



Examination of Environmental Challenges and Their Impacts on the Achievement of Sustainable Development in Nigeria

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ABSTRACT

The paper examines the negative impacts of environmental challenges on the achievement of sustainable development, which is the main goal of the Nigerian National Policy on the environment. The paper takes the view that most environmental challenges confronting human race are anthropogenic and that man in his quest for survival and general comfort has continued to use the natural resources of the land even to the detriment of his health and general well-being. The paper identifies various environmental challenges with their causes and effects on the achievement of sustainable development. It highlights various legal responses to environmental challenges. The paper concludes that there is need for change of attitude among populace so as to mitigate the adverse effects of environmental challenges confronting the contemporary human society to achieve sustainable development.

Keywords: Environmental, Challenges, Impacts, Achievement and Sustainable Development

INTRODUCTION

The National Policy on the Environment was launched by the Government on 27 November, 1989. It was revised and enlarged in 1999 to achieve balanced cross-sectoral linkages and accommodate the environmental concerns of all sectors of the Nigerian economy. The Policy contains specific guidelines for achieving sustainable development in fourteen vital sectors of the nation's economy.¹ The reasoning in sustainable development is to ensure that our environment is safe for human habitation while at the same time checkmating the adverse effect of emerging environmental problems.² Sustainable development concept is therefore an ideal which the environment can be protected from pollution, degradation and or restored, replaced or restituted after degradation.³ The concept is fundamentally concerned with the two-way relationship between development and the environment. Hence, the attainment of sustainable development

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¹ The sectors are: Human Population; Land Use and Soil Conservation; Water Resources Management; Forestry, Wildlife and Protected Natural Areas; Marine and Coastal Area Resources; Sanitation and Waste Management; Toxic and Hazardous Substances; Mining and Mineral Resources; Agricultural Chemicals; Energy Production; Air Pollution; Noise in the Working Environment; Settlements; Recreational Space, Green Belts, Monuments, and Cultural Property.

² Obabori, A. O. *et al*, "An Appraisal of the Concept of Sustainable Environment under Nigeria Law", *J. Hum, Ecol*, 28 (2), 2009, p. 14.

³ *Ibid*.

calls for living a balanced life within the environment and keep environmental resources from destruction and possible extinction.⁴

Premised on the foregoing, this paper is divided into six sections, following this introduction, the paper examines the concept of sustainable development. In section three, the paper analyses interplay between development and environment. Section four highlights various environmental challenges and their impacts on sustainable development, while section five contains the list of legal responses to environmental challenges in Nigeria. The paper concludes that there is need for change of attitude among populace so as to mitigate the adverse effects of environmental challenges confronting the contemporary human society and achieve sustainable development.

The Concept of Sustainable Development

As stated earlier, the main goal of the Nigerian National Policy on the Environment is sustainable development. Sustainable development presupposes that man in his quest for survival and development should be able to draw the line between his immediate needs in term of development without jeopardizing the ability of future generations to meet their needs.⁵ According to Lawrence Atsegbua *et al*,⁶ sustainable development 'is the development that meets the needs and aspiration of the current generations without compromising the ability to meet those of future generation'. To Obabori *et al*,⁷ sustainable development is 'the facilitator for balancing the conservative of nature's resource with the needs for development'.

Every natural resource within the planet earth has its carrying capacity and life span. Environmental sustainability therefore means that the natural resources of the land should not be used beyond their carrying capacity for renewal. Similarly, all non-renewable resources should be guarded and used minimally to prevent their extinction. The main reason behind sustainable development is to ensure that our environment is safe for human habitation while at the same time checkmating the adverse effect of emerging environmental problems.⁸ Environmental legislation presupposes that law can be used to protect the environment from pollution, degradation and that the environment could be restored, replaced or restituted after degradation. The hard fact is that the existence of man on the planet earth depends on the other living and non-living organism inhabiting the earth. According to Rosenhak,⁹ man is from the earth and cannot be separated from it. Due to this fact, God gave man absolute power and rights to dominate other creatures within the ecosystem¹⁰. Statutorily, this right is recognized by the African Charter on Human and People Rights of 1981.¹¹ The Charter, in concrete term, provides that 'all people shall have the right to a general satisfactory environment favourable to their development'. However, notwithstanding of this blank cheque, there is the need to thread softly because every step taken by man has its consequences on the fauna and flora constituting the ecological system, hence, the need to avoid engaging in any activities that have grave consequences to the earth and other natural resources and organisms habiting it.

⁴ *Ibid*.

⁵ See generally Fagbemi, S. A. "The Concept of Sustainable Development: A Double-Edge Sword" *Journal of Law and Diplomacy*, 11 (1) 2014, pp. 19-32.

⁶ Atsegbua L, et al, *Environmental Law in Nigeria: Theory and Practice*, (Lagos: Ababa Press Limited, 2003), p. 54.

⁷ Obabori, A. O, *et al, op cit*.

⁸ *Ibid*.

