

CLIMATE CHANGE AND ENVIRONMENTAL SUSTAINABILITY IN NIGERIA

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Abstract

The effect of climate change is felt globally. Climate change is causing a serious threat and its overwhelming impact is felt globally. The evidence of the warming is unequivocal; there are empirical records of widespread increases in observed air and sea temperatures, sea-level rise, melting ice, extreme weather patterns including more intense and longer droughts, an increase in extreme precipitation events over many land areas, and more hot days and heat waves. The objective of this paper is to interrogate climate change and its mission for sustainable development and also the role Nigeria has been playing at the global, continental and regional level towards environmental sustainability. Using the development and eco diplomacy theory as a framework of analysis, and the data from secondary sources, this paper argues that due to the constant interaction between man and his immediate environment, coupled with the subsequent quest for food, shelter and economic activities have all led to the constant abuse of the environment by the present generation thus, making environmental sustainability very difficult. The paper recommends that the Nigerian government should as a matter of urgency adopt the mitigation and adaptation policy to reduce the negative effect of climate change in Nigeria, the mitigation policy includes: reduction of greenhouse gases, discourage deforestation (cutting down of trees) and increase afforestation. While the adaptation policy should be highly encouraged through assisting local farmers in changing their crop patterns, encourage farmers to develop a crop that is resisted to drought so as to ensure food security.

Keywords: *Climate Change, Global Warming, Sustainable Development, Environment, Nigeria*

INTRODUCTION

A related term, "climatic change", was proposed by the World Meteorological Organization (WMO) in 1966 to encompass all forms of climatic variability on time-scales longer than 10 years, but regardless of cause. During the 1970s, the term climate change replaced climatic change to focus on anthropogenic causes, as it became clear that human activities had a potential to drastically alter the climate. Climate change was incorporated in the title of the Intergovernmental Panel on Climate Change (IPCC) and the UN Framework Convention on Climate Change (UNFCCC). Climate change is now used as both a technical description of the process, as well as a noun used to describe the problem. Climate change has become a new reality with the devastating effect: seasonal cycles are disrupted, as are ecosystem, just as agriculture, water needs and supply, and food production are all adversely affected. Climate change also leads to sea level rise with its attendant effects on weather, increased frequency and intensity of storms, floods, hurricanes, droughts, increased frequency of fires, poverty, malnutrition and series of health and socio-economic consequences (<http://www.nigeriaclimatechange.org/ccinfo.php>).

Since the creation, human activities have continuously revolved around the environment; whether we classified it scientifically or technologically, the experience of man shows that they are inseparable due to constant interaction between man and its natural environment. Ejere (2003) as cited in Oyefara (2013) cited cases where he explained how selfishness and greed have been identified as the main driving forces behind such destruction. It was also observed by the International Court of Justice that throughout the age's mankind has for economic and other reasons constantly interfered with nature. Badly managed economic growth can and does damage the environment but locally and globally through air and water pollution, soil contamination and destruction of resources.

Climate change has enormous impact on our economies and society. It is today widely recognized as one of the greatest challenges facing mankind in this 21st century. Indeed climate change has emerged as a critical development issue since the early 1990s due to its predicted impacts on biodiversity, rural livelihoods and national and global economies. It threatens to reverse the gains of development and puts pressure on already limited human and financial resources in developing countries (Kasali, 2011). The phenomenon of climate change which has affected virtually every facet of human life in contemporary society has

also brought daunting challenges to virtually all facets of life in contemporary society, including, of course, economic development which is now affecting sustainable development in Nigeria. As climate change results in a radical transformation of physical and social life, sustainable development has to contend with meeting the challenges of new adaptation to altered climatic conditions and changes in lifestyles resulting from destruction of existing social structures and infrastructures. These challenges become more obvious in a developing economy like Nigeria (Yusuf, 2012).

Sustainable development goals are the blue print to achieve a better and more sustainable and productive future for all which climatic action it's one of the sustainable development goals.

Sustainable development means the progressive economic and social development of human society through maintaining the livelihood for all the members of the society and also to enable them to meet their present needs, quality of life in accordance with their dignity and social well-being, without necessary compromising the ability of future generations.

