



ACHIEVING THE NEW SUSTAINABLE DEVELOPMENT GOALS: THE ROLE OF SCIENTIFIC RESEARCH IN NIGERIAN UNIVERSITIES

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Abstract:

This paper examines achieving the new sustainable development goals, the role of scientific research in Nigerian universities. Development in any sector can only be achieved when challenges facing such sector are located and tackled. Sustainable development goals are birthed to address every problematic area of human life. Researches, especially scientific researches, fits into all these areas are medium through which solution can be preferred. This study examines the nature, classification, types and approaches of scientific research. It also laid bare the sustainable development goals, the importance and the roles scientific researches play in the achievement of the goals. Academics and professionals must know that education and research are explicitly recognized in all of the SDGs and that universities/tertiary institutions have a direct role in addressing the challenges therein. Higher education institutions (with academics and professionals on the driving seat) have a critical role to play in implementing and driving sustainable development initiatives through their institutional policies and practices. The government and non-governmental organisations needs to make good policy that will aimed at training and retraining of researchers to developed good and quality research skills in implementing the new sustainable development goals.

Keywords: scientific research, achieving, and sustainable development goals

1. Introduction

Research is the process of arriving at dependable solutions to problems through the planned and systematic collection, analysis and interpretation of data. Research is oriented towards the discovering of the relationships that exist among the phenomena of the world in which we live. Chikwe, Ogidi and Nwachukwu (2015) observed that research is the search for knowledge, truth, similarities and relationships, and the process

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of finding solutions to problems through the systematic collection, analysis and interpretation of data. Research is an activity that involves observation and description of the characteristic properties of objects or events for the purpose of discovering relationships between variables and developing generalization that may be used to predict future occurrences (Okeke, 2004). The processes of a research involve identification of problems, gathering new data, finding solution to a problem through carefully designed procedures and logical analysis. It is an intensive and extensive search for solutions to problems in a society. The problem could be in education, business, politics, etc. (Chikwe, Ogidi and Nwachukwu, 2015).

The term “research” is a wide range of concentrates intended to discover reactions to advantageous inquiries by methods for a deliberate and logical approach. Research capability and yield without a doubt fill in as main consideration of evaluating the maintainable improvement of the seventeen advancement objectives and its practicality as a stronghold of scholarly information. As an educative development apparatus, inquire about in higher organizations is equipped towards the evolvment of hypotheses controlling the standards and practices of training. Subsequently, examine fills in as a noteworthy fixing in accomplishing of feasible advancement objectives (Bello and Filade, 2015).

Sustainability has twisted into a global trendy expression as potential answer for some universal, native, and nearby issues challenging society today. As creating countries straggly with issues of overpopulation, sickness, and political fight, developing nations need to manage issues, for instance, foundation breakdown, pollution and unlimited urban extension with controlled assets (Vincent and Kenneth, 2014).

Fayomia, Okokpujia, Fayomc and Okolie (2019) stated that roughly twelve years back, the whole globe saw the beginning of another thousand years. While countries sorted as cutting edge social arrangements denoted the change from twentieth to 21st century with certifiable duty to positive improvement records, others, for the most part in sub-Saharan Africa, basically typified despicable wretchedness list; a state to a great extent characterized by deplorable disappointment of authority, poor administration framework, dishonest political tip top, lease looking for economy, asset revile discomfort, regulated defilement, wasteful open administration, expansive scale joblessness, ghastly physical foundation, deficient and rotted social offices, substantial outer obligation trouble, delicate government framework, slight legal, constricted law-making body, insensate official, battered outside picture, unavoidable neediness, maggot anticipation, monetary buccaneering, mind boggling and unwieldy equity organization, abnormal amounts of violations and revelry, additional legal killings, natural plunder, ‘army’ political gatherings, high maternal and new-born child mortality, over aggressive military, lethargic instructive framework, unnecessary police compel, damaged citizenry, and so on. The limitless rundown is symptomatic of a country, might be not fizzled or bombing, but rather clearly in interminable pain (Vincent and Kenneth, 2014). The verbal confrontation about the delicate fate of Nigeria is firmly identified with the disappointment of administration, provoking the 'sanctification' of Nigeria by areas of

the worldwide group, media, social liberties associations and separatist's bunches as 'a fizzled state, maverick state, or prebendal state'. These gatherings guarantee that Nigeria spells disappointment on all fronts; political, financial, social and goods (Ajiye, 2014).

