



## ATTAINING SUSTAINABLE DEVELOPMENT THROUGH THE TEACHING OF SECONDARY SCHOOL GEOGRAPHY IN NIGERIA

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### ABSTRACT

*This study examined ways in which geographical knowledge through the teaching of senior secondary school Geography has succeeded in the attainment of sustainable development goals set for the country. The article made use of secondary data which was sourced from print materials and online publications to evaluate the present SDG period in Nigeria, how far and how well their set target has been met, and ways in which they can be met before the 2030 expiration period. The study observed that in the last few decades, there have been countless debates on the role of both natural and man-made variables in creating and perpetuating unequal access to environmental resources and how all these impact the countries' sustainable development. The study recommends the teaching of Geography should focus more on the management of the country's resources, good governance, committed and dedicated followership, adequate security and prioritizing of goals according to the country's needs.*

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## 1. Introduction

The new senior secondary education Geography curriculum was developed by the Nigerian Educational Research and Development Council (NERDC) to be used in Senior Secondary schools in Nigeria. The curriculum was developed most importantly in line with the Millennium Development Goals (MDGs) and compliance with the National Economic Empowerment and Development Strategies (NEEDS). Almost immediately after the expiration of the MDGs era, the Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by the United Nations in 2015 as a universal call to action to specifically put an end to global poverty, protect the planet (which is a geographical function), and ensure that by 2030 people everywhere enjoy peace and prosperity.

Geography as a school subject teaches almost every sphere of man's life and his environment, and hence it is said to occupy an enviable position between the natural sciences, humanities, and the social sciences. However, the teaching of Geography in Nigeria remains a very difficult issue mainly because of its wide scope, content, and depth. Furthermore, the 6-3-3-4 system of education whose aim is to improve the technological development of the country represents a cogent factor that will affect what

and how Geography is taught in schools. (Ayeni 1988).

The issue of development in the 21<sup>st</sup> century has become a haphazard phenomenon, particularly in Nigeria and in the world in general, and it is measured by parameters such as level of poverty, effects of climate change, food production and security, corruption, unemployment, and lopsided incomes which continue to be on the increase. The main goal of development is the improvement of the standard of living of humans and the advancement of societies economically, socially and politically. Therefore, development is not purely an economic phenomenon but rather a multi-dimensional process involving re-organization and re-orientation of entire economic and social systems.

Geographic knowledge though dynamic and constantly changing in nature has been able to grow around a core of certain themes and issues that are hinged on the achievement of, first the millennium development goals and then subsequently, the sustainable development goals. There is therefore needed to educate both geographers and non-geographers alike not only on what constitutes the core of Geography but also on how the subject can achieve those goals that will bring about solutions to the country's national development problems. The issue of underdevelopment or slow rate of development in Nigeria is indeed a paradox considering its generally poor state in comparison with the available vast natural and human resources (Oshewolo, 2010). The richly endowed country called Nigeria, which was once one of the wealthiest 50 countries in the world in the 1970s (in the days of the oil boom), has gradually retrogressed and is now among the poorest, most mismanaged, and most corrupt countries in the twenty-first century. This study is therefore aimed at examining the interrelated issues of sustainable development goals, geographic knowledge and the teaching of senior secondary school Geography.

## **2. Objectives of the Study**

The purpose of the study was to:

1. determine ways in which sustainable development goals set for the country can be attained through the teaching of Geography in the senior secondary schools in Nigeria; and
2. how far well the set targets have been met and ways in which they can be met before the 2030 expiration period?

### **3. Geography as a Senior Secondary School Subject in Nigeria**

Geography as a school subject was first introduced in secondary school curricula sometime in the early 1960s, not too long after its introduction as a course of study/academic subject in the then University College Ibadan in 1948 when the Department of Geography was established to train geographers. Since then, there have been rapid changes in both philosophical orientation and the context of the discipline.

Geography education was introduced in the Nigerian School Curriculum as part of the instrument for achieving national development (National Policy on Education, 2013). This was what informed its designation as part of the core curriculum at different levels of education upon its introduction. Geography education curriculum development agencies such as the Nigerian Educational Research and Development Council (NERDC) and experts further identified and disseminated the curriculum goals or purposes of the subject in the school curriculum. These include citizenship education, reflective inquiry and Geography education, (Barth-shermis, 1920; Barth-Norris, 1976; Dubey and Barth, 1980; Olawepo, 1984, cited in Durokifa & Moshood, 2016) among others. Hence it is the function of Geographers to seek to know where things (mostly material resources) are located on the surface of the earth, why they are located where they are, how they come to be located where they are, how places differ from one another and the differentiating factors, and how people interact with the environment.