Oil is the major source of Nigeria economy, and the rate in which various activities within the oil sector is emitting gaseous effect into the atmosphere is quiet worrisome. Agriculture is the second major source of our economy; the current of government of the day is urging her citizenry to take agricultural activities as a priority because it will have a long term benefit on the Nigerian economy. The question that is begging for an answer is how can Nigerians carried out agricultural activities in the era of serious threat be posed by climate change and the quest of sustainable development? Nigeria has never been immune to the negative effect of climate change, due to heavily reliance on the environment for agricultural product. The quest for food, shelter and other socio economic activities have led to the constant abuse of the environment by the present generation; thus, truncating the future of the next generations. In this regard millions of people are faced with increased hunger, flooding disease, drought migration, and shift in rainfall pattern, extreme weather, poverty, migration and internally displaced people.

The paper will extensively look at the nexus between sustainable development and climate change, it will also examine dimension of international politics within the context of sustainable development and look at various policies that the government has put in place

to ensure environmental sustainability. In concluding, this paper will offer some recommendations, if properly implemented it will lead to environmental sustainability and ensure a safer planet earth for the future generations.

Conceptual Clarifications

Climate Change

Climate change stands out of the most outstanding difficulties bedeviling the environmental world today and all things considered, has been given various definitions by various scholars according to their discernment and the manner in which it influences them. The Intergovernmental Panel on Climate Change (IPCC) (2007) defines climate change as statistically significant variations that persevere for an all-encompassing period, regularly decades or longer. It incorporates moves in the frequency and magnitude of sporadic climate occasions as well as the slow continuous rise in global mean surface temperature. Environmental change is believed to be the result effects of global warming on the environment. Thus global warming is regarded as the most serious challenge of modern times (Giddens, 2006).

Climate change alludes to a change in climate that is attributable directly or indirectly to human activities, that alters the atmospheric composition of the earth which leads to temperature alterations. Climate change has the capability of influencing all natural and human systems and maybe a danger to human development and survival socially, politically and economically (Deressa and Hassan, 2010). It is evident that countries in sub-Saharan Africa, including Nigeria, are liable to endure as a result of their geographical area, low incomes, low institutional capacity as well as their more prominent dependence on climate-sensitive renewable inexhaustible natural resources like agriculture. (Ebon 2004) This is further supported by Watson (1997) which stated that African countries are particularly defenseless to climate change because of their dependency on rain-fed agriculture, high levels of poverty, and low levels of human and physical capital, inequitable land distribution and poor infrastructure. Over the years, the change becomes more pronounced and significant. This is as a result of earth's natural variations and man's activities which cause emissions of greenhouse gases thereby increasing global warming. Thus, global warming is what actually induces the change in the climate. Scientists have noted that the average temperature of the earth has increased over the past decades and if

nothing is done, there is going to be more rises in the earth's temperature to the extent that it will be difficult to adapt to. This statement buttresses more the seriousness of the threat posed by climate change to countries that depend mostly on climate-sensitive resources for sustenance of livelihood and overall development.

Sustainable Development

The origin of the sustainability concept is traced to the club of Rome report titled "Limits to Growth" published in the early 1970s; the Brunt-land Report titled our common future published in the 1980s and the Agenda 21, a declaration of the Earth 1 Summit held in Rio de Janeiro in 1992 are critical commitment con to the development of the subject of sustainable development. According to the International Union for the Conservation of Nature (IUCN 1980), the concept of sustainable development was first used and utilized and created in the World Conservation Strategy. Three specific areas were covered in that document – namely: Economic dimension of the concept. Guided management of human use of the resources and wealth of nature is vital if it is to yield the best advantage to the present generation and society.