⁹ Rosenhak R. "Earth, Spirit and Action: The Deep Ecology Movement as Spiritual Engagement:" *The Trumpeter: Journal of Ecosophy*, 22 (2), 2006. pp. 90-95; Zapf, M. K, "Social Work and the Environment: Understanding People and Place" *Critical Social Work*, 11 (3), 2010, p. 10.

¹⁰ See Genesis 1: 28, *The Holy Bible, New International Version*, (Lagos: Bible Society of Nigeria, 2014), p. 2.

¹¹ Ratified in Nigeria and christened African Charter on Human and People Rights (Ratification and Enforcement) Act Cap A9, Laws of the Federation of Nigeria 2004

This note of warning is the concern of Dahl¹² when he posits that ‘the planet and all its inhabitants are today threatened by a potential global ecological crisis that is all the more dangerous because it is insidious, consisting of many separate problems with little immediate effect on daily life but whose cumulative impact and interactions may suddenly break up and render significant parts of the planet less productive or inhabitable. This is where the social roots of concept of sustainable development in the use of the natural resources of the earth lie. According to Ajai,¹³ the principle of sustainable development requires that the environment be managed so as not to irreversibly damage the processions of nature or over taxing them. To prevent extinction and over-taxation of the natural resources, three issues that require collective attention are environmental management, environmental resources analysis and evaluation and environmental protection and conservation.

Apart from the management of natural resources of the land as explained by Ajai, the concept of sustainable development also requires emphasis to be laid on how decisions and actions of today will not affect the future especially in relation to natural resources availability, environmental health and destruction of global ecosystem.¹⁴ The solution to this calls for resources analysis and evaluation so as to determine the best method to use to guarantee renewability. Lastly, to make for protection and conservation of natural resources, the contents and spirit of the World Conservation Strategy (IUCN), of 1980,¹⁵ which defines conservation as the management of natural resources in such a way that it may yield its greatest sustainable benefit to present generations, while at the same time maintaining its potential to meet the needs and aspirations of future generations must be followed to letter. Premised on this, the necessary step in the move towards sustainable development dictate that the use of the environmental natural resources must be done with circumspect. It is in realization of this that Nigeria government approved the National Policy on the Environment and made sustainable development its main objective. The ability to meet the term and mission statement in the Policy will assist in the preservation and conservation of the natural resources and guide government, the corporate entity and individual when embarking on developmental activities.

Interplay Between Development and Environment

The concept ‘development’ is traditionally recognized as the process by which a country provides for its entire population all the basic needs of life such as: health, nutrition and housing, and provides every one with the opportunities to contribute to the very process through gainful employment as well as scientific and technological innovations.¹⁶ It is also a process by which the government and various authorities facilitate the construction and maintenance of the infrastructures and mechanisms which diversify and perpetuate the productive base of the country, such as: agriculture and industries.¹⁷

According to the United Nations Declaration on the Right to Development, ‘development’ ‘is a comprehensive process that involves political freedom and equality of opportunity for all in their access to basic resources namely: education, health services, food, housing, employment and the fair distribution of income. Article 1 of the Declaration on the Right to Development, 1986, asserts that: “The right to development is an inalienable human right”. This Declaration,

¹² Dahl, A. L. “Social Crises and their Connections to Global Ecological Problems” *International Environmental Forum*, available at <http://iefworld.org/ddahl94a.htm>.

¹³ Ajai, W. “Achieving Environmental Protection Through the Vehicle of Human Rights: Some Conceptual, Legal Third World Problems” 2 (1), 1995, *U. B. L. J.*, p. 42.

¹⁴ This is called the principle of intergenerational equity which requires that the needs of the present generation are met without compromising the ability of future generations to meet their own needs.

¹⁵ International Union for Conservation of Nature and Natural Resources, *The World Conservation Strategy* Conference was held in Switzerland in 1980.

¹⁶ Amokaye, O.G. *Environmental Law and Practice in Nigeria*, (Akoka, Lagos: University of Lagos, 2004), p.15

¹⁷ Fagbemi, S. A. (2014) *op cit*, p. 21

according to Okonkwo,¹⁸ had the overwhelming support of the International Community and has been gathering strength since then.

In order to achieve various objectives in the United Nations Declaration on the Right to Development and to ensure conservation of the natural resources of the land as envisaged in sustainable development, the principles in the Declaration are subsumed in Chapter II of the Constitution of the Federal Republic of Nigeria, 1999 (as amended). For instance, section 16 (2) (b) of the Constitution states that, ‘the State shall direct its policy toward ensuring that the material resources of the community are harnessed and distributed as best as possible to serve the common good’. To ensure the realisation of sustainable development, section 17 (2) (d) of the Constitution also provides that “exploitation of human or natural resources in any form whatsoever for reasons other than the good of the community shall be prevented’. In addition to the foregoing provisions, section 20 of the 1999 Constitution enjoins State ‘to protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria’. The above are the provisions of the Nigerian constitutional objectives on nature conservation and protection of the three environmental media to achieve environmental sustainability.