Studies conducted to contribute to development in science are called science research, or scientific studies. The researcher is the person who conducts the research. He locates a problem area in the particular field he is working on, get information on what has been done on the topic by other researchers, locates the difference between his work and that of others on the topic, specifies the methodology to work with, come up with these findings after carrying out the research and proffers solution to the problem based on the result he gets. He generalizes the result and makes his contribution to the development in the field or area of the research focus. For medical researches, the results obtained are uses to diagnose, treat or applied to related cases on which the research is conducted. In other words, such research is to get the cause, the development, effects of diseases and discover methods of protecting and treating (therapeutic intervention) them

2. Statement of the Problem

Developing countries appreciate the significant roles that information generated in developed countries, and available through scientific research systems, can play in their development. Consequently, the impact of scientific research on scholarly communication is increasingly receiving research attention, particularly since the 1990s. Scientific research is seen to be transforming the way in which research is conducted in higher institutions across the world. Researchers in developed countries are now able to devise strategies, manipulate information in a new way, and study issues which previously would have been difficult to address owing to the variety of the data. They now have access to a variety of sources that they can manipulate, share and discuss with their colleagues all over the world through the use of ICT.

Year 2015 the benchmark for actualization of MDGs none of the Nigerian Universities is among the top 500 Universities of the world, as per Academic Ranking of World Universities, 2014. In Africa, the best Nigerian University is only the 20th in the continent. The primary role of research in universities is the transmission of knowledge, discovery of new findings, combined with the training of minds.

3. Literature Review

3.1 Sustainable Development

The concept of sustainable development emerged as a response to a growing concern about human society's impact on the natural environment. The concept of sustainable development was defined by the United Nations in 1987 by the Brundtland Commission (formally the World Commission on Environment and Development) as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*" (Brundtland, 1987; Abubakar, 2019). According to Nelvin (2018), "*this*

definition acknowledges that while development may be necessary to meet human needs and improve the quality of life, it must happen without depleting the capacity of the natural environment to meet present and future needs. The sustainable development movement has grown and campaigned on the basis that sustainability protects both the interests of future generations and the earth's capacity to regenerate. At first it emphasised the environment in development policies but, since 2002, has evolved to encompass social justice and the fight against poverty as key principles of sustainable development".

Abubakar (2019) observed that there are two commonly used visualisations of how the various aspects of sustainable development interact: one is of three overlapping circles representing the three pillars of sustainable development, these are, the economy, society and environment and in all of the overlapping circles, the academics and professionals in our universities and other tertiary institutions have distinctive prominent role in the teaching, training, researching, and implementation of all positive templates leading to the strategic attainment of sustainable development. Other expressions the economy embedded in society, which in turn is embedded in the environment. The final focuses on the vital role that the environment plays in human society and in turn on the economy.

Sustainable Development not only deals with environmental issues, but economic, social and cultural issues as well. Given the increased demands placed on societies and the environment due to, among other factors, increased human migration, increased urbanization and industrialization as well as the ongoing depletion of non-renewable resources, it is clear that global action is needed to create a more sustainable future (Abubakar, 2019). While an academic is a person who teaches or does development related researches at a college or university. As Nigeria and the global community marches towards achieving sustainable development with SDGs as the universal template consisting of identifiable goals laden with targets and indicators that are actionable, a quick reminder here will suffice that academics and professionals have a strategic role to play haven been positioned at the center of sustainable development (Bhowmik, Selim, and Huq, 2017). Education and research are explicitly recognized in a number of the SDGs and universities (tertiary institutions) have a direct role in addressing these (quest for sustainable development). However, the contribution of universities (tertiary institutions) to the SDGs (sustainable development) is much broader, as they can support the implementation of every one of the SDGs as well as the implementation of the SDG framework itself. Some of these main areas of contribution are learning and teaching, research and external leadership. Underlaps agreed is the fact that academics and professionals of higher institutions in Nigeria and elsewhere are consistently rethinking and realigning their role to be more responsive towards societal needs especially at the turn of the millennium and more so now with the launching of the sustainable development goals (SDGs) in 2015.