Sustainable development can also be viewed as sustaining the present generation without mortgaging the future generation (Declaration of the UN Conference on the Human Environment 1972). Sustainable development is defined by the World Commission on Environment and Development (WCED, 1987) regularly called the "Brundtland Commission" as "development that meets the needs of the present without trading off the capacity of the future generation to meet their basic needs". Sustainable Development can also be defined as "a process of social and economic improvement that satisfies the needs and values of all interest groups while maintaining future options and conserving natural resources and diversity" (IUCN,1980). Sustainable development is dynamic in nature since it continuously meets the requirements of the present generation and there is continuous economic growth and in turn, must guarantee that minimum damage must be done to the environment. The struggle for shelter, air, water, energy, food, the raw material has put pressure on the environment. These basic resources must be exploited in such a manner that the needs of the future generation won't be undermined while satisfying the inordinate needs of the present generation. To achieve this, the government must create awareness for the need to preserve the environment for other generations.

According to the United Nations report “Our Common Future”, “sustainable development” means development that addresses the issues of the present without compromising the ability of future generations to meet their own needs (Easton, 2007). According to Brand and Gorg (2008: 28), sustainable development seeks to make serious fundamental changes to societal patterns of development including its power structure, modes of production, and consumption. It is critical to note that it is the risk of human activities posture to the environment that brings the issue of sustainable development to the forefront of the discourse on climate. Nigerian, like most developing nations, there is no adequate information on the location and state of resources, the rate of exploitation and socioeconomic activities and their impact on the environment has exacerbated by climate change which is affecting environmental sustainability.

Theoretical Underpinning

Theory is the analytical tool through which issue can be elucidated and explained and it is the building block that analysis rest on for its clarity (Salihu & Adamson, 2018). This research advances the dependency theory to explain climate change and environmental sustainability in Nigeria. The suitability of this dependency has a peculiarity especially when issue to be analyzed has a development dimension between advanced countries and less developed countries (LDCs). Development theory has many brands from which the appropriateness of the issue to be discussed can be tap from. In using dependency theory, the world is divided into two asymmetrical parts with one being the developed world which has the highly industrial equipment with uncountable numbers of multi-national companies (MNCs) in many parts of the globe. According to Samir Amin who was a proponent of this theory, advanced capitalist economy countries got to this stage through their domineering role played during colonialism in 18 century and by extension imperialism in the 19 century (Momoh and Hundeyin, 2008). Ghosh (2001:1) cited in Okereke (2010) described dependency as a form of unequal international relationship between two sets of countries. One set of countries is called the centre or metropolitan centre; and the other set of countries is called the periphery or satellite. The centre in this case represents developed capitalism while the periphery represents underdeveloped regions of the world. He further insists that dependency is a kind of mechanism, which can explain the causes of economic development and underdevelopment. The essential doctrinal kernel of this theory is that the external forces, which are nothing but the central capitalism, condition the social and economic development of the Less Developed Countries (LDCs). Specifically, the metropolitan countries are the more powerful capitalism. These countries

are geographically located in the northern hemisphere whereas the LDCs are geographically located in the southern hemisphere. This accident of nature has led to the notion of North-South dichotomy in development calculus.

The main endeavour of this school is that to understand the phenomenon of underdevelopment, the specific historical experiences of the underdeveloped countries in terms of the mode of their incorporation into the international capitalist economy, their functions within it and the mechanism for sustaining the conditions of underdevelopment must be considered. This is borne out of the apparent inability of theories of imperialism to provide credible explanations for the persistence of underdevelopment in many post-colonial states in Africa and elsewhere. Bodenheimer () captures this line of thinking when he described dependency as the obverse side of a theory of imperialism.

The bone of contention here is that underdevelopment leads to dependent and asymmetrical relationship between the less developed and developed nations. The dependency school further maintains that the backwardness of developing economies can be viewed when exploring the process when colonialism was exported to some countries, which structurally broke the indigenous pattern of development and in the end destroyed the pattern of growth and development in these societies. Ghosh (2001) maintains that the dependency school is originally Marxian in character because it is based on the concept of exploitation of the weaker LDCs by the developed capitalist countries. Furthermore, the dependency approach tends to explain the development of underdevelopment in Third World countries with reference to capitalistic framework of the centre. Scholars in this school include Paul Baran, Andre Gunder Frank and Samir Amin. These scholars contend that the historical process of colonialism which led to underdevelopment in the Third World societies is the same historical process that facilitated development in the developed economies of Europe and America