Geography is one of the most important subjects we can teach our children today, to prepare them for the major challenges facing not only their immediate society but societies around the world. These problems include illness/diseases, hunger, poverty, environmental degradation, and unsustainable use of natural resources. Also, there exists the problems of insecurity and violent conflict rooted in cultural, ethnic, and religious differences. There is therefore hardly any problem Nigeria faces today that the teaching and learning of Geography cannot provide critical insight into. Geography plays a crucial role in the education of Nigerian children and youths as well as in the future of our democracy as a nation. Also, Geography Education promotes interdisciplinary thinking. Students who understand and apply geographic concepts enhance their critical thinking skills and make connections more easily in all other subject areas. Therefore, what obtains today of using Social Studies as a foundation for Geography Education or as a substitute in Primary Schools and Junior Secondary Schools is not in the best interest of Nigerian students. It will do us no harm as a people if the teaching of Geography is reintroduced in Primary and Junior Secondary Schools even if Social Studies is retained (Halliru, 2014).

According to Akinwunmi (2008) Quality education vastly increases the productivity and potential of individuals and by extension, the societies of which they are part. Enhancing access to education is an important strategy for confronting many challenges facing Nigeria today as a result of decline in the economic activities since the early 1980s. Hence, education in Nigeria faces enormous problems in

such a way that there are significant deficits in affordable access to the staggering educational system in place.

Geography is one of the school subjects which is widely recognized as essential in making students appreciate their environment in general, as well as how they are to live peacefully within it and improve it. When one considers the highly interdisciplinary nature of the subject and the study of space and place as we have it in Geography, it gives a variety of interrelated topics such as economics, health, climate, plants and animals. It is also a very appropriate perspective to consider more complex issues such as sustainable development, that involve economic, social, and environmental dimensions at the same time. Geographic learning can therefore be used for sustainable development to help make a difference in a national community like Nigeria and for planet earth as a whole. Geography is regarded as the science of sustainability, and hence it has an increasingly important role to play in developing the knowledge and the skills to equip future generations with the tools to adapt to and mitigate potentially catastrophic global environmental change (Granados-Sanchez, 2011).

#### **4. The changing nature of Geographic knowledge**

In the last few decades, there have been so many changes in not only the nature of Geography itself but like Geographic knowledge. Geography as a school subject has experienced some major changes over the years. Hence most countries have already recognized the dependence of their social, cultural, and environmental development on their geographical studies much as one could, therefore, normally expect decades after independence that the foundation for Geography should have been well laid in Nigeria, but the truth is that the foundation not only remains rickety but is crumbling (Afolabi, 1978). Geography is relegated to the background while History, Social Studies, Government, and Civic Education are being projected in the primary, junior and senior secondary schools of the current 6-3-3-4 educational system.

Geography over the years has undergone so many changes in its approach and content. Today the discipline is not only concerned with descriptions but also with analysis as well as prediction of future events. Also, the earth's surface and consequently man's environment are generally ever-changing. Many geographical features result from the decision-making process by different countries and institutions at a particular point in time. Today, all over the world, there are problems related to providing food and security, health, effective energy use and environmental conservation mostly of resources. Equally important are equality issues and sustainable development. All these can be achieved when man uses available resources in sustainable ways. The study of Geography is, therefore, necessary to learn more about environmental processes and to understand how land use planning can help us to

overcome problems. Geographical thinking and concepts affect our daily decisions in so many ways; for example, it is important to understand the physical structure and terrain, prevailing climatic conditions and availabilities of resources in each area to maximize their use for sustainable development.

### **5. The transition from Millennium Development to Sustainable Development**

The word development has over the years managed to change and vary in meaning depending on the context in which it is being used especially among the nations of the world. Therefore, the whole essence of development is to enhance advancement and improvement that is reflective of individuals, and the political, economic, social, and cultural aspects of the state (Durokifa, & Moshood, 2016).