To foster compliance with the above provisions, section 13 of the Constitution in concrete terms provides *inter alia* that ‘it shall be the duty and responsibility of all organs of government and all authorities and persons, exercising legislative, executive or judicial powers to conform to, observe and apply the provisions of Chapter II of the Constitution’. To further support these constitutional provisions, the Federal government is signatory to many International Conventions on nature conservation.¹⁹ It is sad to note that the provisions of these statutory instruments are hardly taken into cognizance when embarking on developmental activities. According to Olokesusi,²⁰ the destruction of flora has continued at an alarming rate in Nigeria. Again, in spite of the sweet promises in which the provisions of the Nigerian Constitution are worded, the provisions of Chapter II are not justiciable. Hence, when the government or any of her organs fail to honour the provisions, no redress can be sought in the court of law. For instance, section 6 (6) (c) of the Constitution denies the courts the power to adjudicate on any issue having to do with the enforceability of the provisions of the Fundamental Objective and Directive Principle of State Policy.²¹ In the case of *Olubunmi Okogie (Trustees of Roman Catholic Schools) and Other v Attorney-General, Lagos State*,²² the Court of Appeal, while considering the constitutional status of the Chapter II of the 1979 Constitution stated thus:²³

While section 13 of the Constitution makes it a duty and responsibility of the judiciary among other organs of government, to conform to and apply the provisions of Chapter II,

¹⁸ Okonkwo, R. T. *The Law of Environmental Liability*, (Lagos: Afrique Environmental Development and Education, 2003), p. 264.

¹⁹ See in this connection Convention on International Trade in Endangered Wild Species of Fauna and Flora of

1974; The Joint Regulation on Fauna and Flora on the Lake Chad Basin of 1977; The African Convention on the Conservation of Nature and Natural Resources; the Endangered Species (Control of International Trade and Traffic) Decree No. 11 of 1985; The Mineral Act of 1969; Public Land Act 1970; Chad Basin Development Authority Act of 1973 and Museum and Monumental Act of 1979 among others.

²⁰ See generally Olokesusi, F. “Environmental Legislation and Administrative in the Context of Nature Conservation in Nigeria” in Shyllon, F. (ed.), *The Law and the Environment in Nigeria*, (Ibadan: Vantage Publisher, 1989), p. 12.

²¹ For instance, section 6 of the 1999 Constitution (as amended) establishes the superior courts in Nigeria and vests them with judicial powers to determine disputes between government and individual and between individual *inter se*. However, section 6 (6) (c) of the Constitution while delimiting the judicial powers of courts provides that the judicial powers vested in accordance with the foregoing provision of this section shall not, except as otherwise provided by this Constitution, extend to any issue or question as to whether any act or omission by any authority or person or as to whether any law or any judicial decision is in conformity with the Fundamental Objectives and Directive Principles of State Policy set out in Chapter II of this Constitution.

²² (1981) 2 NCLR 337

²³ The provisions of Chapter II of the 1979 Constitution are *impari materia* with Chapter II of the Constitution of the Federal Republic of Nigeria 1999 (as amended).

section 6 (6) (c) of the same Constitution makes it clear that that no court has jurisdiction to pronounce on any decision as to whether any organ of government has acted or is acting in conformity with the Fundamental Objectives and Directive Principles of State Policy. It is clear therefore that section 13 has not made Chapter II of the Constitution justiciable. I am of the opinion that the obligation of the judiciary to observe the provisions of Chapter II is limited to interpreting the general provisions of Constitution or any other statute in such a way that the provisions of the Chapter are observed, but this is subject to the express provisions of the Constitution.

In view of the above decision, experience has shown that, States often express some degree of nonchalance towards fulfilling obligations they owe to citizens where the mechanism for the enforcement of same are inefficient or lacking completely.²⁴ This situation has been responsible for the lack of access to environmental information, inability of the public to adequately participate in the making of decisions that affect the environment and ultimately, lack of access to justice in environmental cases. The implication of this statutory road block has led to the several environmental challenges and problems bedeviling the country. These challenges are the subject matter of the next section.

Environmental Challenges and their Impacts on the Achievement of Sustainable Development

Environmental problems arise whenever there are changes in the total quality and quantity of any environmental factor which directly or indirectly affects the health and well-being of man adversely. Many environmental problems confronting Nigeria are those typical to developing countries. These problems had their root, amongst others, in overpopulation, urbanisation and poor management of the natural resources within the ecological system²⁵. The truth of the matter is that natural resource, as its name suggests, are resources which belong to the nature. The implication of this, according to Bassey,²⁶ is that these resources occur naturally and can thus be grabbed or taken by the quickest, the strongest and the most brazen. This impression has led to the pressure which human population placed on the natural resources resulting in catastrophic effects on the carrying capacity of these resources. This has also reflected on the degradation and various environmental challenges currently confronting the human race. For instance, as at 1 January, 2017, the population of Nigeria was estimated to be 189 559, 502 million people.²⁷ Also, Nigeria has been classified as the sixth most populous nation in the entire world.²⁸ The interaction of these millions of Nigerians, according to Omofonmwan and Osa-Eboh,²⁹ with their respective environment has left indelible mark on the landscape. The effects of this are manifested in various environmental challenges such as: urbanization, deforestation, land degradation, desertification, overpopulation and all kinds of pollution among others. There is no doubt that environmental problems have negative impacts on the environment and on the living standard and health of human being. The causes and effects of environmental problems are intertwined and these are discussed below.