Dependency scholars further contend that it will be extremely difficult if not impossible for development to be achieved in underdeveloped countries by the diffusion of capital, institution and values the international metro pole. This is because the underdeveloped countries serve as satellites for the metropolitan centres in the Western world, which extract capital and economic surplus from the satellite countries, which is subsequently channeled out for the development of western economies. The implication of this is that the

development of Third World economies is limited by their satellite nature status and that these economies can only develop if they are able to extricate themselves out of strangulation by the western metropolis (Okereke (2010).

Generally, the theory of dependency can explain the global operation of the capitalist system during the neocolonial era while also accounting for the presence of some colonial features of the LDCs, and the dependence of the LDC on the developed capitalist countries for the development of the LDCs. In the views of Santos (1970: 289-90) maintains that dependency arises because some countries can expand through self-impulsion while other which are dependent can only expand as a reflection of the dominant country which may have positive or negative effect on their immediate development. Santos further maintain that dependency is a conditioning situation in which the economies of one group of countries are conditioned by the development and expansion of other more powerful and developed group of countries. The endeavour of dependency theorists is geared towards providing explanation for the persistence of this asymmetrical relation even after the attainment of political independence by these countries.

The negative impact of climate change is generally expected to hit the less developed countries harder than the developed countries because with the low level of technology, lack of financial resources, high reliance on the environment for survival and poverty to fight the negative impact of climate change. In spite of the LDCs contribute lesser emission than the developed countries. This has resulted in genuine dangers to sustenance instability and health-related diseases (Salihu & Adamson, 2018). The contention here is that the developed nations are the major contributor of these gaseous emissions and the idea of advising developing or underdeveloped countries to reduce their emissions is a means of denying them of developing her economy to reach the same pedestal that the developed countries have attained. In the same vein, the developed nations could give the underdeveloped countries financial guide and technological assistance in order to help them to mitigate or reduce their carbon emission to the atmospheric earth.

Challenges of Climate Change in Nigeria

The causes of climate change have always been attributed to the activities of man-made e.g. Bush burning Deforestation i.e. cutting down trees for firewood. Salihu & Adamson

(2018) posited that human activity is changing the number of greenhouse gases in the atmosphere in these important ways, namely;

- Industrial revolution e.g. the activities of automobiles, asphalt companies and other industries have led to emission of several gases like carbon dioxide, chlorofluorocarbon, methane and Nitrogen into the atmosphere which over time depletes the ozone's through the ultraviolet radiation and it likewise influences the creation of ozone-harming substances leading to altered climate thereby leading to sharply decrease in rainfall and extreme hot weather. It should also be noted that due to the high concentration of carbon, activities of asphalt company led to the black soot that was all over Port Harcourt city in 2018.
- Burning of fossil fuels by oil producing companies and refineries which discharge ozone-depleting substances into the climate) an example is the gas flaring in the Niger-delta area and the rising of black soot in Port Harcourt.
- Land use change such as deforestation (cutting down of tree for household activities and roofing of houses) and desertification which is extremely common in the northern part of the country eventually leads to climate change.
- Agricultural activities, for example, bush burning, fertilizer application, among others, which are all anthropological influencers of climate change.

Looking at the past, the issue caused by climate change such as heavy floods that have destroyed homes and devastating farmlands, increased widespread hunger (food insecurity) and diseases like skin cancer, the negative result of environmental change in Nigeria is unquantifiable. The land mass is been compromised accordingly, as a result of the desert infringement, villages and communities are been swallowed up. Crops are been affected, there is sharply decreased in rainfall, increment in temperature, shortage of land for farming, erosion, the lake is contrasting Etc.

The consistent decrease in rainfall and the ravaging drought in this region have prompted the contracting of Lake Chad in the northern part of the country (Coe & Foeley, 2001).