The Millennium Development Goals or MDGs came about in September 2000 when 189 Heads of state (Nigeria being one of them) adopted the United Nations Millennium Declaration because of the increasing rate of hunger and poverty in the underdeveloped, and low-developing countries of the world. This declaration was developed into a fifteen-year working document which was expected to be achieved by the year 2015. There were eight-millennium development goals (MDGs) in all, based on an agreement made at the United Nations conference sometime in the 1990s which represented commitments from both developed and developing countries. It is however quite unfortunate that at the end of the stipulated fifteen-year period, even though many countries made progress towards achieving the Millennium Development Goals (MDGs), many more lagged. The MDGs were relatively successful and achieved in Sub-Saharan Africa where many countries recorded accelerated progress. For example, in Rwanda, poverty reduced drastically from 78% to 44.9% in 2003 with the help of MDGs-induced policies (Sangado, et al, 2003, cited in Durokifa, & Moshood, 2016).

The term ‘Sustainable development’ on the other hand, simply refers to development that is ongoing or that can be maintained without it having any negative or detrimental effect on the future. It is that development that takes place in each nation-state where the current needs of the people are met with the available resources without those needs and resources having any negative effects on the future needs of the same people, i.e. it is the development that meets the needs of the present without compromising the ability of the future generations to meet their own needs.

Sustainable development Goals (SDGs) were developed to succeed the MDGs by reiterating questions such as, how well did MDGs perform in developing countries? Where are the aims of the MDGs met? If MDGs struggle to achieve 8 goals, how possible and easily will SDGs 17 goals be realized? It is clear from all studies carried out, and all reports submitted that although the MDG era of fifteen years in Nigeria recorded slight progress with regards to targeted goals, it did not meet the required plausible

targets. Therefore, sustainable development goals were introduced or launched in September 2015 almost immediately after the expiration of the MDGs and started operation in 2016 to try to continue from where the MDGs stopped. The SDGs project comprises 17 targets to improve livelihood, ensure the stability of the economy and environment, and protect the planet for future generations (Sachs, 2012; Emas, 2015:2-3; Waziri, 2015, cited in Durokifa & Moshood, 2016).

According to Adedayo (2014), In recent decades, sustainable development, also known as sustainable well-being, has been widely embraced by both developed and developing countries as a positive alternative model of development for achieving a balance between the environment and other elements of human needs and rights with economic growth and development. The Sustainable Development Goals are a global call to action to end poverty, protect the earth's environment and climate, and ensure that people everywhere can enjoy peace and prosperity. They are as follows:

- 1) End poverty in all ramifications
- 2) End hunger, food security and promote sustainable agriculture
- 3) Good Health and Wellbeing
- 4) **Quality Education and life-long opportunities**
- 5) Gender Equality and Women's empowerment
- 6) **Clean Water and Sanitation for all**
- 7) **Accessible, Affordable, Reliable and Sustainable energy for all**
- 8) Promote Decent Work and Economic Growth
- 9) Promote sustainable industrialization
- 10) Reduce Inequalities within and among countries
- 11) Build inclusive safe and sustainable cities and communities
- 12) Promote sustainable consumption and production pattern
- 13) **Urgent action to address Climate Change**
- 14) **Conservative and Sustainable use of marine resources, oceans and seas**
- 15) **Protect, Restore and Promote terrestrial ecosystem and halt biodiversity loss.**
- 16) Promote peaceful and inclusive society, rule of law, effective and accountable society while ensuring sustainable development
- 17) Strengthen means of implementation and global partnership for sustainable development.

Although these 17 SDGs are integrated and interrelated, they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability. These SDGs are a broader version of the MDGs and according to Waziri, 2015, cited in Durokifa & Mosood 2016, the attainment of SDGs will free the human race from want, and secure the

planet for the present and yet to come generations. SDGs according to Ilcan and Phillips, (2010); Saith, (2006); cited in Nightingale (2018) reshape how development practice is done and more nefariously, how we imagine the world ought to be, distilled into numeric form.

The SDGs which is an inclusive developmental plan focus on six essential elements: **human dignity, human advancement, planet warmth**, prosperity, developmental partnership, justice and equity. These elements just like MDGs aim to end extreme poverty anywhere and everywhere, transform lives, **improve the planet** and promote socio-economic development (Ihejirika, 2015, cited in Durokifa & Moshood, 2016). Out of the six elements mentioned, the first three can conveniently be achieved through the teaching of Geography in the Nigerian Senior Secondary school. The four pillars of sustainability therefore are; Human, Social, Economic and Environmental, all of which have some geographical undertone.