²⁴ See for instance, Alobo, E. E and Obaji, S. P. "Constitutional right to healthy environment as a panacea for Sustainable Development in Nigeria". *The Nigerian Law Journal*, 19 (2), 2016, pp. 244-257: 249

²⁵ See generally Fagbemi S. A. "An Appraisal of the Socio-Legal Implications of Population Growth on the Environment" *University of Ibadan, Journal of Public and International Law*, 3, 2013, pp. 57-71

²⁶ Nnimmo B. "Nigeria: National and Global Environmental Challenges". Text of paper presented at ERA's Training Session for Journalist at Akure, Nigeria, April, 2013, p. 1.

²⁷ <http://Countrymeters.info/en/Nigeria>.

²⁸ See "The World Population and the Top Ten Countries with the Highest Population", available at <http://www.internetworldstats.com/stas8.htm>. Date accessed 20/3/2016 at 5.00pm

²⁹ Omofonmwan, S. I and G. I. Osa-Edoh, G. I. "The Challenges of Environmental Problems in Nigeria" *J. Hum. Ecol*, 23 (1), 2008, p. 53.

i. Urbanization

Urbanization is on-going process all over the globe. People moving from rural to urban areas are the primary cause of urbanization and history indicates that this movement of people is very hard to influence.³⁰ Urbanization is the outcome of social, economic and political developments that lead to urban concentration and growth of large cities. Urbanisation is caused by high population growth rate and rural-urban migration. Migration is the main reason for rapid growth of megacities. Migration has been going on over centuries and it is a normal phenomenon. Migration can take different forms and dimensions; it may consist of movement from rural-rural, rural-urban, urban-urban and urban-rural. All these are very important in the consideration of urbanization.

The problems associated with urbanisation is acute and exemplified by factors such as inadequate housing and infrastructure, legal dualism in land administration and control, lack of proper monitoring of physical development activities in urban areas,³¹ absence of updated master plans, uncoordinated spatial; urban growth, decay of inner cities; land speculation and rapidly growing urban population. The problems also manifested in inefficient waste management system, emission from automobiles, industrial plants and power generating sets; gas flaring, bush and refuse burning, solid and liquid minerals extraction activities and agro chemicals are associated with urbanization. In addition to the above, several problems such as absence of efficient storm water, discharge system, ocean surge due to rise in sea, indiscriminate destruction of vegetation for fuel and constructions material are imminent in urban cities.³² For instance, land pollution through indiscriminate disposal of solid wastes provides breeding grounds for infectious disease vectors, while air pollution results in acid rains which destroy building and infrastructures. This also result in inadequate storm drains, dumping of refuses in drainage lines and construction of houses close to and even on the natural water channels.³³

The effects of urbanisation on the environment are quite significant. These effects among others include rapid deterioration of physical environment and provide breeding ground for prostitutes, criminal and social miscreants, depletion of green areas and open spaces resulting in the loss of biodiversity. According to Omofonmwan and Osa-Edoh,³⁴ environmental conditions in cities have gradually deteriorated due to the rapid growth of the cities and the attendance inability of social services and infrastructures to keep pace with the rate of growth.

ii. Overpopulation.

Nigeria population has grown dramatically since the 1952/53 population census conducted in the country. Population is a major factor in all environmental related issues and challenges. For instance, overpopulation causes stress on the environment. These problems include natural resources degradation, erosion, desertification and deforestation. As the growth of mankind continues unabated, the increase in the pollution and indiscriminate cutting of the trees for timber and fire wood will dis-balance the entire ecosystem. The main concern for the unchecked

³⁰ Weingaertner, C. "Analyzing Synergies between Urbanisation and Sustainable Development" Universitet Service AB, Stockholm, 2005, p.1; Nsiah-Gyabaah, K. "Urbanisation Processes – Environmental and Health Effect in Africa". Panel's Contribution to the PERN Cyberseminar on Urban Spatial Expansion, Sunyani Polytechnic, Sunyani, BS, Ghana.

³¹ Abiodun, O. *Urban and Regional Planning Problems in Nigeria*, (Ife: University of Ife Press, 1985), p. 4

³² Olaniran, O. J, "Flood Generating Mechanism of Ilorin in Nigeria" 1983, *Geo-Journal*, pp. 231-277; Ogunpa, F.G. "Flood Disaster: An Environmental Problem or a Cultural Fiction" 1981, *Aman*, pp. 110-120, Nigerian Environmental Study/Action Team NEST, "Nigeria's Threaten Environment: A National Profile, Ibadan: Interface Printers Ltd, 1991.