With reference to the role of academics and professionals, Castells opined that *"universities have been found to be hubs of economic activities"*. According to Hill (2006), universities have played a key role in the process of economic development as both a

source of new knowledge and a trainer of scientists and engineers who work in industrial laboratories and human societies. In fact, through the instrumentality of academics and professionals of tertiary institutions, Castells stressed core functions aside TRACS (Teaching, Research and Community Service) to list that;

- Universities create jobs and offer training and education for local residents;
- Most support local businesses through the procurement of goods and services;
- Some advance community development through real estate projects, educational infrastructure;
- others facilitate community service projects that have an economic component; and
- Nearly all partner with government and civic groups to strengthen the economic health of the community.

Sustainable development is defined as the development that meets the needs of the present without compromising the ability of future generation to meet their own needs (Shah, 2008). The needs include material, values, relationships, freedom to think, act spiritual living. The United Nation Conference on sustainable development came up with 17 sustainable development goals which were birthed from the millennium development goals in 2012. (United Nations (UN), 2016). The 17 goals are to:

- 1) End poverty in all its forms everywhere.
- 2) End hunger, achieve food security and improved nutrition, and promote sustainable agriculture.
- 3) Ensure healthy lives and promote wellbeing for all at all ages.
- 4) Ensure inclusive and equitable quality education and promote life-long learning opportunities for all.
- 5) Achieve gender equality and empower all women and girls.
- 6) Ensure availability and sustainable management of water and sanitation for all.
- 7) Ensure access to affordable, reliable, sustainable and modern energy for all.
- 8) Promote sustained, inclusive and sustainable economic growth full and productive employment, and decent work for all.
- 9) Build resilient infrastructure, promote inclusive and sustainable industrialization and foster motivation.
- 10) Reduce inequality within and among countries.
- 11) Make cities and human settlements inclusive, safe, resilient and sustainable.
- 12) Ensure sustainable consumption and productive patterns.
- 13) Take urgent action to combat climate change and its impacts.
- 14) Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- 15) Protect, restore and promote sustainable use of terrestrial ecosystem, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss.
- 16) Achieve peaceful and inclusive societies, rule of law, effective and capable institutions.

17) Strengthen means of implementation and revitalize the global partnership for sustainable development.

Sustainable development is very important as it saves National budget, fulfills the needs of people, conserves natural resources, helps in the coordination between the natural resources and people and conserves natural resources for future generation. It is carefully worked for the short and long term benefits for people, planet and prosperity. The three pillars of sustainable development are economic growth, environmental stewardship and social inclusion. These cut across all sectors of development from urbanization of cities to agriculture, infrastructure, energy development energy use, water, transportation.

