An Appraisal of the legal and Policy Framework in Combating Climate Change in Nigeria: What is the Way Forward

Abstract

The climate change debate has moved from being an illusion to being a serious environmental challenge for modern governments especially in developing societies. Even though, countries in the Global North have been the culprit and those in the Global South have been the victims, trading blames back and forth will only aggravate the damage already done. Facing frontally the anthropogenic factors that have triggered the crisis in Nigeria, for instance, will go a long way in stemming the byzantine effects already generated. This paper has broadened the climate change discourse by conceptualizing the phenomenon, identifying its effects on the global and domestic environments and mooted solutions to arrest the menace. The paper concludes that until the anthropogenic factors that generate and sustain the climate change menace are addressed, the present generation of Nigerians may not be adequately protected while there may be nothing to preserve for the future generations. This paper explored data comparatively and made some useful and achievable recommendations.

Keywords: Policy Framework, **Combating**, **Climate Change**.

1. Introduction

In the past few years and especially since the publication of the Intergovernmental Panel on Climate Change's (IPCC's) Fourth Assessment Report in 2007, attention has shifted from the question, "Is climate change real?" to the questions, "How severe will the changes be?" and "How can societies both mitigate change and build adaptive capacity?"[129]. These shifts have been observed to bring into focus rich veins of scientific research on the vulnerabilities of specific places, the potential for climate-related disasters and disaster responses, and strategies to prepare for climate change impacts. What these have in common is that they are centered within the analysis of the role of anthropogenic factors rather than the physics or chemistry in bringing about climate change. This research consequently opens up the realm of decision-making beyond recommendations on the technical feasibility of various policy options, to a consideration of overall social development in the context of economic, political, and cultural conditions. Thus, climate change and human responsibility, the economics of addressing the problem and technical solutions, and the aspect of "climate justice" in regard to North-South (developed-developing world) relations in particular have all received substantial exposure in public debate and specialized technical, policy, and academic literature.[130] In fact, it can be argued that there is a proposition about the imperative to "climate-proof" society, the poor, and even the state.

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[129]M E Ibarrará and Others, *Climate Change Vulnerability and Resilience: Current Status and Trends for Mexico* (Washington: US Departments of Commerce and Energy 2008) 15.

[130]P Burnell, *Climate Change and Democratization: A Complex Relationship: A Policy Paper* (Berlin: Heinrich-Böll-Stiftung 2009) 45.

This work seeks to broaden the conversation on climate change in Nigeria and advances likely solutions to stem its impact on the society.

2. Conceptualization of Climate Change

According to some scholars, there are ongoing concerted efforts by stakeholders from local, national, regional, continental and global arenas to increase awareness and appreciation of the negative effects of climate change on poverty reduction, growth and sustainable development efforts.[131] Climate change is the long-term alteration of temperature and typical weather patterns in a place[132]. Climate change could also be understood a global phenomenon of climate transformation characterized by the changes in the usual climate of the planet (regarding temperature, precipitation, and wind) that are especially caused by human activities. Climate change could also refer to a particular location or the planet as a whole. According to the Oxford Advanced Learner's Dictionary[133]Climate Change refer to changes in the earth's weather, including changes in temperature, wind patterns and rainfall, especially the increase in the temperature of the earth's atmosphere that is caused by the increase of particular gases, especially carbon dioxide. Climate change may cause weather patterns to be less predictable. These unexpected weather patterns can make it difficult to maintain and grow crops in regions that rely on farming because expected temperature and rainfall levels can no longer be relied on. Climate change has also been connected with other damaging weather events such as more frequent and more intense hurricanes, floods, downpours, and winter storms. In fact, there is now a strong global consensus that climate change presents an urgent challenge to human welfare and sustainable development. Climate change has been conceptualized by the Intergovernmental Panel on Climate Change (IPCC) as statistically significant variations that persist for an extended period, typically decades or longer and includes shifts in the frequency and magnitude of sporadic weather events as well as the slow continuous rise in global mean surface temperature.[134] According to Anyadike[135], here is no such thing as a "normal" or average climate but as the

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[131]R C Anyadike, *Climate Change and Sustainable Development in Nigeria: Conceptual and Empirical Issues*. In Implications of Climate Change for Economic Growth and Sustainable Development in Nigeria (Enugu: African Institute for Applied Economics, 2009); E Eboh, *Implications of Climate Change for Economic Growth and Sustainable Development in Nigeria* (Enugu: African Institute for Applied Economics, 2009); H Ward, *Democracy and Climate Change: Why and What Matters* (London: Foundation for Democracy and Sustainable Development 2010).