The SDGs have undergone serious criticisms, in particular, on the large number of goals and targets, which are viewed as too complex to communicate to the public or drive policy, and too ambitious, universal, and absolute to be successful (Langford, 2016; cited in Liverman, 2018). Others focus on the contradictory nature of many of the goals, suggesting that the growth goals cannot be met without sacrificing many of the environmental ones or that sustainability cannot be achieved under the current economic model of capitalism (Hickel, 2015a; cited in Liverman, 2018). One of the objectives of the Sustainable Development Goals is to end poverty in all its forms by 2030. However, the continuous increase in poverty level has generated a lot of debates among policymakers and scholars while the government keeps formulating policies to avert the situation. It is however quite unfortunate that the geographical context of Nigeria and its likely path to sustainable development is still lined with so many obstacles and contradictions.

According to Liverman (2018), Many of the SDGs focus directly on the environment, including biodiversity and ecosystems, climate change, & oceans, while others focus on the main forces driving environmental degradation including energy & water use, food production, consumption, and urbanization; all these are geographical concepts found in Geographical knowledge. Also, climate change which is a geographical phenomenon is presently affecting every country on every continent. It is disrupting national economies and affecting lives, costing people, communities and countries dearly today and will likely do even more tomorrow. It is therefore very pertinent to include its teaching and learning in the school curriculum through the teaching of Geography.

People are experiencing the significant impacts of climate change all over the world, which include changing weather patterns, rising sea levels, and more extreme weather events such as flooding, earthquakes and hurricanes. The damaging effects of greenhouse gas emissions from avoidable human

activities are driving climate change and continue to rise to uncontrollable levels. Without action, the world's average surface temperature is projected to rise over the 21st century and is likely to surpass 3 degrees Celsius, with some areas of the world expected to warm up even more over the years. Also, deforestation and desertification caused by human activities and climate change pose major challenges to sustainable development and have affected the lives and livelihoods of millions of people in the fight against poverty. Unfortunately, the poorest and most vulnerable people found mostly in developing and underdeveloped countries are being affected the most by all these changes hence the need for the citizens to be educated in mitigating climate change.

In more developed countries of the world such as the United Kingdom, China, United States of America etc., affordable, scalable solutions are now available to ensure cleaner, safer, and more resilient economies and environments. Some of the solutions provided include; renewable energy and a range of other measures that will reduce emissions, management of forests and reduction of desertification, pollution control etc.

Goal 13 is the most important SDG to Geographers (to be taught under the Geography curriculum) as it is that goal to take urgent action to combat climate change and its impacts, and it has five major targets that include; strengthening resilience and adaptive capacity to climate-related hazards and natural disasters, integrating climate change measures into national policies, strategies and planning, improving education, raising awareness and human and institutional capacity, implementing climate finance for developing countries, and promoting mechanisms for raising capacity for effective climate change-related planning and management in least developed and developing countries and marginalized communities, including focus on women and youth.

Three advantages of sustainable development are that it:

1. Helps in ensuring a better life for present and future generations.
2. Lowers the impact on the environment by reducing air, water and soil pollution.
3. Helps in achieving long-term economic growth.

Sustainability therefore is all about people and their needs, not just about technology, the environment or "being green.", seen through an environmental lens, sustainability is about managing and protecting the earth's natural resources, ecosystems, climate, and atmosphere so that current generations and future generations will have all they need to survive and also extra for future use.

Sustainable development can be achieved both within and outside of Geography education in Nigeria if we as citizens of the country especially secondary school students are encouraged to:

- restricting human activities on the environment.



- ensure technological development is input effective and not input utilizing
- ensure the rate of consumption should not surpass the rate of production of renewable resources
- minimize all types of pollution.
- make sensible use of natural resources.

## **6. Geography and Development**

Geography as a school subject has a major responsibility in delivering education for sustainable development, especially because the geographical concepts of place and space are key dimensions for the analysis and pursuit of development and sustainability (Granados-Sanchez, 2011). Geography has been a partner and a critic of the idea and measurement of development all over the world; collecting and analyzing data, challenging assumptions and measures of progress, and curating texts and maps that show different aspects of development and environment around the world (Blaikie, 2000; Dorling et al., 2008; Hart, 2001; Seager, 2009; Slater, 1974; Watts, 1984; cited in Liverman, 2018). Yet it has been observed that Geography and Geographers are rarely seen as major contributors to the general theories and practices of development, despite their concern and distinctive skills (Bebbington, 2002; Peck and Sheppard, 2010; cited in Liverman, 2018).