3.2 Academics and Sustainable Development in Nigeria

Academics are the most strategic resources of the universities and other tertiary institutions. Also responsible for the growth and development of different categories of professionals required to facilitate the realization of development aspirations of modern societies. Development agenda of societies and develop strategies are set for the actualization of various development frameworks. Academics in Nigeria are well aware of the urgency for the provision of high-level manpower, particularly in science, technology and humanities generally that could facilitate the process of industrial growth and development of the immediate environment and the nation at large. It's no doubt that global economy is knowledge driven and that academics and professionals have been the drivers of modern economies, the world over. One of the major preconditions for sustainable human development is a functional educational system. It provides for the necessary frameworks, determines the appropriate policies, initiates relevant projects and above all sets the required standards for the evolution of a viable educational culture within which the pace of development of a society is anchored. Thus, a functional educational system provides for the establishment of different educational institutions designed for the provision of training opportunities to different categories of people. For instance, basic, post-basic and higher educational institutions have different mandates but interconnected for the realization of high-quality manpower and relevant knowledge for transformation of societies. Therefore, the quality of production and distribution of goods and services is influenced greatly by research and innovations, which is knowledge based and consistently updated to cope with the dynamic nature of human environment. It is in line with these dynamics that societies in modern times crave for higher institutions to facilitate the production and dissemination of more specialized knowledge across sectors of the economy and society for sustainable economic growth and development, political stability, peaceful co-existence and the preservation of humanity. It is in the light of this that Nigeria in recent past has seen the rise in the number of tertiary institutions, particularly specialized colleges, polytechnics and universities established by federal and state governments as well as private entrepreneurs in order to catch up with the development trends in the world.

3.3 Access and Sustainable Development

According to UNESCO (2019), Education for Sustainable Development (ESD) *“empowers people to change the way they think and work towards a sustainable future”*. This implies access to good-quality education available at every stage of life. Educating students on the necessity of sustainable development by integrating sustainable development issues into all aspects of teaching, research and service. This implies reorienting the education system at all levels to help people think and behave in ways that foster a more sustainable planet (for example, global citizenship, recycling, climate change, biodiversity, renewable energy and social responsibility).

Blessinger, Sengupta and Makhanya (2018) stated that *“in practice, it means equipping students with the requisite knowledge, skills, attitudes and values to create a sustainable future. To that end, students should cultivate critical and creative thinking skills, engage in authentic interdisciplinary learning activities and develop a value system that emphasizes responsibility to self, others and the planet.”*

Thus, scientific research for sustainable development and the UN Sustainable Development Goals (SDGs) go hand in hand. Indeed, an increasing number of universities are offering degree and certificate programmes in sustainable development. According to Blessinger (2018), through good-quality education and lifelong learning that people are equipped with the requisite knowledge and skills needed to address a sustainable future, education becomes paramount in achieving all the SDGs. Higher education institutions (with academics and professionals on the driving seat) have a critical role to play in implementing and driving sustainable development initiatives through their institutional policies and practices. One of the key questions to be addressed is: what can higher education leaders, faculty and students do to implement sustainable development in their institutional vision, mission and values statements, their strategic plans and their organizational culture?

3.4 Strategic contribution by Academics to the SDGs for sustainable development

3.4.1 Strategic Messages

- Academics and professionals MUST KNOW that education and research are explicitly recognized in all of the SDGs and that universities/tertiary institutions have a direct role in addressing the challenges therein
- Pertinent to stress here that universities/tertiary institutions manned by academics and professionals holds a position of neutrality, trust, and uncompromising stakeholders within society. They have a fundamental role in educating and sensitizing the public on the need to pursue sustainable development with the SDGs as the center of gravity
- The SDGs as blue print for sustainable development requires domestication to suit Nigeria’s peculiarities hence universities/tertiary institutions through their extensive research engagement and activities assumes a strategic role in providing the much-needed knowledge, evidence-based research, sustainable solutions and

concrete innovations to propel and support the actualization of SDGs while academics and professionals serve as catalysts.

- The quest for sustainable development provides a unique opportunity for academics and professionals in universities/tertiary institutions to demonstrate their willingness and capacity of playing active and strategic role in the development of Nigeria and by extension the world.

As catalysts and as well engines for the production of knowledge, academicians and professionals in tertiary institutions as posited by Sampson, (2004) *“have been known for connecting knowledge creators with knowledge commercializers through technology incubators, entrepreneurial development curricula and nurturing relationships with community-based venture funds”*.