It was also in this line that Abdulhamid (2011) clarifies that the lake is drying due to the nature of rainfall in June-August. The main sources of the water have become unreliable. The fishermen and farmers in those communities to a great extent rely upon the lake for their survival.

As the temperature continues increasing there is a decrease in rainfall which has affected the river flow pattern, irrigation, especially in the lake region. Crops yield become

unpredictable. Weather events such as heavy winds and floods devastate farmland. The loss of livelihood is creating tension, which has increased migration to other states in Nigeria, which has been named as the root of the farmers and pastoralist conflict in Nigeria.

In the southern part of Nigeria, the rising sea levels in the coastal area especially in Lagos has also increase coastal erosion and flooding which has also affected agricultural productivity and displacement of people, UNFCC (2003) estimates that the southern coastline is susceptible to sea level rise of between 0.5 and 1.0 by the end of the century. Were the sea level ascent up to one meter, between 45 and 50 million people will be affected. The economy is even more vulnerable because of the coastal region because it houses the national economy. The forest reserved is also been threatened through high temperature elevated CO₂ concentration, increased vulnerability of organic pools (Francesco, 2008). It is also evident that some states in Nigeria that have already been classified as a frontline state are step by step been gobbled up by desertification. The demand for wood on structure, furniture and domestic activities is affecting our forest.

The condition of the country's resources is in a state of limbo and entanglement. The UN Food and Agriculture (FAO) rating Nigerians water use and conservation practices as “poor” by global standard, only about 8% of homes have access to treated pipe-borne waters. From the UN examination, the impact of climate change will reduce water shortages in northern Nigeria (Mshelia & Kennedy, N.D). Southern Nigeria coastal areas face construction of fresh water due to increased flood and sell water intrusion due to sea level rise. The UNDP has estimated that Nigerians will count up to 255 million in 2030. The Nigerian government must be proactive with the possible scarcity of water in other to avoid conflict. Finally, the impact of climate change in Nigeria is so alarming in the north due to drought and desertification which is affecting agricultural productivity, shortage of land; individuals are leaving in degraded and genuine destitution, unemployment, rural/urban drift, which has led to violence. The ascent of sea level is caused as a result of melting the thermal expansion of oceanic waters and the melting of glaciers. The erosion in the eastern part of the country will affect the farmland and crops. The financial well-being of the nation is also been threatened as a result of man-made activities in the Niger Delta region.

Climate Change and Environmental Sustainability in Nigeria: any Nexus?

Since man came into existence, human activities have continuously revolved around the environment, man has found it difficult to separate his activities from the environment and the constant interaction between man and his environment is currently compromise the planet earth, thereby truncating the future of the next generations. Despite, the importance of mankind cannot be overemphasized. Okeke (2013) asserted that It was the importance connected to the environment for human survival that compelled the United Nation Environment Programme (UNEP) and the World Meteorological Organization (WMO) with a mandate to monitor the global environment and formulate policies and eventually recommend to the UN policies and strategies that would ensure nature and enrichment especially those types of plants and creatures that have been endangered by human activities. The rationale behind this to maintain, respect and preserve the environment without endangering the future of the generations.

Man's activities have consistently destroyed the natural quality of the environment directly or indirectly through impact, pollution or over-exploitation. Therefore, emphasis must be put in place on how to sustain it, and also how to determine our well-being and existence. Sustaining the environment involves making sure that the process and mode of interaction with it should be at equilibrium stage. Thus, sustaining the environment demands that the society designs activities to meet human needs, while uncertainly safeguarding the life support system of the planet. It also requires that human activities should only use natural resources at a rate which can be replenished naturally (Emesini, 2016). Okeke (2013) posited that the natural environment is planned in such a way is self-sustaining but due to consistent abuse of human activities, the sustainability capacity is now been threatened. Ejere (2003) expressed that selfishness and greed have been recognized as the propelling factor behind the decimation of the planet earth. Man needs to survive, at this particular point he needs its economic power to fulfill the essence of coming to this world and due to his interference with nature, the economy is badly managed and the environment has been destroyed due to manmade activities through air pollution, bush burning which has contaminated the soil and water pollution that has affected seas.