Geographers are known to study spatial patterns in development. They try to find by what characteristics they can measure development by looking at economic, political and social factors. They seek to understand both the geographical causes and consequences of varying development and ways by which they can be sustained.

The three types of development that are studied in Nigerian Geography are:

- Social development – relating to the development of the people of a particular place. (population growth, life expectancy, poverty and inequality, cultural diversity and identity, living conditions and housing, security and crime, mobility, social welfare and quality of life, literacy, education and ICT access, corruption and governance.
- Economic development - relating to the finances and wealth of a place. (GDP, research and development, sustainable public finance, corporate responsibility, mining and quarrying, energy use and consumption, renewable energy production, transportation, water bodies and fisheries, development of rural areas etc.
- Environmental development – relating to the quality of people vis-a-viz, air, water, soil etc. (pollution, climate change, biodiversity protection, desertification, deforestation, waste

generation, land-use change, waste management, management of water resources, natural hazards etc.

Of these three aspects, which make up the whole of sustainable development, the environment is the basic life-giving support mechanism behind human activity. But as is the case when one looks through a telescope, a geographer must look at all three at the same time to get a clear view of sustainable development, as they are interrelated and interdependent upon each other (Granados-Sanchez, 2011).

## **7. Nigeria's policies in support of Development**

As in other countries of the world, the problem of development in Nigeria is that it must take place in space over well-defined territories. Therefore, whether one considers economic, social, environmental, or political development, in the final analysis, there would be a need to organize or reorganize space (Filani 1999). Herein lie the challenges to the future of geography in Nigeria.

In a bid to ameliorate the grave consequences of poverty and developmental disorder, as well as make some impact in the achievement of both the millennium development and sustainable development goals, successive Nigerian governments have designed and implemented numerous policies and projects some of which have Geographical bases. These developmental programmes date far back to the 1970s and include notable ones like:

1. Operation Feed the Nation [OFN] in 1976, and Green Revolution in 1980 to address poverty and food production.
2. Directorate of Foods, Roads and Rural Infrastructure [DFRFRI] in 1986 to construct good roads, provide rural water and electricity supply for those in the rural areas
3. National Directorate of Employment (NDE) in 1986 aimed at providing financing, training and guidance for unemployed youths; the Poverty Alleviation Programme (PAP) was introduced in 2000 to address the problems of rising unemployment in society, boost economic productiveness, and ensure Nigerians are provided with necessities of life such as affordable health care, sanitized environment, quality education amongst others (Chukwuemeka, 2009; Adebayo, 2012: 2-3; Onwe and Chibuzor, 2015:227-230; cited in Durokifa and Moshood 2016)
4. Nigeria's National Development Plan (NDP) 1962-1968, 1970-1974, 1975-1980, and 2021-2025, built around the six concepts of economic growth and development, infrastructure, public administration, human capital development, social development as well as regional development.

Regardless of these developmental programmes in Nigeria, the real development expected is yet to take place, but Instead, poverty, insecurity, unemployment, child mortality, corruption and lopsided income, brain drain etc. have been on the increase.

The term development is studied extensively in Geography majorly under population topics. It is a known fact that a productive population helps bring about economic growth and development and rapid population growth will ultimately result in downward economic development. The population of Nigeria today is estimated at well over 200 million (making her the largest black nation in the world and the largest country in the Commonwealth, after India and Pakistan) which is quite high considering the available resources and the country's economic development. Some of the resultant effects of high population on Nigeria's economic development include the following:

- Inadequate food supply and pressure on the available ones. A very high percentage of Nigeria's population is currently living on less than one dollar a day, making it more and more difficult to feed. Although the large and growing population of the country can provide the food and agricultural produce needed to sustain the needs of the people, Nigeria has consistently remained dependent on the importation of nearly everything; from food to clothing and even premium motor spirit (PMS) also known as petrol.
- Even though Nigeria is rich in petroleum resources, there are also a variety of other resources available for both local use and export, such as; tin, columbite, lead, limestone, gold, iron, natural gas, coal, nitrite bitumen, uranium and other economically valued mineral resources scattered over the national territory. As well as the large expanse of agricultural land available for various forms of cultivation
- Only a small percentage of the population is working or gainfully employed, leading to overdependence on them by the aged (retirees) and the underaged (children) and hence lowering the standard of living. Therefore, the problem of unemployment is a major resultant effect of high population.
- Inadequate provision of housing and extremely high rent mostly in the cities and urban areas. The government is unable to provide shelter at affordable rates and so there are a lot of homeless people around.
- Insecurity issues all over the country with kidnappings and abductions being the most prevalent. The only means of transportation that has not been infiltrated so far is 'air', as both road and rail travel are no longer safe in the country.
- The emergence of ghettos, slums and squatter settlements has also been on the increase, especially in major towns and cities in Nigeria such as Lagos, Ibadan, Kaduna.
- Environmental pollution is daily on the increase in Nigeria, with polythene/cellophane and polystyrene products topping the list of environmental pollutants.