Academic and professionals can contribute towards achieving sustainable development in Nigeria and elsewhere through the following strategic openings:

- 1) **Research:** research on the prospects and challenges of achieving the SDGs for sustainable development; multidisciplinary to interdisciplinary and trans disciplinary researches; industry, innovations and sustainable solutions.
- 2) **Education:** education for sustainable development; Jobs for implementing the SDGs aiming sustainable development, and capacity building; mobilizing young people particularly making reference to the concept of “Graduate Rapid Entrepreneurial Employment of Nigerians (GREEN)” on the need to declare youth unemployment as a national emergency in Nigeria if achieving sustainable development is the goal and target (Yahaya and Galadima, 2015).
- 3) **External leadership:** strategic and public engagement by the academics and professionals; cross-sectorial dialogue and action, policy development and advocacy; aligning governance and operations with the SDGs towards achieving sustainable development: Greenspan (2004) observed *“Our system of higher education bears an important responsibility for ensuring that our workforce is prepared for the demands of economic change. America’s reputation as the world’s leader in higher education is grounded in the ability of these versatile institutions to serve the practical needs of the economy by teaching and training, and more significantly, by unleashing the creative thinking that moves our economy forward”*.

3.4.2 Nature of Scientific Research

Science is all about finding or searching thing out. So, the nature of scientific research is discovering new things in science, writing about them and allowing others to criticize or point out the mistakes. It is the systematic investigation of scientific hypothesis and theories. Hypotheses are guesses scientists makes in the course of finding out carrying out thing. The guesses are subjected to experimentation to confirm whether they are right or not. Scientific theories are well confirmed type of explanation of nature, made in a consistent way with scientific methods. They are the most reliable, rigorous and comprehensive form of science knowledge. The need to find them out or explain them the essence of scientific research. Research hypothesize about the word around us but

more often and useful on drugs that can be used to treat ailments. Scientific research is without prejudice that is you can either believe what the researchers say or find out whether he is right or not. It is falsifiable, scientific research are logical, objective and testable (Wikipedia, 2020).

3.4.3 Classification of Scientific Research

Scientific research can be classified based on:

1. Methods of data collect: observational or experimental.
2. Relationships with time/time factor: retrospective, prospective or cross-sectional.
3. Application medium – clinical, laboratory, social descriptive research
4. The causes – descriptive or analytical:
 - a) It is descriptive:
 - case series
 - surveillance studies
 - b) Analytical features:
 - observational studies (cohort, case control and cross- sectional research)
 - interventional research (quazi-exptal, clinical research)

3.4.3.1 Methods of data collection

- a) observational research: this is a type of correctional research in which a researcher observes an on-going behavior.
- b) experimental research: this is a study that strictly adheres to a scientific research design. It includes hypothesis, variable and it's done in a controlled environment

3.4.3.2 Researches based on relationship with time

- a) retrospective research: this examines exposures to suspected risks in relation to an outcome that is established at the start of the study.
- b) prospective research: this is a study design in which the documentation of the present or absence of an exposure of interest is done preceding the onset of the condition being studied.
- c) cross section: study analyzes data of variable collected at one given point in time across a sample population or a pre-defined subset.

3.4.3.3 Research based on application medium

- a) clinical researches: these are components of medical and health research intended to produce knowledge valuable for understanding human diseases, preventing and treating illness and promoting health
- b) laboratory researches: these are highly controlled investigations in which the researcher manipulate the particular factor under study to determine if it generates a change in the subjects
- c) social descriptive research: these are used to describe the characteristics of a population being stupid.

