FIVE

LEGAL, REGULATORY AND INSTITUTIONAL RESPONSES TO CLIMATE CHANGE IN NIGERIA: CHALLENGES AND OPTIONS

Dr Paul Samuel Tamuno[*] & Ibanabo Young Matthew Esq.[**]

Abstract

This article examines the legal, regulatory and institutional response to climate change in Nigeria. The primary question that is addressed in this article is: 'To what extent has Nigeria put up an effective legal, regulatory and institutional regime in response to the global challenge of climate change?' This article is pertinent because of the growing global concern about the potential harmful impact of climate change on the planet. A proper legal, regulatory and institutional response would mean that Nigeria is not only adequately prepared to address the challenges of climate change within her territory but also positioned to make her contribution to the global fight against climate change. The authors note that before the year 2021 there was no statute in Nigeria that specifically addressed climate change. Similarly, there were no regulatory bodies or institutions that were established to specifically monitor climate change and coordinate national response to climate change. This was true both at the national level and at the state level. Nigeria has drafted several policies on climate change. But these policies have largely not been implemented. However, in the year 2021, Nigeria signed the Climate Change bill into law. The purpose of the Climate Change Act is the mainstreaming of Climate Change actions and the establishment of the National Council of Climate Change. The authors found that the Climate Change Act has come to fill the vacuum caused by the lack of a statute on Climate Change. The authors therefore, recommended that this statute be effectively implemented.

Keywords*: Legal, Institutional, Climate Change & Nigeria*

[*] LLB (Hons) (Port Harcourt); B.L.; LLM (Aberdeen) Ph.D. (Aberdeen), Associate Professor, Acting Head of Department Private Law Department, Faculty of Law, University of Port Harcourt.

[**] LLB (Hons); B.L.; LLM; Ph.D (in view) ibinabomatthew@uniport.edu.ng.

1. Introduction

An indigenous American proverb states that: 'Treat the earth well: it was not given to you by your parents, it was loaned to you by your children. We do not inherit the earth from our ancestors; we borrow it from our children.'[1] This proverb highlights the sacred duty the present generation owes to future generation in the management of the environment.

This article examines the legal, regulatory and institutional response to climate change in Nigeria. The primary question that would be addressed in this article is: 'To what extent has Nigeria put up an effective legal, regulatory and institutional regime in response to the global challenge of climate change?' This article has become pertinent because of the growing global concern about the potential harmful impact of climate change on the planet. A proper legal, regulatory and institutional response would mean that Nigeria is not adequately prepared to address the challenges of climate change within her territory but also positioned to make her contribution to the global fight against climate change.

2. Conceptual Clarification

To understand what Climate Change is, it is necessary to understand what weather and Climate is. Weather is: "the atmospheric conditions in any area at any time, with regard to the sun, cloud, temperature, wind, rain, etc."[2] Climate, on the other hand, is: "the average weather conditions of a particular region of the world over a long period of time, with regard to temperature, rainfall, air pressure etc."[3] In other words, weather is the elements we see daily. While Climate looks at the condition of the weather over a period of time.

Climate change is a persistent fluctuation in the climatic elements for a considerable length of time usually about 35 years so as to show significant differences in the behaviour of climatic conditions of an area.[4] Climate change therefore refers to changes in the statistical average weather conditions, or in the time disparity of weather within the context of longer-term average conditions.[5] According to the Intergovernmental Panel on Climate Change (IPCC), "climate change is any change in climate over time, whether as a result of human activity or because of the natural variability."[6] The IPCC further defined climate change as, "a change in the state of the Climate that can be identified by changes in the mean of climate variables and/or the variability of its properties, which persists for an extended period; typically for decades or longer period."[7] Climate Change is often attributed directly or indirectly to anthropogenic activities.[8] There are 2 important concepts that are associated with Climate Change. The first of these is Global Warming. The term global warming is often used interchangeably with climate change. However, there is a slight distinction between the 2 terms. Global warming refers specifically to the gradual increase in the average temperature of the earth's atmosphere and its oceans which is almost permanently changing the earth's climate.[9] Global warming is an aspect of climate change and therefore it is the man made activities especially, the release of Green House Gases that is globally held to be responsible for global warming.[10] These Green House Gases are primarily released through anthropogenic activities such as burning (of fossil fuels, wood and other solid wastes), combustion of solid wastes and fossil fuels from industrial and agricultural activities, gas flaring,

---

[1] 'Native American Legend: Native American Proverbs and Wisdom' http://www.legendsofamerica.com/na-proverbs.html Accessed 28 April 2022.

[2] G Davidson, M Robinson, *Chambers 21st Century Dictionary* (Chambers Harrap Publishing Ltd 1999) 1607.

[3] *Ibid.* 256.