The fact still remains that every state needs economic development, both how do we approach these economic activities viz-a-viz and also preserving the planet earth? There

must be an instrument been put in place to save our environment from the various economic activities taking place in Nigeria. The quest for food, housing shelter and economic development has led to the constant abuse of the environment through the illegal cutting down of trees, bush burning, vandalization of pipelines which devastatingly affect the planet earth. According to Oyefara (2013), a nation of Nigeria's size and geopolitical significance, non-strategic, arbitrary and inadequate efforts on environmental stewardship have both present and future negative impacts on economic development, quality of life and peace. Notwithstanding its effect poor environmental conditions drive away foreign investment and tourism that are needed to promote Nigeria economic growth.

Nigeria economy is monocultural thereby depending heavily on the oil and gas sector to survive. In the course of exploration and production of oil, wastes are generated and the way and manner this waste is managed had a tremendous impact on the environment. Mitchell (2000) presents that the improper dumping of refuse, industrial wastes to rivers and seas have led to water pollution. Also the emissions of carbon monoxide from industrial machines, automobiles, ships have led to air pollution. The impacts have now led to the depletion of the ozone which is undermining both human beings and plant. Man's activities have destroyed the natural quality of the environment directly or indirectly through impact, pollution or over-exploitation. Thus, if urgent care it's not taken to support this planet earth; the pattern in which we sustained the environment would determine our well-being and existence. Sustaining the environment involves the process of interaction with should always be at equilibrium. Thus, it is expected that for any nation that is working towards sustainable development efforts should be made to see how the activities meet human needs, while also preserving the planet earth. Sustainability requires that human activities should only use natural resources at a rate which can be replenished naturally. Long term result of environmental depreciation is the inability to sustain human life. Such degradation on a worldwide scale would imply the extinction of humanity.

Nigeria's Response to Climate Change and Environmental Sustainability

Several efforts are being made to ensure a successful reduction of greenhouse gases effect globally; such efforts have resulted into international conferences and agreements, although some of these agreements have been highly criticized because of his delicate nature. (Uchegbu, 2010). The major arguments have always been between the economic developed

countries and the less developed countries. The EDC at several climate change conferences which is predicated on forcing the LDC to cut down their emission but the LDC vehemently disagree, since they additionally reserve the right to aspire to the level of development which the EDC has attained, forcing them to reduce their emission is to perpetually make them underdeveloped. The EDC are the major contributor of this gaseous emissions compared to the LDC. Taking a cursory look at the outcome of various conferences of climate change like the Kyoto protocol which the LDC consented to cut down their emission but the United States was not a signatory to that protocol. Other conferences have taken place in Copenhagen in Denmark, Cancun in Mexico but the concrete one that has been taken more serious is the Paris conference 2015. Which various countries collectively agreed to reduce their emission and also promised to assist the LDC with funds to reduce the gaseous emission. The fundamental question is if this money is eventually released to these LDC countries, will they use it for the purpose it was meant for? With the crops of leaders African are parading can we entrust them with the supposed funds that were been promised by the LDCs countries? It is now left for the civil society, media, the LDCs countries, and her citizenry to engage their leaders to ensure that these funds when released should be used for the purpose it was originally meant for.

Nigeria has been exceptionally active at the global, continental and regional bodies towards a sustainable environment, she has also signed different treaties, protocols and agreement, thus, committing the nations towards promoting a sustainable environment and she has also provided quality and exemplary leadership when she is been called upon and has continued and consistently collaborate with the international community in trying to safeguard the environment for the future generations which Nigeria is a signatory to these international conventions. The Federal Government has been so concerned with these adverse charges that it established the Federal Government Protection Agency (FEPA), now Ministry of Environment in 1988, through Decree 58. It was saddened with the responsibility of working out procedures on how to handle the environment; to address specific and identified ecological issues like urbanization problems, deforestation, desertification, and pollution among others. Currently, the direct concern is on the resultant impacts of the aforementioned problems which are drastic climate change and its threatening effects on life now. The Ministry has extended its scope through Environmental Impact Assessment (E.I.A). The E.I.A has advanced extensively in scope, tools, techniques

and methodology which include the following: public participation or involvement; screening and perusing; impact identification; predicting; monitoring and evaluation. Also, the Ministry was empowered to sensitize and disseminate information on modern/scientific methods of agricultural and general land use practice, and the bulk of their activities were community-based (Isife, 2011)