[132] Resource Library Encyclopediahttp://www.nationalgeographic.org/encyclopedia/climate-change/accessed August, 2021

[133] A S Hornby, (New 9th Edition Oxford University Press) 258

[134]IPCC, *Impact, Adaptation and Vulnerability. Contribution of Working Group II of the Intergovernmental Panel on Climate Change to the Third Assessment Report of IPCC* (London: Cambridge University Press, 2001); IPCC, *Impact, Adaptation and Vulnerability. Contribution of Working Group I of the Intergovernmental Panel on Climate Change to the Third Assessment Report of IPCC* (London: Cambridge University Press, 2007).

[135] R. C. Anyadike*Climate Change and Sustainable Development in Nigeria: Conceptual and Empirical Issues*. In Implications of Climate Change for Economic Growth and Sustainable Development in Nigeria (Enugu: African Institute for Applied Economics, 2009)

weather changes from day to day, so also climate changes from year to year. He however notes that these changes are however cyclical or largely unnoticed, except by climatologists.

Climate change manifests in a number of ways including changes in average climatic conditions; some regions may become drier or wetter on average; changes in climate variability such as rainfall events may become more erratic in some regions; changes in the frequency and magnitude of extreme weather events and changes in sea levels are also evident.[136] The rate and duration of warming observed during the 20th century are unprecedented. Increases in maximum temperature, numbers of hot days and the heat index have been recorded globally during the second half of the 20th century.[137]

There are three major causes of climate change: (i) astronomical causes, (ii) volcanic eruptions and (iii) anthropogenic (human-related) causes. These are concerned with the anthropogenic dimension of climate change.[138] In this wise, the single human activity that is most likely to have a large impact on the climate is the burning of "fossil fuels" such as coal, oil and gas, including gas flaring. These fuels contain carbon, and burning them makes carbon dioxide gas. Gas flaring, for instance, threatens global health by emitting significant volumes of greenhouse gases which contribute to climate change and threatens local health by emitting toxins that poison local villagers, their lands and rains, flora and fauna.

Furthermore, energy generation in Nigeria is by thermal means, i.e. burning of fossil fuels such as gas, petrol, kerosene and diesel. As Imhonopi and Urim observe, the present Nigerian micro and macro economy depends on generators for the supply of electricity, thus increasing the country's carbon footprint and further tipping the country towards an ecological crisis.[139] The situation is further exacerbated by the lack of technological development in the country which has left it with fewer options regarding the adoption of renewable energy technologies to meet its energy needs. An estimated 60-70% of the Nigerian population does not have access to electricity, while energy demand in Nigeria is dominated by firewood and coal and women and children are the most affected in the energy crisis.[140]

Using descriptive analysis, Ozor[141] demonstrated the processes that lead to climate change so as to enable a better understanding of the concept. The study described in details the

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[136]E Eboh, *Implications of Climate Change for Economic Growth and Sustainable Development in Nigeria* (Enugu: African Institute for Applied Economics, 2009); H Ward, *Democracy and Climate Change: Why and What Matters* (London: Foundation for Democracy and Sustainable Development 2010).

[137]D Imhonopi and U Urim, 'Indigenising Nigeria's Democracy: Issues and Implications'A paper presented at the Anthropological and Sociological Association Of Nigeria (ASAN) Annual Conference, University of Ilorin, Ilorin, Nigeria.

[138]Anyadike (n 3).

[139]Imhonopi and Urim (n 7).

[140]E Uyigue and Others (eds.), 'Promoting Renewable Energy and Energy Efficiency in Nigeria' The Report of a one-day Conference which Held at the University of Calabar Hotel and Conference Centre 21st November, organized by Community Research and Development Centre (CREDC).

[141] N Ozor, *Implications of Climate Change for National Development – The Way Forward. In Implications of Climate Change for Economic Growth and Sustainable Development in Nigeria* (Enugu: African Institute for Applied Economics, 2007).

impacts of climate change on various issues of national development such as low agricultural productivity, food insecurity, resource conflicts, unemployment, environmentally-induced migration, livelihood problems and health issues. The study also noted that these impacts are as a result of devastating effects of flooding, drought, erosion, desertification, sea level rise, heat stress, pests and diseases, and erratic rainfall patterns, arising from climate change. The study further suggested the need for climate policy in Nigeria, the establishment of NCCC, the development of a national framework for climate change adaptation, and the embracing of emerging technologies.