[4] S. S. Ajayi, 'Climate Change in Nigeria and its Impacts on the Nigerian Environment' in S. S. Ajayi (ed) *Refocusing the Attention of the Federal Government of Nigeria on Ecology and the Environment* (University of Ibadan Publication 2018) 19.

[5] *Ibid.*.

[6] Intergovernmental Panel on Climate Change Working Group I (2014), '4th Assessment, summary for policy Marker' http//www.ipcc-wg1.ucar.edu/wg1/wg1-report.html (Accessed on 20 May 2022)

[7] 'Climate Change: Impacts, Adaptation and Vulnerability Summary for Policy Makers,' Climate Change Conference in Geneva, Switzerland, cited in S. S. Ajayi (note 4 above).

[8] Anthropogenic activities are activities caused by human beings. S. S. Ajayi (note 4 above)

[9] S. S. Ajayi (note 4 above)20

[10] A. A. Idowu, S. O. Ayoola, A. J. Opele, N. B. Ikenweiwe, 'Impact of Climate Change in Nigeria,' (2011) 2 (2) Iranica Journal of Energy and Environment 145.

deforestation and bush burning etc.[11] Since the industrial revolution in Europe (in 1750) the largest contributor to global warming is Carbon-dioxide, followed by Methane, Nitrous-oxide, Hydro-fluorocarbons, Perflurocarbons and Sulphurhexaflouride.[12] In the earth's atmosphere, there are naturally occurring amount of greenhouse gases (water vapour, carbon dioxide, methane and Ozone etc.) that play an important role of trapping the heat of the sun and maintaining the earth's temperature at levels that can sustain life on earth.[13] Without these naturally occurring Green House Gases, the earth would be 33 degrees cooler than it is today which would make life unsustainable.[14] However, human activities, since the industrial revolution have increased the amount of Green House Gases in the atmosphere thereby causing gases like Carbon-dioxide, Methane, Ozone etc., to result in an increased radiative forcing in which the earth radiative equilibrium is adversely affected causing increased temperatures.[15]

The second important concept that is associated with climate change is Ozone Layer Depletion. The Ozone Layer is a thin shield in the upper atmosphere that protects the earth from the sun's ultraviolet rays.[16] The term depletion of the Ozone Layer refers to the relatively high concentration of Ozone in the Stratosphere, a layer of very dry air, around 15-35 kilometers above the earth's surface.[17] Ozone depletion refers to the thinning of the Ozone layer, which allows more ultra violet rays to reach the earth's surface.[18] Causes of Ozone layer depletion include Chloroflurocarbons, Nitrogenous compounds, unregulated launches of Rockets and global warming. Climate Change and Ozone Layer depletion are thus connected by the fact that the same factors cause them. In other words, the Ozone itself, and other Ozone depleting substance such as Chloroflurocarbons and hydrochloroflurocarbans are powerful Greenhouse gases.[19] Furthermore, Ozone depletion and Climate Change are also linked by their effects on the physical and chemical processes in the atmosphere.[20] Climate Change and the Depletion of the Ozone layer have been leading environmental concerns since the 1960s.

3. Renewable Energy Versus Non-Renewable Energy and Global Climate Change

The commencement of the commercial production of crude oil changed the face of global energy utilization. This is because crude oil and its accompanying natural gas or associated gas gradually displaced coal as the dominant source of energy.[21] This is perhaps attributable to the fact that the commencement of the commercial production of crude oil coincided with the invention of the automobile cars which relied on derivatives from crude oil such as petrol, gas and diesel. In addition, the exploration of crude oil took place in the post industrial revolution era, when production of goods was usually on a large scale and global export of goods was higher than any other time in history. In this era, there was a high level of urbanization globally with increased demand for energy for the purposes of lighting, cooking, heating, transportation, manufacture etc. Oil and Gas has permeated all aspects of the human society in the last century.[22] It has shaped the ways wars are fought, the way people travel and transport goods, the way communication is carried out, the way goods are manufactured etc. Today, crude oil's dominance of the energy sector can be seen in the fact that, oil and gas together contributed 38.8% of the global primary energy consumption in 2015.[23]