3.4.3.4 Research based on causes

- a) descriptive research: this investigates the spread of disease as in the society at particular time. there are case series, surveillance studies and case report
- b) analytical researches: these focus on understanding the cause effect relationships between two or more variables

3.4.3.5 Researches based on their descriptive feature or analytical feature

- a) for descriptive feature
 - case series: these describes case that are repetitive and having common features
 - surveillance studies: these are result obtained from the data of a health case that has been following for a period of time
 - case report: this is examining single cases of different qualities is the society.
- b) analytical researches: here, groups are compared observational and intervention research comes under this group. It could be cohort, case control and cross-sectional studies.
 - Cohort studies are those where a group of patients having same characteristics are followed up in time e.g. comparing the academic performance of children who had been exposed to the same treatment at a particular time of their life. There could be prospective cohort study or retrospective cohort study.
 - Clinical Studies are to evaluate drugs, device, surgical for the treatment of a disease or syndrome. It could also be comparison of one or more applications, identifying a disease and preventing their recurrence. Clinical Studies are conducted by diligent researches, mostly medical personnel forming research team. It could be conducted in University, hospitals, clinics etc. and financed by drug companies, health care institutes, medical centres and physician. It is the most valuable study in scientific research.

3.5 Types of Scientific Research

Basic types of researches are:

- 1) Descriptive,
- 2) Applied,
- 3) Quantitative,
- 4) Qualitative,
- 5) Conceptual,
- 6) Empirical.

Descriptive research discovers different types of inquiries, presenting conditions as they are:

- a) Applied research proffer solution to urgent issues faced by the public,
- b) Quantitative research deals with amount or estimation,
- c) Qualitative research focuses on the quality,
- d) Conceptual identified with abstract ideas,
- e) Empirical has to do with perception.

3.6 Research Approach

There are two approaches to scientific research: qualitative approach and quantitative approach.

- 1) Qualitative research concentrates in the test of attitude.
- 2) Quantitative research generates quantifiable dates to be analyzed quantitatively in a formal way.

4. The Role of Scientific Research in Attaining the New Sustainable Development Goals

The world is discovered and formed through research. Research assists in understanding the most difficult social issues like environmental change, human right and avoidance of malady, social varieties. It solves many operational problems in business and industry sector and across all fields of human endeavour.

The SDG are aimed at solving human problems and making the world a better place to live in; hence researches into all involved sectors provide and promote the processes development of every sector as all opportunities and possibility to expand and progress will be exploited and the findings will be applied to real-life problem of different scenario in the organizations, institutions, industries and society. The sustainable development goals were collected to address human's generic problems to eradicate poverty, raise the standards of living of people, sustain and improve the ecosystem. The results or conclusions from quality research on all these will assist the policy makers in taking the right decisions as individual and groups, New scientific knowledge can only be derived from scientific research, from which new application are derived to solve problems in all areas of human endeavours, thereby achieving the sustainable development goals. Result from scientific researches proffer solutions and sustain developments or growths recorded in all the areas.

4.1 Policies Making Challenges of Nigeria Researcher

All over the world the exchange and capital streams add to long haul monetary development and improvement and give an establishment to accomplishing ecological and social objectives. Whenever exchange and speculation approaches and ecological and social strategies are commonly strong, the commitment of each to reasonable advancement is upgraded. OECD nations ought to strengthen this lucidness, both in their local courses of action and in universal transactions. Developing in a way that is ecologically and socially maintainable, creating nations require enhanced access to OECD markets and dynamic help from OECD nations for their ability building endeavors.

Fortify cognizance among exchange, speculation, ecological, and social strategies by:

- Reforming residential approaches that are both exchange mutilating and ecologically harming.

- Assessing the ecological and social effects of exchange and venture progression and of motivating force measures went for pulling in remote direct speculation and creating or refining appropriate philosophies to this end.
- Developing reasonable methodologies for guaranteeing that exchange and speculation disciplines and natural and social strategy instruments remain commonly strong.
- Encouraging the utilization of natural and social sets of accepted rules in the private part; giving a strong administrative and institutional structure for private division movement; and advancing mindfulness and successful execution of OECD instruments managing multinational endeavours, corporate administration, and pay off.