3. Appraisal of Climate Change in Nigeria

Aside the numerous challenges facing the Nigerian state, climate change has arisen as a silent challenge to the country and is believed to be behind certain agitations such as resource control, correction of environmental pollution and degradation of many Nigerian towns and villages and the Niger Delta uprising, among others. Nigeria, over the past few years, has been beset by a lot of climate anomalies. Consequences of extreme climate events due to global warming have been so dramatic that there has been considerable and disturbing concern among various levels of government and citizens in the country. These consequences include flooding, desertification, erosion, drought, sea level rise, heat or cold stress, pests and diseases, erratic rainfall patterns, and land degradation.[142] The South-south geopolitical zone is mainly affected by sea level rise and deforestation-induced changes; the Southwest zone by sea level rise and deforestation-induced changes; the Southeast by erosion, flooding, and land degradation; the North-central by changes due to de-vegetation and overgrazing; the Northeast by drought, desertification and heat stress; and the Northwest by drought, desertification and heat stress.[143]

Like other environmental problems, climate change involves externality, for instance, the emission of greenhouse gases causes damages to other economic agents for which they are not compensated by the agent responsible for the emission. The standard theory of externalities points to one of taxation of the emitter equivalent to marginal social cost of the externalities generated by it. The threats posed by climate change across the globe with particular reference to developing countries, where agriculture is a dominant sector and in turn depends on weather and climate. The study utilized the sustainable development model in the form of the Green Wall Sahara Nigeria Program as a strategy for greening the drought-prone and desert infested areas of Northern Nigeria.[144] The study concluded that the challenges of climate change to economic growth and sustainable development in Nigeria require creative thinking, holistic ideas, innovative solutions and the involvement of all stakeholders. Two studies was conducted on the gender dimensions of climate change in North-Central and South-Eastern Nigeria.[145] The North-Central study assessed the impact of climate change on the Zumba and Augie Communities in Niger and Kebbi states

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[142]*Ibid.*

[143]Imhonopi and Urim (n 7).

[144] C M Onuoha, 'Climate Change and Sustainable Development in Nigeria: The Mitigating Role of Green Wall Sahara Nigeria Programme' [2009](10) *African Institute for Applied Economics (AIAE), Enugu Forum Policy*.

[145]J Agwu and A Okhimamhe, Climate Change, Its Impacts and Adaptation: Gender Perspective from the Northern and Eastern Nigerian. <http://www.ng.boell.org/downloads/Gender_Climate_Change_in_Nigeria.pdf> accessed on 11 November 2019.

respectively. It highlighted the challenges and adaptation strategies of the selected communities.

The paper observed that communities had noticed climate change but failed to identify its causes. Some of the women in these communities attributed the climate change such as environmental degradation to the construction of the Shiroro dam and the resulting massive deforestation. Less scientifically, Augie women believed that the flood waters from Bakolori and Goronyo dams which destroyed their farms and affected the health of their people were calamities inflicted by the gods. Again, the women accepted that they had contributed to deforestation in their search of fire wood which led to the disappearance of many plant and animal species. Although these resilient communities have put various adaptation measures in place, they were not primarily targeted at reducing the impact of climate change. The study finds that Augie community is already practicing a number of coping strategies and requesting for assistance to strengthen them. Specifically, the stakeholders of the community requested for funding, awareness campaigns and capacity building.

In Zumba, awareness campaigns are also needed to address traditional beliefs. The second aspect of the study focused on two South-eastern communities, namely: Enugwu Nanka in Anambra State and Akama Amankwo Ngwo in Enugu State. The study revealed that the impacts of climate change in South-Eastern Nigeria include the destruction of shelter (both human and animal), arable farmlands, access roads and economic trees by landslides and tornadoes. Climate change is also responsible for excessive heat, heightened insect activity and the drying up of streams. The study concluded that while ingenious adaptive and mitigation strategies developed by women were found in the sample states, better policy making to combat climate change is urgently needed.

The threat of climate change to food security and livelihoods in selected states in Nigeria,[146] in that climate change negatively impacts significantly and impedes on all aspects of crop yields, availability of seeds, and access and utilization of foods. They noted that there were decreases in crop yields due to decreases in temperatures in the study areas and that most of the farmers had low level of awareness on the dangers of climate change.