---

[11] IPPC, *Climate Change 2013: The Physical Science Basis: Summary for Policy Makers* (Cambridge University Press 2013) 11
[12] *Ibid.*
[13] IPPC, *Climate Change 2007: The Physical Science Basis* (Cambridge University Press 2013) 9
[14] *Ibid.*
[15] IPPC, *Climate Change 2013: The Physical Science Basis: Technical Summary* (Cambridge University Press 2013) 35
[16] United States Environmental Protection Agency, 'Ozone Layer Depletion' file:///C:/Users/Paul2017/AppData/Local/Microsoft/Windows/INetCache/IE/JK6WHEKU/ozonedepletion.pdf Accessed 10th May 2022
[17] *Ibid.*.
[18] *Ibid.*
[19] J M Andino, 'Chloroflurocarbons are havier than air, so how do scientist suppose these chemicals Reach the Altitude of the Ozone Layer to Adversely Affect it' (1999) Scientific American 1
[20] S. S. Ajayi (note 4 above)23
[21] *Ibid.*.
[22] S Reyna, A Behrends, 'The Crazy Curse and Crude Domination: Towards an Anthropology for Oil' in A Behrends, S Reyna, G Schlee, (eds) *Crude Domination: An Anthropology of Oil* (Berghahn Books 2011) 3 at 3-4.
[23] 'BP Statistics of World Energy Review 2016' *https://www.bp.com/.../bp.../statistical_review_of_world_energy_full_report_2016.pdf* Accessed 8 November 2022.

In recent times there are increasing calls for the replacement of fossil fuels and nuclear energy with renewable energy. This is attributable to the fact that fossil fuels are not only centralized in their production but in addition their overall volume of reserve is on the decline due to their finite nature and extensive use. Furthermore, the use of fossil fuels has adverse impact on the environment and is a driving force for climate change. In recent times the harmful environment effect of utilizing fossil fuels (coal, oil and natural gas) has been brought to the fore. These environmental impacts include exhaustion of natural resources, ozone depletion, acidification of the oceans and global warming. Renewable energy has therefore been proposed as a potential means of meeting global energy needs without harming the environment. The search for clean source of fuel is therefore the causative factor in the move from fossil fuels to renewable energy. But the technology for renewable energy is considered in many quarters to still be nascent and largely experimental. This explains why globally, governments tend to invest more in fossil fuels than renewable energy. It is estimated that the global subsidies for renewable energy in 2010 was US$66 Billion.[24] While the global subsidies for fossil fuel in the same year was US$775 Billion.[25] Indeed, global subsidies on Fossil fuel in 2012 was estimated at US$1 Trillion.[26] In spite of this, renewable energy is a concept that has been endorsed globally. Internationally, there are collaborations between governments of some states such as (Canada, China, India etc.,) and international organizations such as the International Energy Agency.[27] There are also investments into expanding the capacity of existing renewable energy infrastructure such as Hydro-electric dams, Wind powered generators, Solar Thermal electricity generators etc. Among all these sources of renewable energy sources, solar thermals are considered to be the source of energy with the highest potential. The International Energy Association estimates that by the year 2060, solar powered generators would produce 90% of the world's electricity.[28]

4. Renewable Energy and Africa

While the gradual shift to renewable energy is good news for the world, it is not without challenges for African countries such as Nigeria. This is because Africa contains a large percentage of the world's reserve of fossil fuels[29] on which the export of which they depend on as a source of national income.[30] Africa, in recent times has depended on fossil fuels and has made relatively low investment on renewable energy. Fossil fuel accounts for approximately 50% of the total primary energy and 80% of electricity generated across the continent are from fossil fuels.[31] In spite of this heavy reliance on fossil fuels, Africa did not attain energy security. African countries suffer the worst energy shortages in the world. Statistics show that 74% of people living in in sub Saharan Africa have no access to electricity and 83% of people living in these countries have no access to modern fuels for cooking and other domestic use.[32] The shift to renewable energy is therefore potentially capable of adversely affecting African countries in 2 ways. First, it would deprive African states which have depended economically on the export of Fossil fuels of a viable source of income. Secondly, it would worsen the energy shortages in Africa. This is because African states have not invested in renewable energy infrastructure. Africa's future as regards energy security is to increase corporation with regional

[24] 'Fossil Fuel and Renewable Energies Subsidies on the Rise' https://www.esi-africa.com/news/fossil-fuel-and-renewable-energy-subsidies-on-the-rise/ Accessed 7 November 2022.

[25] *Ibid.*

[26] *Ibid.*

[27] V M Abadi. 'Nuclear Energy: the Past and Future Challenges in Competition with Renewable Energy in Iran and the World' (2016) 2 (2) American Journal of Renewable and Sustainable Energy 6 at 7.

[28] B Sills, 'Solar May Produce Most of the World's Power By 2060 IEA Says' https://www.bloomberg.com/news/articles/2011-08-29/solar-may-produce-most-of-world-s-power-by-2060-iea-says Accessed 7 November 2022.

[29] Africa is said to house 10%, 8% and 4% of the world's proven reserve of crude oil, natural gas and coal respectively. See 'BP Statistics of World Energy Review 2011' https://www.bp.com/.../bp.../statistical_review_of_world_energy_full_report_2011.pdf Accessed 8 November 2022.