³³ Bulama, M. "The Nigerian Built Environment Challenges" in Alabi, A. S and Epelle, S (eds) Proceedings of the first National Built Environment Summit on Built Environment Disasters: For National Action Plan Nigeria Institute of International Affairs, 8th – 11th February, 2005, Lagos Nigeria Institute of Architects, pp. 185-196.

³⁴ Omofonmwan, S. I, and Osa-Edoh, G. I. *op cit*

population is that as human population continues to rise, it may greatly affect the environmental equilibrium and deplete both the natural and social resources of the land.

The relationship between environment and population is complex. Since the environment is the core of man's existence on the planet earth, anything that affects it must invariably affect the quality of his life.³⁵ The effect of population growth on the environment therefore is proportional to the number of the people living in it as each individual inhabitant of the environment pollutes the environment in one way or another. Due to population size, we consume resources such as land, food, water, soil and services from earth ecosystems; over consumption uses up or severely deplete supplies of non-renewable resources, such as fossil fuels and deplete renewable resources such as fisheries and forest if we use them up faster than they can replenish themselves.³⁶ The glaring picture of unchecked human population growth is a recipe for doom of the planet earth and its inhabitants. Population growth has continued to take its toll on the environment and other natural resources in the planet earth; hence, the fear now is that due to the population growth, the carrying capacity of the environment will not be able to sustain the trend.

In the Nigerian National Policy on Population for Development,³⁷ it is observed that the present high rate of population growth is already contributing substantially to the degradation of the ecology of the country. This is evident in land fragmentation, over-farming and over-grazing resulting into soil erosion and desertification. Similarly, overcrowding has led to the spread of shanty towns and urban blight; all of which would worsen if the present population growth continues.³⁸

iii. Desertification

Desert is barren land, waterless and treeless and often sand covered soil as Sahara desert which spread across Africa continent. Desertification is the encroachment of the desert on land that was once fertile.³⁹ Apart from human factor such as indiscriminate cutting of trees for timber and fire wood, other major causes of desertification is attributable to natural hazards such as drought and sand deposits by winds. Desertification is more prominent in the Northern part of Nigeria. Given a typical example of desertification in the Northern part of Nigeria, Fasihu⁴⁰ posits that between 50% and 75% of Bauchi, Borno, Gombe, Kano, Sokoto, Zamfara and Yobe States are under threats of desertification. The ten States constituting the core Northern part of Nigeria, according to the learned author, with a population of about 27 million people, account for about 38% of the country's total land areas. In these areas, population pressures, resulting from over-grazing, over exploitation for fuel wood and marginal land and aggravated drought due to global warming has accelerated the rate of desertification.⁴¹

The effect of desertification on the environment and its inhabitants is dangerous, such effects always lead to famine, diseases, destruction of crops, live stocks and man himself. Desertification

³⁵ Atsegbua, L. *et al*, *op cit*, p. 66; Fagbemi, S. A. (2013). *op cit*, p. 62.

³⁶ Fagbemi, S. A. *ibid*, p. 63.

³⁷ Nigeria's Population Policy was derived from differing perceptions of population problems and the need to adopt policies to influence the identified problems. The first population policy was crafted during the military administration of General Ibrahim Babangida with Professor Olikoye Ransome-Kuti as the Minister of Health in 1988. Its main goal was: 'to improve the standards of living, to promote the health and welfare, especially through preventing premature deaths and illnesses among high risk mothers and children; to achieve lower population growth rates through reduction of birth rates by voluntary fertility regulation methods that are compatible with the attainment of economic and social goals of the nation....'

³⁸ See the Nigerian Environmental Study/Action Team NEST, 1992; Omofonmwan, S. I. and Osa-Edoh, G. I. *op cit*, p. 54.

³⁹ *Ibid*.

⁴⁰ Halidu, M.F. "Threat to the Nigeria Environment", *Nigeria Environmental Issues*, available at ngenvirons.blogspot.com. date accessed 12/2/2016, p. 5

⁴¹ See Nigeria Country Profile Implementation of Agenda 21; Review of progress made since the United Nations Conference on Environment and Development, 1992, available at <http://www.un.org.dpcsd/earthsummit>. Date accessed 12/3/2016, p. 10

can be controlled through irrigation, terrace ploughing and planting of trees and grasses. However, this required committed efforts.

iv. Land Degradation.

The intensification of the use of fragile and marginal ecosystems has led to progressive degradation and continued desertification and deforestation of marginal agricultural lands even in the years of normal rainfall. One major factor contributing to land degradation is inappropriate agricultural practices, the destruction of watersheds and the opening up of river banks and other critical areas have led to silting of river beds and loss of water courses. A typical example of this is the uncontrolled use of agro-chemicals resulting into problem of chemical pestilence in the soil in humid areas and soil crust formation in arid climates, which have contributed to salinization and destruction of vast agricultural lands.

Nigeria is known for her large deposit of petroleum oil. Hence, petroleum oil prospecting with its attendant pollution problems such as spills, oil well blow-out, oil blast discharge, improper disposal of drilling mud has created problems like: the loss of the aesthetic values of natural beaches due to unsightly oil slicks, damage of marine wildlife, and modification of the ecosystem through species elimination and the decay in biota (fauna and flora) succession and decrease in fishery resources among others.