Efe highlighted the implications of climate change-induced variability's on food security and livelihoods and recommended that management issues raised by the study be translated into decision and policy making by stakeholders in order to ensure food security in northern Nigeria. Njoku discovered a downward trend in rainy days per annum in Sokoto and Kano, with Kaduna having only a slight reduction in its rain day per annum. This observed climate change induced variability was found to have a negative effect on annual crop yields. The study also found that a decrease in food crops availability occurred as rainfall and temperatures decreased in the study areas.

Most of the environmental consequences of climate change manifest as physical changes such as sea level rises, higher local temperature and changes in rainfall pattern. A study of

[146] S I Efe, Climate change and food security in African: Delta state Nigeria experience in R N C Anyadike and Others (eds.), Conference Proceeding on Climate Change and the Nigerian Environment, 2009.

the effects of climate change on the socio-economic development of Nigeria, and finds that climate change and existing climatic variability will have harsh effects on the low-income and marginalized poor people in Nigeria and will, in addition, make the process of eradicating poverty more difficult because of the negative effects of climate change on economic growth, poor people's livelihoods and assets and the level of risks to which the people are exposed.[147]

In fact it has been predicted that 'Nigeria will lose close to $9 billion as a result of the catastrophe while, at least, 80 per cent of the inhabitants of the Niger Delta will be displaced due to the low level of the oil-rich region. ..'[148] A study showed that until the year 2050, the climate will be mainly affected by an increase in atmospheric carbon dioxide mass contributing to arise in the mean air temperature near the earth s surface.[149] From the computations made, it was demonstrated that warming could lead by the year 2000 to recession of the polar ice boundary in the arctic by 20 of latitude and in the year 2050 to complete melting. He also speculated that even a comparatively small warming would bring about an increase in the drought frequency in a number of regions of the continents a decrease in the river run-off and a fall in the levels of many lakes and interior seas.

A common theme in the climate change vulnerability literature is the idea that countries, regions, economic sectors and social groups differ in their degree of vulnerability to climate change.[150] This is partly due to the fact that changes in temperature and precipitation occur unevenly and that climate change effects on resources and wealth are distributed unevenly across the globe. Unless appropriate mitigation measures are adopted to reduce vulnerability in Nigerian and other developing countries of sub Saharan Africa, climate change portends grave danger not only to the people but also to the biotic and abiotic environments. The study expressed concern that all developmental advances witnessed in sub Saharan Africa may be destroyed or reversed over a short period of time unless the effects of climate change are urgently tackled.

4. The Impact of the National, Legal and Policy Framework for Combating Climate Change

The general regulations relating to the environment in Nigeria includes,[151] the Nigerian Constitution, the National Environmental Standards and Regulations Enforcement Agency Act 2007 (NESREA Act); the Environmental Impact Assessment Act (EIA Act); and the National Oil Spill Detection and Response Agency Act 2005 (NOSDRA Act) etc. The basis

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[147] P AO Odjugo, An analysis of rainfall pattern in Nigeria [2005](4)(2) *Global Journal of Environmental Science*, 139-145.

[148] Available at <http://www.nestinteractive.org/climate_change.htm> accessed 11/11/2019.

[149] M I Budyko, *The Earth s Climate: Past, and Future, Academic* (Orlando Florida, Press Inc, 1980).

[150] J C Nwafor, Global Climate Change: The Driver of Multiple Causes of Food Insecurity in Sub Saharan Africa (Paper Presented at the International Conference on Climate Change and Economic Sustainability. Awka: Nnamdi Azikiwe University, 2007).

[151] The different States within Nigeria also have the power to make laws to protect the environment within their respective jurisdictions; e.g. in Lagos State, there is the National Environmental Standards and Regulation Enforcement Act, 2007; and in Akwa Ibom State, there is the Environmental Protection and Waste Management Agency Law, Cap 47, Laws of Akwa Ibom State of Nigeria 2000.

of environmental policy in Nigeria can be found in Section 20 of the Nigerian[152] Constitution of the Federal Republic of Nigeria which contains provisions for the protection and improvement of the environment and safeguarding of water, air and land, forest and wildlife of Nigeria.