[30] For instance, for decades 80% of Nigerian government revenue has been derived from oil. C I Obi, 'Oil Extraction, Dispossession, Resistance, and Conflict in Nigeria's Oil Rich Niger Delta' (2010) 30 Canadian Journal of Developmental Studies 219 at 223.

[31] See 'BP Statistics of World Energy Review 2011' https://www.bp.com/.../bp.../statistical_review_of_world_energy_full_report_2011.pdf Accessed 8 November 2022.

[32] S Scholvin, A New Scramble for Africa? The Rush for Energy Resources in Sub-Saharan Africa (Taylor and Francis 2016)23; 'The Energy Access Situation in Developing Countries', a publication of the United Nations Development Programme Bureau for Energy 2009.

energy partners (such as the Gulf Guinea Commission) and international partners (such as the Organization of Petroleum Exporting Countries) for the purpose of developing capacity for potential future sources of energy such as solar power.

5. Current and Anticipated Impact of Climate Change on Nigeria

Nigeria is particularly vulnerable to the problem of climate change. By virtue of Nigeria's geographical positioning that extends from the Gulf of Guinea in the Atlantic Ocean in the South to the Sahara desert in the North, Nigeria is particularly vulnerable to the deleterious effects of climate change. Experts have produced extensive reports on the current and future impacts of climate change in Nigeria. For instance, experts on Climate Change have demonstrated that Nigeria is already experiencing various degrees and categories of ecological and meteorological problems caused by changes to the climate system.[33] These ecological and meteorological problems include *inter alia* a decreasing amount of rainfall in the continental interiors and an increasing amount of rainfall in the southern coastal parts of Nigeria.[34] In addition, the frequent, incessant and increasing droughts and desertification in the northern regions of Nigeria have been attributed to Climate Change.[35] In Nigeria's socio-economic structure is such that the bulk of domestically consumed foods are grown in the northern region of the country. Therefore, the frequent, incessant and increasing droughts are a serious threat to national food security.[36] Another ecological or meteorological problem attributed to Climate Change is the fact that many rivers, streams, ponds and other water bodies in Nigeria have dried up, while many rivers, streams, ponds and other water bodies in the northern part of the country are according to experts at the verge of disappearing.[37] In addition, the current widespread cases of flooding, wind storms, rain storms and even thunderstorms in Nigeria may be attributed to climate change.[38] Experts have sounded the grave warning that if the current trend of global warming and climate change is not reversed, Nigeria and other West African countries would face the risk of a temperature increase of as much as between 2.5 degree centigrade and 4.5 degree centigrade by the year 2100.[39]

6. Nigeria's Contribution to the Global Problem of Climate Change

Nigeria's primary emission of Green House Gases is through gas flaring in the Niger Delta by oil companies. However, there is another way in which Nigeria indirectly contributes to climate change through emission of Green House Gases. This indirect way of Nigeria's contribution to climate change is through the problem of deforestation. The problem of deforestation is pervasive in Nigeria in that it is experienced in all parts of Nigeria.

6.1 Deforestation and Climate Change

Deforestation is the direct or indirect "conversion of forests into alternative, permanent non-forested use of land such as agriculture, grazing or urban development."[40]Deforestation may be a consequence of human causes such as cutting of trees for timber. Deforestation may also result from non-human causes such as desertification, erosion etc. Deforestation occurs in all regions: tropical, sub-tropical and temperate. Deforestation is an issue of global concern as it is shrinking areas of the tropical forests[41] and causing loss of bio-diversity and enhancing the greenhouse effect.[42]

---

[33] A Chindo, P N Nyelong, "Lake Chad: From Mega lake to Mini lake" (2004) 6 Arid Wetland Bulletin 24-27.
[34] P O Odjugo, "An Analysis of Rainfall Pattern in Nigeria" (2005) 4(2) Global Journey of Environmental Science 139 at 145
[35] P A O Odjugo, "General Overview of Climate Change Impacts in Nigeria" (2010) 29(1) Journal of Human Ecology 47 at 55.
[36] *Ibid.*.
[37] P A O Odjugo, "The Impacts of Global Warming on Climate Change and extreme weather conditions: Global and Regional Evidences" (2007) 7 Asia Pacific Journal on Environment and Development 52 at 53
[38] I J Ekpoh, 'Climate Change and Recent Severe Flooding in Uyo, Akwa-Ibom State' *https://www.ajol.info/index.php/gjss/article/download/135936/125432* Accessed 1 June 2022
[39] P A O Odjugo (note 34 above).
[40] G. C. Van Kooten, E. H. Bulte, *The Economics of Nature: Managing Biological Assets* (Blackwells, Oxford 2000) 41
[41] S Barraclough, K. B. Ghimire, *Agricultural Expansion and Tropical Deforestation* (EarthScan, Sterling, Virginia 2ooo) 71