Bolster openings and capacities with respect to creating nations to develop in a way that strengthens natural insurance and social improvement by:

- Increasing market access for creating nations, particularly in areas where supportable improvement is probably going to profit most from financial progression.
- Reviewing monetary and natural strategies from the point of view of the objective of neediness lessening.
- Promoting usage of the universal improvement objectives reflected in the DAC Report "Molding the 21st Century: The Contribution of Development Co-task". In moving in the direction of these objectives, most OECD nations are guided by the generally acknowledged focus of 0.7% of GNP as a fitting goal for ODA levels.
- Continuing to enable the poorest nations to enhance their ability to partake in the practical advancement of the worldwide economy. This incorporates building up the arrangement and institutional systems expected to pull in private capital streams to those nations, while limiting unfriendly ecological or social effects related with such streams and giving fitting help to innovation co-task.
- Where improvement co-task assets are utilized to help the arrangement of worldwide open merchandise (for example environmental change), concentrating on those exercises that have clear neighborhood advantages, and which additionally create auxiliary advantages at the local and worldwide levels.

4.2 Challenges in Terms of Funds Faced by Nigeria Researcher

The bleeding edge expert has a combination of options open with a particular ultimate objective to assemble data from individuals. Standard eye to eye interviews remains prominent, imaginative correspondence developments, for instance, inspectors have empowered new techniques for correspondence. Potential research masses have ended up being dynamically geologically scattered, mechanical types of progress and programming have made granting over extensive detachments more possible. Investigate is never again limited to eye to eye open individuals, as online procedures have urged access to overall research individuals (Adenipekun, 2013).

In subsidizing of Nigerian institutions had deteriorated and the impacts had stayed smothering for institution managers, which were prompted absence of responsibility, misuse of open assets, inefficient expenditure, debasement and removal of needs (Onyeonoru, 2002). Contrasted with other creating nations in Africa through increment in instructive expenditure, Nigeria has kept up a little level of financial portion to training. The rate extent of real to planned use was just about 100% in Zimbabwe from 1990 to 1993 individually. This was trailed by Kenya having 90.1% in 1990 and increases to 94% in 1993 to 1995 respectively.

The previous politically-sanctioned racial segregation South Africa likewise expanded its genuine to spending use from just about 90% of every 1990 to 94% out of 1995. Nigeria in actuality performed nearly more awful than these different nations as well as its proportion of genuine to spending use on training really deteriorated from 85% in 2016 to 77% in 2017 to 2019 separately (UNESCO, record Yearbook, 2019). World Bank (2019) observed that the instructive expenditure in Botswana, ascended from 6.0% in 2016, and increases 10.4% in 2018; Ivory Coast from 7.2% in 2016 also increases to 7.7% of every 2018; Ghana from 3.1% to 3.3% from 2016 to 2018; Kenya from 6.0% to 7.1% from 2016 to 2018; and South Africa from 6.0% to 7.9% from 2016 to 2018. On account of Nigeria instructive expenditure nose-plunged from 6.0% to 1.2% from 2016 to 2018 and in this manner declined relentlessly to a grim 0.9% since 2018. Due to the above situation, the unexpected issue of the mind networks, modern strikes and decrease in registration for graduate examinations in the run is no longer a special case in Nigerian colleges today. Today the Nigerian college framework keeps on affliction from scholarly discharge made by the issue of mind deplete (Fayomia, Okokpujia, Fayomc and Okolie, 2019).

According to Fayomia, Okokpujia, Fayomc and Okolie (2019), ramifications of this improvement are that in view of migration of innovative know-how, the economy cannot be developed. Numerous great understudies who likely would have selected for graduate courses in the basic controls to advance the essential social ability in Nigeria have no educators to direct their investigations. Subsequently, the truly necessary scholarly limit with regards to the future can't be manufactured. Once more, this issue of declining accounts to the colleges is unavoidable everywhere throughout the African mainland. According to the ADB distributed give an account of African Development Indicators, the association infers that the accomplishments of African colleges are compelled by poor financing with regards to rising asset prerequisites and heightening swelling. This circumstance additionally clarifies some portion of the human investment departure from the landmass (African Development Bank (ADB), 1998). Second is the of instructor/understudy proportion.