There is also the NESREA Act which repealed the Federal Environmental Protection Agency Act (FEPA Act) and established the National Environmental Standards and Regulation Enforcement Agency (NESREA). The Agency has responsibility to enforce compliance with environmental standards, regulations, rules, laws, policies and guidelines. NESREA is also responsible for the protection and development of the environment, biodiversity conservation, sustainable development and the development of environmental technology. Although the NESREA Act repealed the FEPA Act, it nonetheless saved the subsidiary regulations made pursuant to the FEPA Act. The following FEPA regulations are still applicable under the NESREA Act: the National Environmental Protection (NEP) (Effluent Limitation) Regulations; the NEP (Pollution Abatement in Industries and Facilities Generating Waste) Regulations[153]; and the NEP (Management of Solid and Hazardous Waste) Regulations.

The Environmental Impact Assessment Act (EIA) sets out the procedures and methods to ensure prior consideration of environmental impact assessment on certain public or private projects.[154] The Act also gives specific powers to the National Environmental Standards and Regulation Enforcement Agency (NESREA)[155] to monitor and certify environmental assessment on projects. The Act stipulates the content of an environmental impact assessment report and the procedure for the conduct of the assessment. The schedule to the EIA Act lists certain activities for which an assessment study is mandatory.[156] Failure to comply with the provisions of the NESREA Act and the EIA Act gives rise to criminal and civil liabilities.

The Harmful Waste (Special Criminal Provisions, etc) Act was enacted in reaction to the dumping of toxic waste in a Nigerian coastal state in 1988.[157] The Act prohibits the carrying, depositing and dumping of harmful waste on any land or territorial water. Such activities attract severe penalties. Civil liabilities are also imposed in respect of damage or loss suffered as a result of such harmful activities.

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[152] Constitution of the Federal Republic of Nigeria 1999 (as amended)

[153] Regulation 11 of the National Environment Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations provides that the collection, treatment, transportation and final disposal of waste shall be the responsibility of the industry or facility generating the waste.

[154] Attached to the EIA Act is a schedule of activities and industries for which environmental impact assessments are mandatory.

[155] NESREA is a national body established in July 2007, responsible for environmental regulation for the whole of Nigeria. The Act repealed the Federal Environmental Protection Act 1998 (FEPA).

[156] These include Agriculture, Airport, Drainage and Irrigation, Land Reclamation, Fisheries, Forestry, Housing, Industry, Infrastructure, Ports, Mining, Petroleum, Power Generation and Transmission, Quarries, Railways, Transportation, Resort and Recreational Development, Waste Treatment and Disposal, and Water Supply.

[157] popularly referred to as the Koko Port Incident.

The NOSDRA Act[158] established the National Oil Spill Detection and Response Agency. This Agency is responsible for the co-ordination and implementation of the National Oil Spill Contingency Plan for the country. The different states of the federation have also enacted environmental laws that are largely tailored to address their specific environmental challenges.

Also, Section 3 of the Associated Gas Re – Injection Act (AGRA)[159] makes it illegal to flare gas without the consent of the Minister of Petroleum, who may issue a certificate if satisfied that it is not feasible to utilize or re-inject the associated gas. The Act further imposes a penalty of =N=10 (about 11.9cents) for every 1000 standard cubic feet of gas flared and the oil field where the gas is being flared, may be shut down.

The above regulations shows clearly that there is no definite positive steps towards the mitigation of the climate change, a lot still needs to be done both in terms of enforcement and implementation.[160] There is no single legislation with direct emphasis on climate change. Ignorance is a major obstacle which had prevented the public from knowing the devastating effect of climate change and hence, there is a lukewarm attitude towards its mitigation. The average Nigeria man equates climate change with change in weather condition. Poor rural people in drought prove western Nigeria, are hardly integrated with emerging structures and mechanisms for mitigating climate change. They have title access to resources and scientific knowledge. Their vulnerability and capacity to climate change is being aggravated by the stress associated with subsistence production, small farm holding, poor land tenure, low technology, poor livelihood diversification etc. yet the poor people in these affected areas are left to cope with frequent droughts, heavy flooding, high temperature and extreme weather events.[161]

5. Climate Change: The Way Forward

Local participation in the fight against climate change, the local people are in the web of this catastrophe called climate change.[162] For any government effort to be viable, it must be aimed towards the local people and local government. Local Government participation can

[158] The National Oil Spill Detection and Response Agency (NOSDRA) was established in 2004 to administer the National Oil Spill Contingency Plan (NOSCP).