The problem of exposure to radiation, creation of artificial ponds associated with bad mining practices and non-reclamation of mining wastes lands as provided for in the Mineral Act of 1958 are common in the mine fields of Jos Plateau, Enugu and other locations within the country. Furthermore, excessive pressures on available resources, infrastructure and space due to rural-urban migration and the resultant problems of urban decay and squatter settlements are evident in places like Lagos, Port-Harcourt, Umuahia, Kano, Kaduna, Maiduguri and of recent Abuja and its satellite towns.⁴²

v. Pollution.

Environmental pollution is another major environmental challenge in Nigeria. Pollution is the introduction by man directly or indirectly of substances or energy into the environment resulting in such deleterious effects as harm to living resources, hazard to human health, hindrances to marine activities including fishing, impairment of quality of seawater and reductions in amenities.⁴³ From this definition, man's activities on the planet earth are the major causes of environmental pollution. Environmental pollution can be categorized into three groups; these are air or atmospheric pollution, aquatic or water pollution and land or surface area pollution.⁴⁴

With regard to air pollution, the World Health Organisation defines air pollution as 'limited to situation in which the outer ambient atmosphere contains materials in concentration which are harmful to man and his environment.'⁴⁵ Air is a mixture of basically two complementary gases: Nitrogen and Oxygen. Air pollution is the upsetting of the natural arrangement of different gases in the air. It involves the emission of harmful substances into the atmosphere, which will cause danger to any living things.⁴⁶ While describing the impact of air pollution on the environment, Akanbi⁴⁷ said that air pollution is the most difficult and sensitive. This is because, air is invisible,

⁴² See Nigeria Country Profile Implementation of Agenda 21 note 46 *supra*.

⁴³ Ibidapo-Obe, A. "Criminal Liability for Damage Caused by Oil Pollution", in Professor Omotola, J. A. (ed), *Environmental Laws in Nigeria including Compensation*, (Lagos: Faculty of Law, University of Lagos, 1990), p. 231.

⁴⁴ Omofonmwan, S. I. and Osa-Edoh, G. I. *op cit*, p. 55.

⁴⁵ World Health Organisation, "The Impact of Development Policies on Earth" in Dianna. A. and Cooper. D, (eds) *Review of the Life nature*, WHO, Geneva, 1990, p. 25.

⁴⁶ Atsegbua, L. *et al*, *op cit*. See also Fagbemi, S. A. 2010. "Reflections on the Causes, Effects and Legal Mechanisms for the Control of Environmental Pollution in Nigeria" *University of Ibadan Journal of Public and International Law*, 1, p. 154.

⁴⁷ See Akanbi, E. O. "Air Pollution Control Law" in Professor Omotola, J. A. (ed), *Environmental Laws in Nigeria*

intangible and fleeting, hence, it may be soiled, abused, degraded and contaminated with dangerous pollutants until it reaches hazardous, even deadly level before it is noticed.

The growth and development of industries and urbanization has contributed greatly to air pollution in Nigeria. Available data showed that Nigeria has about 5,000 registered industrial facilities and some 10,000 small scale industries operating illegally within the residential premises.⁴⁸ Stack fumes from these industries emit nauseating gases and particulates with grave respiratory and cardiac ailment consequences. Their physical spread often include sunlight for hours in several parts of Lagos, Kano, Enugu, and Port-Harcourt. Air inversion with its accompany foggy dispersion and visibility reduction to less than 20 metres has almost become a permanent feature of the Oko-Baba, mid-section of part of the Third Mainland Bridge in Lagos where Saw milers burn away sawdust and other wood sawing.⁴⁹ Similar phenomenon is experienced at the toll gate end of Ile-Ife/Ibadan expressway, Osun State where thick and cloudy smoke from the furnace of the Ife Iron Company pollutes the air and emits nauseating odour. Another such Iron Company with the same catastrophic effect is visible at Ikirun also in Osun State.⁵⁰ The consequences of air pollution can result in suffocation, irritation of the eye, lungs and skin problem. It can also cause reduce visibility and irritate the respiratory system.

Aquatic or water pollution is the discharge of unwanted biological, chemical and physical material into water bodies from man's environment. The pollutants are usually chemical, physical and biological substances that affect the natural condition of water. The incidence is responsible for the wide spread of water contamination in most Nigeria cities. For example, in places like Kano, Kaduna and Lagos, coloured, hot and heavy metal-laden effluents especially from the textile, tannery and paint industries are discharged directly into open drain and water channels, constituting direct dangers to water users and biota downstream.