Nigeria's reaction to environmental change threats in the context of policy development framework remains a major setback and has not been viable to sustain the planet earth for further degenerating thus hampering it for the future generations. Despite its high reliance on fossil fuel and high vulnerability to the negative impact of climate change, Nigeria is simply in the process of setting up a climate change policy that would address the issues of mitigation, adaptation measures and financial requirements and mobilization. However, there are a number of existing policies that could be adapted and implemented fully expecting climate change to reduce its potential unfriendly impact. The NEEDS document for climate change in Nigeria (2012) clarified different policies that the government has set up to guarantee environmental sustainability. They are as follows;

National Environment Policy:

Towards meeting the difficulties of addressing the key natural issues and difficulties of land degradation (deforestation, desertification, coastal and marine environmental erosion), and air and water contamination, urban rot and metropolitan waste, as well as hazards of dry spell, beachfront floods, floods and erosion, the Nigerian government expounded a National Environmental Policy in 1989. The strategy was changed 1999 to suit new and rising ecological concerns. The objective of the modified approach is to accomplish practical improvement in Nigeria and, specifically to (i) secure a nature of condition sufficient for good wellbeing and prosperity; (ii) advance the reasonable utilization of common assets; (iii) reestablish and keep up the biological system and environmental procedures and save biodiversity; (iv) raise open mindfulness and promote understanding of linkages between environment and development; and(v) collaborate with government bodies and different nations and international organizations on ecological issues. Nigeria has likewise enacted a number of specific approaches and activity plans for the execution of the National Environment Policy. These approaches that could be adapted to help national environmental change on mitigation and adaptation response efforts include (i)

National Policy on Drought and Desertification; (ii) Drought Preparedness Plan; (iii) National Policy on Erosion, Flood Control and Coastal Zone Management; (iv) National Forest Policy; and (v) National Biodiversity Strategy and Action Plan. (NEEDS 2010) What's more, Nigeria has numerous laws and administrative measures to promote sustainable environmental management in numerous segments of the economy. For example: The Nigeria Environmental Safe Regulation Agency is one of them.

The National Policy on Drought and Desertification, specifically, perceives that environmental change could strengthen drought and desertification in the part of the nation that is inclined to these natural issues. Consequently, the approach emphasized the need to equip relevant organizations, institutions and citizens enough to gather, examine and use atmosphere information viably to enhance and battle drought and desertification. Explicit execution strategies for the policy include: (I) reinforcing of organizations, institutions and facilities for the gathering and examinations of meteorological and hydrological as well as for dissemination of data; (ii) redesigning the current national early cautioning facilities for increased productivity and service delivery; (iii) creating proper awareness programmes for formal and informal education to improve information climate and environment issues; and (iv) empowering appropriate land use that enhances carbon dioxide sequestration, for example, afforestation, reforestation and agro-ranger service. This likewise diminishes soil disintegration and increment crop efficiency for monetary improvement.

The National Forest Policy is adapted towards guaranteeing feasible forest management, advancing participatory procedure of development, encouraging private sector – forestry improvement and embracing a coordinated way to deal with forestry development. Government is at present setting out on a number of forestation programmes. Under the direction of the African Union Commission, Nigeria is entering into the venture on the "Green Wall Initiative" in which a "green divider" of trees (40 million trees every year in the following 10 years) will be planted over the dry-land region of Nigeria to not just push back deforestation and secure agribusiness and employment over the Sudano-Sahelian zone of the nation, yet in addition upgrade the carbon sequestration of biodiversity resources in the region of environmental change relief. The objective of the National Biodiversity Strategy and Action Plan is to create a proper system and program instruments for the preservation of Nigeria's biological diversity and upgrade its practical use by coordinating

biodiversity integrations into national planning, policy and basic leadership forms. It provides frameworks for addressing (i) biodiversity protection, (ii) supportable utilization of biological assets, (iii) evenhanded sharing of benefits, (iv) preservation of agro biodiversity, (v) bio safety, and (vi) biodiversity-industry interface, all of which ought to improve the nature of the nation's biological systems to assume the fundamental role of moderating the worldwide carbon cycle and, in this way, climate.