Deforestation is one of the contributors to global climate change. Deforestation results in the increase of the amount of Carbon Dioxide in the atmosphere.[43] Carbon Dioxide, in turn, reduces the thermal infrared radiation in the atmosphere by absorbing the thermal infrared radiation in the atmosphere.[44]The impact of deforestation on the climate is in 2 ways. The first impact of deforestation arises from the fact that deforestation expels carbon dioxide into the atmosphere as a result of the fact that dead trees release all their stored carbon.[45] A 2010 analysis estimates that, globally, deforestation has caused nearly a billion tons of carbon to be released into the atmosphere.[46] The second impact of deforestation arises from the fact that deforestation makes fewer trees available in the environment. This lessens the amount of Carbon stored.[47] Globally, deforestation is ranked highly as a causative factor of climate change. International experts rate deforestation as a global cause of climate change next to the direct emissions from the industries and the oil and gas sector.[48] This is equally true in Nigeria. Deforestation comes next to the gas flaring practices of oil companies as a cause of climate change.

The problem of deforestation is particularly acute in countries like Nigeria that are vulnerable to the problem of desertification. Deforestation results in desertification both directly and indirectly. The direct impact of deforestation on desertification results from the fact that the cutting of trees enhances desert encroachment.[49] The indirect impact of deforestation on desertification is from the fact that deforestation results in climate change because it alters normal weather and season patterns creating hotter and drier weather thereby increasing drought and desertification.[50]

6.2 Nigeria's Contribution to Climate Change through Deforestation

Nigeria has a tale of the adverse impact of deforestation on its forests and forest resources. Nigeria is severely plagued with the problem of deforestation. With a population of approximately 180 million people[51] and a land mass of just 923, 678 km^2 [52] the problem of deforestation is particularly acute in Nigeria.[53] In addition, to the massive population growth in Nigeria, agricultural expansion, urbanization and industrialization, logging, grazing, fire, mining and petroleum extraction, fuel wood collection have been attributed as the causes of deforestation in Nigeria[54]

The Food and Agriculture Organization of the United Nations observed in 2005 that Nigeria had the highest rate of deforestation in the world.[55] Between 2000 and 2005 Nigeria is said to have lost 5.7% of its primary forests.[56] From 2006 to 2010 the loss of forests through deforestation is said to have

---

[42] A Angelsen, 'Agricultural Expansion and Deforestation: Modeling the Impact of Population, Market Forces and Property Rights' (1999) 58 Journal of Development Economics 185 at 192.

[43] R Pinker, 'The Microclimate of a Dry Tropical Rainforest' (1980) 22 Journal of Agricultural Meteorology 249 at 253.

[44] *Ibid.*

[45]'Global Forest Resource Assessment 2010' http://www.fao.org/forestry/fra/fra2010/en/ Accessed 1 May 2017

[46]*Ibid*.

[47] Pinker (note 43 above)

[48] *Ibid.*

[49]E H Dregne, *Desertification of Arid Lands*(Harwood Academia Publishers London, 1983)11

[50]*Ibid*.

[51] National Bureau of Statistics http://www.nigerianstat.gov.ng/report/21 Accessed 1 June 2022.

[52] *Ibid.*.

[53] In 1970, 10% of Nigeria's total land mass of 923, 678 km^2 was covered by forest. Today, only about 4.05% of Nigeria's land mass is covered by forests. Between 2011 and 2015 Nigeria lost 9% of its forest through deforestation. See L Poopola, 'Valuing Nigeria's Forests: Issues and Context' Paper presented at the 14th Annual Chief S.L. Edu Memorial Lecture Organized by the Nigerian Conservative Foundation (Nigeria Conservation Publication 2016).

[54] P Mfon, O A Akintoye, G Mfon, T Olorudami, S U Ukata, T A Akintoye, 'Challenges of Deforestation in Nigeria and the Millenium Development Goals' (2014) 9 (2) International Journal of Environment and Bioenergy 76 at 83-85; F. C. Okafor, 'Rural Development and the Environment: Degradation versus Protection' in P. O. Soda. F. O. Odermeho, (eds) *Environmental Issues and Management in Nigerian Development* (Evans Brothers Ltd Publishers Ibadan 1988)154.

[55] M Ayala, 'Co-integration and Series Analysis of Arab Countries Food Gap (1980-2007)' (2010) 346(3) Journal of Economics and Engineering 32 at 41; 'Nigeria has Worst Deforestation Rate, FAO Revises Figures' https://news.mongabay.com/2005/11/nigeria-has-worst-deforestation-rate-fao-revises-figures/ Accessed 17 May 2022.