Inasmuch as the teaching of Geography plays a major role in the achievement of sustainable development goals in Nigeria, there are some obstacles to the achievement of these goals, such as;

extreme poverty, high unemployment rate, climate change, conflict and insecurity, having poor or no capital budget to plan and complete economic activities, social inequalities, poor waste management and poor environmental management, natural calamities, like flooding and erosion, absence of peaceful societies, the prevalence of ethnic and religious clashes, rapid population growth rate, rapid urbanization, deforestation, environmental impact of extractive industries, having a business climate which is characterized by erratic power supply slow rate of economic growth, unsustainable consumption and production, rising misappropriation and misallocation of scarce resources, poor governance characterized by inequality, inadequate public services like health care, clean portable water, good motorable roads, and sanitation, corruption and other global challenges such as the 2020 COVID-19 pandemic (Imasiku 2021). These challenges to sustainable development are influenced by socioeconomic, demographic/population, technological, and environmental issues which are the primary changes that transform society and invariably individuals.

## Conclusion

Sustainable development is development that keeps in check the present generation's needs without neglecting the future generation's capability to address their own needs. Sustainable development through the teaching of geography can provide a solution to how Nigeria as a nation plans its economic activities and growth without damaging the environment and at the same time ensure a safer habitat is maintained for future generations to also build up their economies and societies without neglecting the environment. Therefore, Teaching geography for sustainable development is considered a new generation of critical geography education which emerged with the changing nature of Geography.

## Reference

- Adedayo, A. (2014). Adverse Geography and the Challenge of Sustainable Development in Nigeria. Revised version of paper presented at the 2014 Annual conference of the Association of American Geographers (AAG), held in Tampa, Florida, USA, April 8—12.
- Akinwunmi, F. S. (2008). Millenium development goals: the place of education in Nigeria <https://www.researchgate.net/publication/343281948>.
- Ayeni, B. (1988). Geographical knowledge, national development and the teaching of geography in schools. A paper prepared for: the Nigerian Geographical Teachers' Association seminar/workshop of the South Western zone, Bendel state University, Abraka campus on February 10-12 1988.
- Durokifa, A. A. and Moshood, A. B. (2016). Evaluating Nigeria's Achievement of the Millennium Development Goals (MDGs): determinants, deliverables, and shortfalls. [Africa's Public Service Delivery and Performance Review](#) 4(4):656 DOI:[10.4102/apsdpr.v4i4.147](https://doi.org/10.4102/apsdpr.v4i4.147)
- Granados-Sanchez, J. (2011). Teaching Geography for a Sustainable World: A Case Study of a Secondary School in Spain. *Review of International Geographical Education Online* © RIGEO 1(2),151-168.

- Filani, M.O. (1999). Reflection on 50 Years of Geography in Nigeria. *Annals of the Social Science Academy of Nigeria*, 11, January-December, 45-64.
- Halliru, S. A. (2014). Teaching Geography from the Ninth Year School Level in Nigeria: A Challenge to Nigerian Geographers. Proceedings of the 55th Annual Conference of the Association of Nigerian Geographers (ANG), 229-235.
- Imasiku, K. (2021). Organizational Insights, Challenges and Impact of Sustainable Development in Developing and Developed Nations. Chapter Metrics Overview, open access peer-reviewed chapter. DOI: 10.5772/intechopen.93748
- Liverman D. M (2018). Geographic perspectives on development goals: constructive engagements and critical perspectives on the MDGs and the SDGs. *Dialogues in Human Geography* 8(2), 168–185.
- Nightingale, A. J. (2018). Geography’s contribution to the Sustainable Development Goals: ambivalence and performance, *Dialogues in Human Geography*, 8(2) 196–200.
- UNESCO. (2005). UNESCO and sustainable development. Retrieved from <http://www.unesco.org/images/0013/001393/139369e.pdf>.