[159] Cap A25, Laws of the Federation of Nigeria (LFN) 2004.

[160] Combating Desertification And Mitigating The Effects Of Drought In Nigeria, The Revised National Report on the Implementation of the United Nations Convention to Combat Desertification in those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (CCD). Submitted to the Secretariat of the UNCCD Bonn, Federal Republic of Germany For The Attention of The Committee for the Review of the Implementation of the Convention (CRIC)) March, 2005

[161] A I Ayeni, 'Climate Change Mitigation in Dry Land Rural Communities in Nigeria, Old Problem: New Challenges and New Opportunities' [2009](58) *Earth and Environmental Science*, 6.

[162] Gas flared in Nigeria, containing high amounts of methane and carbon dioxide-major greenhouse gasses, is also a major contributor to global warming, as it produces emissions that is more than the combined emissions of the rest of sub-Saharan Africa <http://www.foei.org/en/what-we-do/affected-peoples/grassroots-highlights/impacts/nigeria.html> assessed 11/11/2019.

be strengthened by creating awareness and giving them the necessary incentive to effectively implement climate change policies and legislations.[163]

Also having glimpse through the legal framework for environmental protection in Nigeria, one can easily assert that there is an urgent need to have a specific law regulating activities that might result in climate change in Nigeria. For instance chairman of the House of Representatives' committee on Climate Change, Eziuche Ubani noted that "The country does not have a national policy on climate change. And the reason why there is none is that there's no will in the executive at all. The President has mentioned climate change only once. It's on record. And then he promised international community that he is going to do something about it by creating a commission or institution to ensure climate change governance; after that nothing has happened."[164] Climate change and its mitigation is currently the target of the Nations throughout the world in view of its consequences and threats to human survival. Several conferences at local, continental and international levels are currently organized globally with the aim of seeking remedies to continuous CC. Apart from this, agreements have been reached by world nations, especially the advanced ones on committing funds to checkmate the impacts of CC scenario. In the light of these global events, local communities cannot be indifferent to all these global efforts on CC. Thus, whatever, might be the local belief and perception about the scenario, it is highly demanding that thorough and regular and consistent investigations is required on the impacts of climate change on various environmental attributes and activities such as water accessibility, crop production, human health, animal production and so on. Furthermore, studies should also include research into spatial dissemination of relevant and related information that will enhance the understanding of the reality of climate change,especially among the local settings, as obtained through scientific means in good time. Climate change problems cuts across all sector of the environment and since Nigeria's major source of revenue is generated from the oil and gas sector which is the highest contributor to climate change, there is a need to have a law which would bring about not only sustainable management of this sector but at the same time take in hand the menace of climate change.

Furthermore, public and Non-Governmental Organizations (NGO) participation should be encouraged. Projects that will mitigate the effect of climate change should be encouraged. It would also be easier to enforce conformity where there is provision for compensation in the event of breach of climate change regulations. This will encourage people/nations to expose the perpetrators of these acts and also ensure better participation by developing countries. In Nigeria, efforts of NGO's such as the Climate Change Africa is commendable,[165] the Green Earth Preservation Charter (GEPC),[166] Community Research

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[163] The empowerment of people in local rural communities through training, new governance mechanisms and partnerships to enable them to advocate for supportive public policies is necessary to improve access to and availability of critical knowledge and resources. Information for decision-making must be open, and mechanisms such as participatory research and participatory learning and action allow broad input into decisions about what information is truly needed by communities. In addition to knowledge, communities need capacity building through creating and enhancing rural infrastructure, particularly that needed for local and regional marketing.

[164] N A Yahaya, 'Nigeria: Representatives Flay Yar'Adua Over Climate Change' <http://allafrica.com/stories/200905250025.html> assessed on 11/11/2019.

[165] Climate Change Africa is a Non-Governmental Organization that focuses on the fight against climate change in Africa.

and Development Centre,[167] Building Nigeria's Response To Climate Change (BNRCC)[168] ELRI[169] and NEST[170] to mention a few.