[56] Ayala (note 55) above; T. E. Olagunju, 'Impact of Human Induced Deforestation, Forest Degradation and Fragmentation on Food Security' (2015) 8 (1) New York Science Journal 1 at 7.

increased to about 8%.[57] Between 2011 and 2015 Nigeria lost 9% of its forest through deforestation.[58]In 1970, 10% of Nigeria's total land mass of 923, 678 km^2 was covered by forest.[59] Today, only about 4.05% of Nigeria's land mass is covered by forests.[60]

6.3 Nigeria's Contribution to Climate Change through Gas Flaring in the Niger Delta

Nigeria flares huge volumes of gas every year. This huge volume of gas that is flared and vented constitutes the bulk of Nigeria's emission of Green Houses Gases into the atmosphere thus affecting human communities all over the world. According to the Post Carbon Institute, flaring and venting of gas in Nigeria results in the emission of an astounding 150 to 200 million tons of Carbon Dioxide into the atmosphere every year.[61] Gas flaring and venting makes Nigeria the highest contributor to global warming in sub-Saharan Africa.[62] This huge volume of gas is flared because of there is a nexus between the ratio of associated gas and crude oil produced. Nigeria is said to produce an average of between 2 million to 2.5 million barrels of crude oil per day.[63] Oil production levels determine the level of Associated Gas produced along with the crude oil and thus in turn determines bears the amount of gas flared.[64] It is estimated that for every 2.2 million barrels of crude oil produced, 2.2 billion cubic feet of Associated Gas is produced alongside.[65] Since the mid-1970s, Nigeria has flared between 2 billion to 2.6 billion cubic feet of gas per day.[66] There are currently plans by the Federal Government of Nigeria to increase its level of oil production from the current average of 2.2 million barrels of crude oil per day to 3 million barrels of crude oil per day by the year 2020.[67] If the current trend of gas flaring is not checked the volume of gas flaring would also increase. This means that the level of Green House Gas emissions from Nigeria would also double. However, the Federal Government of Nigeria has set a target to completely end gas flaring by the year 2020.[68] Experts argue that this gas flaring ending target is unrealistic.[69]

Nigeria's contribution to climate change through gas flaring is particularly worrisome because the primary gas released in gas flaring is Carbon Dioxide. The United Nations Framework Convention on Climate Change mentioned that of the 6 dominant Green House Gases, Carbon Dioxide is considered to have the strongest impact on climate change.[70] Satellite observed emissions showed that Nigeria gas flaring constitutes about one tenth of global gas burst total making it second only to Russia whose flares constitute one quarter of the total gas flaring in the world.[71] The seriousness of this problem is

---

[57] *Ibid.*

[58] L Poopola, 'Valuing Nigeria's Forests: Issues and Context' Paper presented at the 14th Annual Chief S.L. Edu Memorial Lecture Organized by the Nigerian Conservative Foundation (Nigeria Conservation Federation Publication 2016); Olagunju (note 56) above.

[59]Poopola (note 58) above.

[60] *Ibid.*

[61] See Nigeria, Gas Flaring and Global Warming (note 24 above). But this must be put in context as the contribution of Africa to global Green House gas emission is relatively insignificant. Africa is said to contribute barely 3.8% to global Green House Gas emissions. A Sy, 'Africa: Financing Adaptation and Mitigation in the World's Most Vulnerable Region' *https://www.brookings.edu/wp-content/uploads/.../global_20160818_cop21_africa.* Accessed 1 June 2022.

[62] B Kahn, 'Gas Flaring: Major Cause of Climate Change, BP Oil Spill Solution' http://justmeans.com/blogs/gas-flaring-major-cause-of-climate-change-bp-oil-spill-solution Accessed 10 August 2022.

[63] 'Gas Flaring in Nigeria: A human Environmental and Economic Monstrosity: A Report by the Climate Justice Programme and the Environmental Rights Action/Friends of the Earth Nigeria June 2005' p. 10 www.climatelaw.org/.../nigeria/report/index.html Accessed 18 January 2022.

[64] *Ibid.*

[65] *Ibid.*

[66] *Ibid.* 11

[67] 'NNPC to Increase Crude Oil Reserves by 40 Billion Barrels by 2020' https://www.tribuneonlineng.com/153392/ Accessed 1 July 2022

[68] P S Tamuno, 'A Sequential Analysis of Nigeria's Attempts to End Gas Flaring' (2018) 1 IELR 17 at 24

[69] *Ibid.*

[70] K B Ajide, 'The Impact of Population Age Structure on CO_2 Emissions in Nigeria' in A Adenikinju, A Iwayemi, W Iladare (eds) *Energy Resource Management in a Federal System: Challenges, Constraints and Strategies* (Proceedings of the 2013 NAEE/IAEE Conference) (Nigerian Association of Energy Economics Publication 2014)710 at 711