Land or surface pollution is the occurrence of unwanted material or waste on land. According to Lawrence Atsegbua *et al.*,⁵¹ land pollution means the degradation of land by man through harmful activities like dumping of harmful waste material such as chemical input that are dangerous to vegetation and agricultural products. Thus, in major Nigerian cities such as Ibadan, Lagos, Kano, Enugu, Aba, Port-Harcourt, Kaduna, Owerri and Warri, municipal solid waste heaps dot several parts of these cities blocking motor roads, alleys and pavements. These unsightly dump sites are characterized by various non-biodegradable household petrochemical products such as polythene bags, plastic container, Styrofoam packages and tyres. Furthermore, crankcases of oil discharged by mechanical workshop or mechanic villages dotting Nigeria urban cities.

The problem of environmental pollution is not limited to urban areas. It is evidently clear that the rural areas in Nigeria have had its shares of pollution in varying degree. Obajimi⁵² has rightly observed that several rural towns that had in the past enjoy fresh and dry air are currently experiencing air pollution problem. A good example of this is Wasinmi Village along Ile-Ife-Ibadan expressway, where a giant Asphalt and Quarry Plant is located very close to the community. Stone dust from this Plant has adverse effect on the inhabitants of the community apart from the damage it has done to the aesthetic value of this sleeping community.

Legal Responses to Environmental Challenges

The attitude of Nigeria government to environmental challenges before 1988 was lukewarm and characterized by docility. Of course, this is not to say that before then, there was no local attempt to checkmate environmental problems. This can be seen in the various primitive's customary

including Compensation, (Lagos: Faculty of Law, University of Lagos, 1990), p. 1.

⁴⁸ See Nigeria Country Profile Implementation of Agenda 21 note 46 *supra*

⁴⁹ Halidu, M. F. *op cit*.

⁵⁰ Fagbemi, S. A. 2010. *op cit*, p. 154.

⁵¹ Atsegbua, L. *et al*, *op cit*; Fagbemi, S. A. (2010) *op cit*, p. 152

⁵² Obajimi, M. O. "Air Pollution – A Threat to Healthy Living in Nigeria Rural Towns". Proceeding of the Annual Conference of Environmental Prosecution Society of Nigeria, Ilorin, 1998, p. 21.

methods and practices adopted at the various communities to preserve and conserve the natural resources from degradation or extinction.⁵³ This was followed by the enactment of statutory laws and regulations to address environmental problem albeit at sectorial levels.⁵⁴ However, the Koko incident of toxic waste dumping in 1988 was the major eye opener and a wake up alert to government on environmental problems. Ever since then, the government has entered into several bilateral and multilateral agreements, protocols, conventions, and treaties to address environmental issues and challenges. At the National and State levels, several laws were enacted to tackle environmental challenges. The lists of these international agreements, conventions as well as local legislations are by no mean exhaustive. However, the following are instructive:

International Agreements/Conventions:

- ❖ 1954 London International Convention for the prevention of the pollution of the sea by oil.
- ❖ 1958 Geneva Convention on the High Sea.
- ❖ 1968 African Convention on Conservation of Nature and Natural Resources
- ❖ 1969 International Convention on Civil Liability for Oil Pollution Damage (it was held in Brussel, Belgium)
- ❖ 1972 UN Conference on the Human Environment (Stockholm declaration) which established the nexus between development and environmental integrity.
- ❖ 1975 Convention on the Prevention of Marine Pollution by Dumping Waste and other Matters (held in London).
- ❖ 1976 Vancouver Conference on Human Settlements (Habitat I).
- ❖ 1982 International Convention on the Establishment of International Fund for Oil Pollution Damage. (Brussel, Belgium)
- ❖ 1985 Vienna, Austria Convention on the Protection of Ozone Layer.
- ❖ 1992 UN Conference on Environment and Development (Rio Summit) which produced a suite of five documents namely:
 - Agenda 21 – an action plan for sustainable development in the 21st century
 - The Rio declaration-principles on healthy environment and equitable development
 - The Convention on biodiversity
 - The Convention on climate change
 - A statement of forest principles.
- ❖ 1993 Lugano Convention on Civil Liability for damage resulting from activities dangerous to the environment.
- ❖ 1996 Instabul Conference on Human Settlements (Habitat II) which links quality living with construction and environment, drinking water, etc.
- ❖ Kyoto accord/Kyoto protocol on global warming CFCs
- ❖ African Charter on Human and People’s Right

⁵³ Amokaye, O. G. *op cit*, p, 1; see generally: Adewale, O. “Customary Environmental Law” in Ajomo, M. A. & Adewale, O. (eds), *Environmental Law and Sustainable Development in Nigeria*, Nigerian Institute of Advanced Legal Studies, Lagos and British Council, 1994, p, 153; Ehighelua I. *Environmental Protection Law*, (Effurun Warri: New Page Law Publishing Co. 2007), p, 3 and Bewaji, J. A. I, *African Belief* in Odeneye & Shoremi (eds), Nigeria Life and Culture, (Ogun State University, 1995), pp. 163-193

⁵⁴ See in this connection Town Improvement Act, 1863; Swamp Improvement Act, 1877; The Water Works Act, 1915; Leprosy Act, 1916; Public Health Act, 1917; Mineral Act, 1917; Forestry Ordinances, 1938; Oil in Navigable Act, 1968; Petroleum Act, 1968; Land Use Act, 1978 and Factories Act, 1987 amongst others.