Despite being a signatory to a number of global environmental summits and conferences Nigeria is yet to completely hold fast to global environmental standards and practices. The explanation behind this could be ascribed to the fact that most of the policy makers or environment lack technical knowledge that will in general direct and guide them on a legitimate measure to be taken. Nigeria for over the years has not been able to transform most of these international treaties, which it is a signatory to. Nigeria leadership is only good at signing treaty but implementing it has always been a serious challenge. The country is a signatory to several international treaties and conventions and sustainable use of biodiversity. Consequently, the country participated in all negotiation processes leading to the adoption of CBD and was one of the 153 signatories to the convention at the United Nations Conference on Environmental and Development (UNCED) commonly called Earth summit (Uwaegbukm, 2007).

The leadership in Nigerian has failed in the area of public awareness about climate change particularly in the rural area that is severely affected. Furthermore, the sincerity of different leadership over time to reduce this scourge has been more of deception. It must be expressed plainly, that corruption has been a serious bane militating against climate change especially in the area of budgeting. Okeke (2013) stated that the Nigerian political elite is so much involved in corruption and are overwhelmed by the quest of primitive accumulation that even the process of mitigating the impact of climate change is highly marginalized. It is on record that climate change financial assistance by the Bretton Woods institutions are been abused by the political leadership of Nigeria.

Conclusions and Recommendations

The study has provided an opportunity to cross-examine environmental change and the quest for sustainable development in Nigeria. Climate change is causing serious threat and

its overwhelming impact is felt globally. The proof of the warming is unequivocal; there are records of widespread increases in observed air and sea temperatures, sea-level rise, melting ice, extreme weather patterns including more intense and longer dry seasons, an increase in outrageous precipitation events over many land areas, and more hot days and warmth waves. The anticipated effect of climate change which includes: dangerous floods and storms; exacerbated water stress; decline in agricultural productivity and food security; and further spread of water-related diseases, especially in tropical areas. This could lead to population displacement, migration, and potential clashes.

The idea of preserving the earth without comprising the ability of the future generations is the overall strides towards recognizing that humanity has the ability to reduce the impact of climate since it is assumed and believed that climate change is a man-made activity. Developed countries (DCs) are likely to mitigate problems through technological innovation and institutional overhaul. Less developed countries (LDCs) are less inclined to mitigate such problems since they lack wealth and expertise. Facing severe environmental problems, people in LDCs may have to leave affected areas, which, in turn, may cause conflict in receiving areas due to several reasons.

This paper thus puts forward the following recommendations:

Campaign on tree planting, parks and greener terrains, urban/advertising garden and afforestation in man's habitats should be encouraged while blundering and deforestation of the natural vegetation should be debilitated, there should be the conservation of acres on land. Nigeria government should likewise seek after an intentional approach on raising awareness and enlightenment programme on the need and peril of the effects of ecological irregularity and environmental challenges on climate change. Countries ought to invest in green and cleaner technologies that produce low carbon vitality, for example, sunlight based; this will go far in securing and protecting the earth for future generations.

The Nigerian government should adopt the mitigation and adaptation policy to reduce the effect of climate change in Nigeria, the mitigation policy incorporates: decrease of greenhouse gases, discourage deforestation (cutting down of trees) and increase afforestation. While the adaptation policy ought to be very supported through assisting local farmers in changing their crop patterns, encourage farmers to develop a crop that is

opposed to dry season in order to guarantee food security. To achieve sustainable development all conventions, agreements and treaties signed by the Nigeria government must be translated into actions with prompt impacts. Since the various documents that were signed contain the necessary actions needed to guarantee sustainable development in Nigeria.

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