[71]M I Shuaibu, M A Oyinlola, 'Energy Consumption, CO_2 Emissions and Economic Growth in Nigeria' in A Adenikinju, A Iwayemi, W Iladare (eds) *Energy Resource Management in a Federal System: Challenges, Constraints and Strategies* (Proceedings of the 2013 NAEE/IAEE Conference) (Nigerian Association of Energy Economics Publication 2014)744 at 749

seen in when considered from the context that the International Energy Association, stated that the energy related world Carbon Dioxide Emissions had reached a threateningly high historical maximum of 30,600 millions of tonnes in 2010.[72] Energy analyst have argued that in order to limit global temperature increase within safe limits, global emissions must not exceed 32,000 million tonnes by the year 2025.[73]

7. Legal and Institutional Framework on Climate Change in Nigeria

Given, the above background to the problem of gas flaring in Nigeria, a proper legal and regulatory framework for gas flaring is indispensable. It must be emphasized at this stage that before 2021, Nigeria had no detailed legal and regulatory framework on climate change.[74] Apart from a few funds and policies,[75] there were no statutes or agencies specifically dedicated to addressing the problem of climate change in Nigeria. This may perhaps be explained by the fact that in Nigeria, environmental discussions have for decades been dominated by the focus on the Niger Delta oil spill and pollution crisis to the near exclusion of other environmental issues such as desertification, erosion and climate change. Climate change concerns have only come to the fore of Nigerian environmental discussions in recent times. From a domestic or national perspective, traces of regulations which indirectly impact Climate Change can be found in the Nigerian general environmental regulations. Nigeria thus relied heavily on the international treaties and conventions which she has assented to or ratified as the specific laws for addressing climate change. The point must be made at this stage that the mere signing of a treaty or convention by Nigeria does not make it enforceable in the courts in Nigeria. The Supreme Court of Nigeria has affirmed that an international treaty or convention must be incorporated into Nigerian municipal law by the process of domestication to make it binding and enforceable in the Nigerian Courts.[76] A perfect illustration of this principle is seen in the African Charter on Human and People's Rights. Although, the African Charter on Human and People's Rights (African Charter) does not expressly address the question of climate change, it provides an example of the impact of ratifying an international treaty. After ratifying the African Charter in 1983, Nigeria incorporated it into domestic law by enacting it as the African Charter on Human and Peoples Rights (Ratification and Enforcement) Act of 1983 (African Charter Act). The implication of this domestication of the African Charter is that it became part of Nigeria's national laws. Section 1 of the African Charter Act provides that the provisions of the African Charter have "force of law in Nigeria and shall be given full recognition and effect and be applied by all authorities and persons exercising legislative, executive or judicial powers in Nigeria." The Supreme Court of Nigeria affirmed that "the incorporation of the African Charter into Nigerian municipal law makes it binding on the Nigerian Courts."[77]

Another issue worth considering is the status of such domesticated international treaties and conventions in the hierarchy of Nigerian laws. The Supreme Court stated has affirmed that "the domestication of the African Charter on Human and Peoples' Rights places it above the other national statutes in Nigeria but below the Nigerian Constitution."[78] "Any conflict between the African Charter on Human and People's Rights and any statute in Nigeria should be resolved in favour of the African Charter on Human and People's Rights."[79] The import of this judgment is that although Nigeria at the moment has not domesticated any climate change treaty or convention, such domestication, if eventually done would place the treaty or convention at the peak of the Nigerian hierarchy of laws, second only to the constitution.

In the year 2021, Nigeria passed the Climate Change Act into law.

[72] K B Ajide (Note 70 above)
[73] *Ibid.*
[74] For instance, South Africa. South African Legal and Regulatory framework on Climate Change are discussed in details in Chapter 5.
[75] These funds and Policies are examined in details in chapter 4.
[76] Abacha V. Fawehinmi (2001) AHRLR 172
[77] Abacha V. Fawehinmi (2001) AHRLR 172 paras 14-15.
[78] *Ibid.*.
[79] *Ibid.*.

8. National Regulation on Climate Change in Nigeria

As noted above, before the year 2021, there were no statutes that specifically addressed the problem of climate change in Nigeria. Climate change issues were treated under the general body of environmental regulations in Nigeria. The advantage of this approach was that environmental issues are treated holistically rather than on a piece-meal basis. The disadvantage of this approach was that certain key environmental issues such as climate change are not given the requisite attention they ordinarily deserve. In discussing the statutory response of Nigeria to Climate Change, it is therefore pertinent that some important statutes that indirectly impact on Climate Change before the year 2021. These statutes are the Constitution of the Federal Republic of Nigeria 1999, the Environmental Impact Assessment Act, the Associated Gas Re-injection Act 1979 and the Associated Gas Reinjection (Continued Flaring of Gas) Regulations of 1984.