Local Enactments for the Protection of Environments

- ❖ The Constitution of the Federal Republic of Nigeria, 1999 (as amended). Various sections of the 1999 Constitution on environmental protection are sections 16 (2), 17 (2) and 20⁵⁵.
- ❖ 1968 Oil in Navigable Water Act⁵⁶.
- ❖ 1976 River Basin Authorities Act(as amended).
- ❖ 1978 Land Use Act⁵⁷
- ❖ 1978 Criminal Code Act⁵⁸.
- ❖ 1988 Harmful Waste (Special Criminal Provision etc.) Act⁵⁹.
- ❖ 1993 Water Resources Act⁶⁰
- ❖ The National Environmental Standards Regulation Enforcement Agency (Establishment) Act (NESREA), 2007⁶¹. This, at present is the principal enactment on environmental policies and regulation in Nigeria. Although, this Act has repealed the Federal Environmental Protection Act. However, by virtue of section 35 of NESREA, all the Directives and Regulations made by FEPA are still effective⁶² and this include the following:
 - National Effluent Limitation Regulation, 1991,
 - National Guidelines and Standards for Environmental Protection Control in Nigeria, 1991.
 - Pollution Abatement in Industries and Facilities Generating waste Regulations 1991.
 - Resources Conservation Action Plan
 - Pollution Waste Management Regulations, 1991.
 - National Fuel-wood Substitution Programme and
 - Environmental Impact Assessment Act, 1992⁶³

CONCLUSION

The law is put in place to check human conduct and to act as agent of change. However, law cannot operate in vacuum unless the people, which it seeks to address are prepared to change or adopt new approaches in the way and manner of their reasoning. This is required in the present dispensation if the laws and policies in the protection of the environment from degradation and destruction will not become a mere day dream. This paper has highlighted various environmental challenges confronting Nigeria as a nation and government responses to them. Of note, amongst these, is the formulation and adoption of the Nigerian National Policy on the Environment and promulgation of National Environmental Standard Regulation Enforcement Agency (Establishment) Act, 2007 in addition to various Conventions, Protocol and Treaties to which Nigeria is party and municipal enactments. However, a peep into the activities of government over the years reveals little of no serious commitment to enforce these legal instruments. For instance, various succeeding administrations in Nigeria starting from the colonial to military and civilian governments placed little or no importance to environmental issues. It is evidently clear that government has taken little or no step to identify the parties that directly or indirectly involves in environmental degradation and exploitation and where done, there has never been concrete measure taken to curtail the activities.

⁵⁵ See further sections 33 and 34

⁵⁶Now Cap 06, LFN, 2004

⁵⁷Now Cap L22, LFN ,2004

⁵⁸Now Cap C38, LFN, 2004

⁵⁹Now Cap H1, LFN, 2004

⁶⁰Now Cap W2, LFN, 2004

⁶¹ See importantly sections 7, 8 and 27 of NESREAA

⁶² See Omaka C. A. *Environmental Regulation in Nigeria* (Lagos: Lions Unique Concepts, 2010), p. 42.

⁶³ Now Cap E12, LFN 2004. See sections 2, 13 and 60.

A typical example of government lackadaisical attitude could be seen in the issue of gas flaring and oil spillage in the Niger Delta Region of the country where environmental problems, on the account of oil exploration, had inflicted and continuing to inflict tremendous damage to health and livelihood of the people of the region to the detriment of environmental sustainability.⁶⁴ It is observed that while the concept of sustainable development has taken root in developed countries, Nigeria and other developing countries in Africa are just coming to term with the concept. Furthermore, in countries such as: India, Pakistan and Bangladesh various constitutional provisions are used to protect the environment and human rights, the Nigerian constitutional provisions on the preservation of environment is a mere directive. This, it is submitted, is a big clog in the wheel of achieving a sound environmental standard as stipulated in the Nigerian Policy on environment.⁶⁵

Two major causes of environmental challenges identified in this paper and militating against the achievement of sustainable development are overpopulation and urbanisation. In fact, a major strategy for the attainment of the Nigerian National Policy on the Environment is human population. However, various efforts made by government to curb population growth and urbanisation problems have yielded little of no result. The impacts of population growth and urbanisation are evident in the use of the nation natural resource. Hence, to achieve sustainable development there is need for a change of attitude among populace in order to mitigate the adverse effects of environmental challenges confronting the contemporary human society. Similarly, to stem the tide of rural-urban migration, government must increase its efforts in the development of the rural communities by putting in place infrastructural amenities to stimulate and sustain self-reliance and development in the rural areas. Finally, the Nigerian environmental objective must be reviewed, to protect, preserve and conserve environmental natural resources from going extinction.

⁶⁴ See generally Adedeji, D & Eziyi, O. I. "Urban Environmental Problems in Nigeria: Implications for Sustainable Development" *Journal of Sustainable Development in Africa*, 12 (1), 2010, p. 132.

⁶⁵ Fagbemi, S. A. (2014), *op cit*, p. 23.