worldwide Trends in Higher Education Finance: Cost-sharing, Student Loans, and the Support of Academic Research. Commissioned paper for the UNESCO Forum on Higher Education, Research and Knowledge, Paris: UNESCO. Retrieved September 30, 2020 from the UNESCO Database.
- Keraney, M. (2008). The Role of Post-Graduate Education in Research Systems. In P. Harvey (Ed), *Proceeding of Trends and Issues in Postgraduate Education: Challenges for Research International Experts' Workshop* (pp 1-15), Dublin, Ireland: UNESCO
- Kyaligonza, R., Kimoga, J., & Nabayego, C. (2015). Funding of academic staff's research in public universities in Uganda: Challenges and opportunities. *Makerere Journal of Higher Education*, 7(2), 147 - 162. DOI: <http://dx.doi.org/10.4314/majohe.v7i2.10>
- Lemon, M., Lambrechts, W., Fleming, M., & Lee, S. (2016). Reflections on committed research into education for sustainable development: challenges and responses. In W. Lambrechts & J. Hindson (Eds.), *Research and Innovation in Education for Sustainable Development* (pp. 168-184), Vienna, Austria: Environment and School Initiatives
- Lin, S., & Scherz, S. D. (2014). Challenges facing Asian international graduate students in the US: Pedagogical considerations in higher education. *Journal of International Students*, 4(1), 16-33
- Luruli, N. M., & Mouton, J. (2016). The early history of research funding in South Africa: From the research grant board to the FRD. *South African Journal of Science*, 112(5/6), 1-6. <http://dx.doi.org/10.17159/sajs.2016/20150097>
- Mafenya, P. N. (2014). Challenges faced by higher education institutions in research skills development: A South African open and distance learning case study. *Mediterranean Journal of Social Sciences*, 5(4), 436-442

- Mba, D. (2019). Nigeria's universities are performing poorly. What can be done about it. Retrieved October 03, 2020, from <https://theconversation.com/nigerias-universities-are-performing-poorly-what-can-be-done-about-it-112717>.
- Meek, V. L., & Teichler, U. (2009). Higher education, research and innovation: changing dynamics: Report on the UNESCO forum on higher education, research and knowledge, 2001-2009. Retrieved from <https://www.researchgate.net/publication/44841078>
- Mensah, J. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: Literature review. *Cogent Social Sciences*, 5(1), 1-21. <https://doi.org/10.1080/23311886.20-19.1653531>
- Mogaji, E. (2019). Types and location of Nigerian Universities. *Research Agenda Working Papers*. 2019(7), 92-103
- Ngene, B., Quadri, A., Bamigboye, G., & Tenebe, T. (2018). Nigerian Educational System: in The Pursuit of Right Physical Environment for Learning. Retrieved from <https://www.researchgate.net/publication/326225881>
- Nwakpa, P. (2015). Research in tertiary institutions in Nigeria: issues, challenges and prospects: Implication for educational managers. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 20(6), 45-49
- Oni, O., Onyenania, G. O., Momoh, A. U. (2017). Postgraduate studies in Nigerian Universities: Issues and implications. *Continental J. Arts and Humanities*, 9(1), 32-45. DOI: 10.5281/zenodo.1136165
- Onuora, O. A., Ogbodo, O., & Ezejiolor, R. A. (2017). Effect of tertiary education tax fund (TETFUND) in management of Nigerian tertiary institution. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, 2(1), 140-150
- Otto, G., & Ukpere, W. I. (2012). National security and development in Nigeria. *African Journal of Business Management*. 6(23), 6765-6770, DOI: 10.5897/AJBM12.155
- Talebloo, B., & Baki, R. B. (2013). Challenges faced by international postgraduate students during their first year of studies. *International Journal of Humanities and Social Science*, 3(13), 138-145
- Teferra, D. (2013). Funding higher education in Africa: State, trends and perspectives. *JHEA/RESA*, 11(1&2), 19-51
- Turk, M., & Ledić, J. (2016). Between teaching and research: Challenges of the academic profession in Croatia. *ceps Journal*, 6(1), 95-111
- Ukpai, U. E., & Ereh, C. M. (2016). Current challenges and the needed competences in the management of university education in Nigeria. *British journal of education*, 4(2), 74-86.
- Van Rensburg, G. H., Mayers, P., & Roets, L. (2016). Supervision of post-graduate students in higher education. *Trends in Nursing*, 3(1), 1-15. <http://dx.doi.org/10.14804/3-1-55>
- World Bank (2019). Improving Higher Education Performance in Kenya: A Policy Report. World Bank. Retrieved October 10, 2020, from <http://documents1.worldbank.org/curated/en/831821566966279688/pdf/Improving-Higher-Education-Performance-in-Kenya-A-Policy-Report.pdf>
- Yusuf, A. K. (2012). An appraisal of research in Nigeria's university sector. *JORIND*, 10(2), 321-330