Conclusion

Having appraised climate of change phenomenon in Nigeria, it is obvious climate change is no more an illusion called up by the roguish imagination of the political class or civil society gladiators. Climate change is here in Nigeria as the recent rise in flooding, environmental degradation and pollution ad climate change health-induced crises all attest to the need to tackle this insidious enemy frontally. Climate change, which is attributed to the emission of gases known as greenhouse gases mainly: CO2, CO, CH4, N2O, HFCs, PFCs, and SF6 into the atmosphere, traps terrestrial radiations from the earth and re-radiates the heat back to earth, thereby leading to a general increase in temperature known as global warming. The study has identified effects of climate change in Nigeria to include flooding, drought, erosion, desertification, sea level rise, heat and cold stress, pests and diseases, erratic rainfall pattern and others. These effects will undoubtedly affect the Nigerian society if not reversed and could even lead to armed conflicts, popular uprising and social insecurity. The impacts of climate change in Nigeria such as low agricultural productivity, food insecurity, resource conflicts, poverty, unemployment, environmentally-induced migration, health issues and livelihood problems are present challenges that need to be addressed to protect the present generation of Nigerians and preserve the commonwealth for future generations.

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[166] Green Earth Preservation Charter (GEPC), a Nigerian non-governmental organisation (NGO) dedicated to the promotion of renewable energy development, environmental preservation and management, and climate change mitigation. The objectives of Green Earth Preservation Charter are to monitor, restore and safeguard the Earth - mankind, wildlife, biodiversity and the natural systems on which all life depends, and effectively create maximum awareness of the induced climate change; its impact, vulnerability, adaptation and mitigation.

[167] Community Research and Development Centre (CREDC) is a non-governmental, non-profit organization established in March, 2006. CREDC is registered in Nigeria to provide services to ensure that people have access to safe and healthy environment and that environmental resources are managed in the most sustainable way to achieve socio-economic development of our communities. CREDC subscribe to the fact that development cannot be sustainable where information about the environment and environmental resources are lacking; hence CREDC will help to provide up-to-date information on the state of the environment and environmental resources. CREDC will also embark on activities that will bring about infrastructural, socio-economic and human development.

[168] The BNRCC project aims to help build informed responses to climate change in Nigeria by enhancing capacity at the community, state and national levels to implement effective adaptation strategies, policies and actions. <http://www.nigeriaclimatechange.org/> accessed on 11/11/2019.

[169] ELRI is an affiliate of Environment and Health in Communities of Africans (ENHICA) International Foundation Inc, an International Development Organization established in the United States since 1998. ENHICA is a non-profit Scientific Organization for research and services in the areas of Environment and Human Health issues in Communities of Africans. <http://www.elri-ng.org/> accessed on 11/11/2019

[170] Founded in 1987, the Nigerian Environmental Study/Action Team (NEST) is an independent not-for-profit organization dedicated to research and action on environment and sustainable development. Also, NEST is a non-governmental organization, registered with the Corporate Affairs Commission (RC. 5185), with headquarters in Ibadan, Nigeria. NEST is an active member on Nigeria's Presidential Implementing Committee on the Clean Development Mechanism (CDM), and the Climate Change Coordinating Committee of the FMEHUD; it has maintained close relations with parliamentarians, policy makers, and the Federal Ministry of Environment; it has contributed to discussions on mainstreaming climate change into the NEEDS and will seek to continue this work under NEEDS II. <http://www.nigeriaclimatechange.org/aboutus.php> accessed 11/11/2019.

Recommendations

Having observed the challenges of climate change in Nigeria and the way forward, it is therefore recommended as follows:

2. Mainstreaming climate change: This means that all the Ministries, Departments and Agencies, including private organizations, in the Nigeria should pursue a deliberate climate change policy to take care of their respective dimensions of this seemingly pervasive subject matter. There is a hardly MDA and private industrial organization that is completely insulated from climate issues.
3. Proper assessment of vulnerability both of sectors and demographic categories within the national population. Demographic experts are also challenged by the human side of climate change.
4. A national policy that provides for co-ordination and integration of policies and programmes.
5. A pro-poor policy in the light of climate change is required so as to enhance the capacity of people with structural and economic disability given their vulnerability.
6. Adaptation and mitigation financing should be encouraged but there should be safe guards against this application of adaptation finance in a country where some local NGOs are notorious for diverting international funds from foreign donors.
7. Mobilization and exploitation of individual capacities located within the government, civil society, and internal donor-NGOs.
8. Co-ordination of capacity needs to be strengthened and placed within a state agency (ministry or department) with enough political clout and convening power to facilitate integration and compliance across other agencies and sectors both public and non-public, state and non-state actors.