UNESCO (2019) reviewed that the proportion of 1:8 for Kenya and Zimbabwe, while Ethiopia, (1:18), Nigeria, (1:19) and South Africa (1:28.5). Utilizing the above proportions as markers of fragment of the duties of college instructors for the five African nations, it ends up clear that the normal college teacher in Ethiopia, Nigeria and South Africa worries about substantially heavier concern than his partner in Kenya or Zimbabwe. For instance, of Nigeria may even be more regrettable on account of the

requirements under which the scholarly staff in this nation is compelled to work (Chikwe, Ogidi and Nwachukwu, 2015). Thus, several authors presume that the nature of graduates is poor to the point that their effect on the nationwide economy as far as profitability is for the most part beneath the compulsory standard for a creating economy. Because of absence of competent scholarly staff, the registration for graduate examinations has likewise deteriorated.

Few teachers really lecture at least two courses or more than that in a semester. Far more detestable, numerous speakers instruct for a long time with sub-doctorate degrees. The Nigerians colleges can never again draw in youthful brilliant personalities. The rein of veteran's well-past retirement-age instructors tying down the framework. Third, the effect of the monetary change program on the colleges has been extremely grave. The human investment that is lost from the colleges has been connected in different segments of the budget (Chikwe, Ogidi and Nwachukwu, 2015). The teachers who left the colleges have received various procedures to adjust to the effect of the change. As a gathering of experts, with their exchange association the Academic Staff of Union of Universities (ASUU), communicated sentiments of distance and hardship. They have regularly set out on modern strikes which have influenced the lives of their understudies. These strikes have been over issues of pay rates, incidental advantages, work fulfilment and self-completion.

The consequences of the examination uncover that the most well-known imperatives impeding scientists from development and survival in Nigeria are absence of money related help, poor administration, defilement, absence of preparing and experience, poor foundation, inadequate benefits, and low interest for item and administrations (Chikwe, Ogidi and Nwachukwu, 2015).

5. Conclusion

Research, development and innovation is a great tool for any nations in engineering its economic and social development. Common concern of all countries for science and scientific research appears as a recognition of their role in ensuring the welfare of human civilization. The level of society development is determined mainly by performance of its education and research systems, educational level of its citizens, the quality of research activity products and equitable access of all potential users to the services and products of these systems.

The continuous challenges of scientific based research in Nigerian higher education system is inundated with limit its capacity to accelerate the achievement of the new SDGs. It is business as usual because there is no research orientation to achieve the new SDGs. The Universities are also not prepared to review the curriculum for the achievement of the SDGs and besides the strategic plans are yet to be developed as a framework of action for the achievement of the SDGs. The three pillars of sustainable development – economic growth, social inclusion and environmental stewardship cut across all sectors of development, most of which are scientific in nature, Development in

any scientific field or area can only be accomplished through scientific researches which locate the problematic area and come up with solutions. Hence, building a knowledge-based society in addressing the sustainable development goals to ensure the prompt accomplishments of these goals quality scientific researches is needed at different institutions of learning in Nigeria.

5.1 Recommendations

From the above, the reviews the study drawn the following recommendation;

- The government and non-governmental organisations needs to make good policy that will aimed at training and retraining of researchers to developed good and quality research skills in implementing the new sustainable development goals,
- The need for paradigm shift, both in terms of curriculum development and strategic thinking, plan and action to revolutionize and reconstruct the University system for it to escape from its inherited heavily-biased theoretical disposition and isolationist tendencies,
- Provision of equipment and technology for researchers to use in carrying out proposed research duties in Nigerian university for a better society and development,
- government and non-governmental organisations should put in place facilities that will enable fast and good result in all conducted research programmes, and
- Funding of all existing and ongoing research in this country must be prioritised at all Nigerian universities. Research grants should also be made available for both staff and students.

Conflict of Interest Statement

The authors declare no conflicts of interests.

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