8.1 The Constitution of Nigeria 1999

Although there are environmental statutes which predate the constitution of Nigeria 1999, it is important for us to start from the constitution because the powers to make these laws were derived from the 1999 Constitution and the preceding constitutions.[80] The constitution of Nigeria[81] makes no mention of climate change. However, the Constitution of Nigeria is the enabling law of Nigeria that makes important provisions as regards the protection and conservation of the environment in Nigeria. Section 20 of the constitution of Nigeria provides that: "the State shall protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria." This provision is the basis for the enactment of all other environmental protection laws and statutes in Nigeria. Similarly, section 17 of the Constitution provides that: "the Nigerian state order is founded on the ideals of Freedom, Equality and Justice." Section 17(2)(d) provides further that in furtherance of this ideal, "the exploitation of human or natural resources for reasons other than the good of the community shall be prevented." It must be emphasized at this point that while sections 20 and 17 are the basis of the enactment of other statutes on environmental protection, they are not enforceable in Nigerian courts. This is because these sections are contained in chapter 2 of the Nigerian Constitution which provides for the "Fundamental Objectives and Directive Principles of State Policy." This chapter is unenforceable because section 6(6)(c) of the Constitution excludes it from the jurisdiction of the Nigerian courts.

8.2 The Environmental Impact Assessment Act

This Act provides the framework for ensuring that the environmental impact assessments on projects likely to impact the environment are carried out prior to their commencement.[82] The Act provides for an environment agency to monitor and approve projects which have passed the environmental impact assessments.[83] Before the approval of any projects, opportunity must be given to the public to comment on the impact of the project.[84] Equally, the procedure for authorization of Environmental Impact Assessment (EIA) is that after receiving a mandatory study report, the Agency shall put out a public notice stating: 'the date on which the report shall be available to the public; the place at which copies of the report may be obtained and the deadline and address for filing comments on the report.'[85] Comments received from the public are part of the factors to be considered in the mandatory study or

[80] Such as the 1979 Constitution, 1963 Constitution etc.

[81] Constitution of the Federal Republic of Nigeria 1999 as amended

[82] Section 2(1) of the Act provides that "where the extent, nature or location of a proposed project is likely to significantly affect the environment then an environment impact assessment (EIA) must be made."

[83] A mandatory study of the environmental impact must be undertaken before commencing on projects including *inter alia* projects of oil. See para 12 of the Mandatory Study Activities in the Schedule of the Act. This agency was initially the Federal Environmental Protection Agency. It subsequently became the Federal Ministry of Environment. It is currently the National Environmental Standards and Regulations Enforcement Agency.

[84] Section 7 of the Act provides that before a decision is made on a project by the agency, opportunity shall be given to: 'government agencies, members of the public, experts in any relevant discipline and interested groups to make comment on environmental impact assessment of the activity.' Equally section 25(2) provides that the Act also provides that any person may file comments with the environmental agency relating to the report.

[85] *Ibid.* Section 25.

in the event of mediation by a review panel.[86] The Act's list of mandatory projects that must have an EIA undertaken before they are carried out[87] includes *inter alia*: 'Petroleum, Oil and Gas Field Development, construction of pipelines' etc.[88] The impact of this Act on Climate Change is the fact that one of the grounds to objecting to any project could be its likelihood to release Green House Gases into the atmosphere.

In practice, this Act has not been used as the basis for stopping any project that releases Green House Gases into the atmosphere or for addressing any other environmental problems. Several weaknesses of this Act render it ineffective. For instance, the Act does not specify how the complex scientific analysis involved in measuring the environmental impact of a proposed project would be explained to the understanding of the grass root rural people of the Nigeria.[89] The consequence is that the debates on environmental impacts would be monopolized by Non-Governmental Organizations and technical experts without any input from the people whose daily lives would be affected by the project.[90] In addition, no serious publicity has been made about the Act to increase public awareness of the Act. In spite of these weaknesses, the Act is a potential tool for addressing the problem of climate change in Nigeria.

8.3 Associated Gas Re-injection Act 1979

This Act is particularly relevant to the question of climate change as its primary focus was to permanently put an end to gas flaring in Nigeria. This Act was enacted by the Nigerian military government as an urgent response to the problem of gas flaring. This Act expressly prohibited gas flaring from the 1st of January 1984. Section 2 of this Act provided that: 'All companies are to submit Gas Utilisation Preliminary Programmes by 1 January 1980, and detailed programmes on utilisation or reinjection by 1 April 1984.' Section 3(1) provided that: No company was to flare Gas after 1 January 1984 without the permission of the minister of petroleum. The penalty for non-compliance according to section 4(1) was forfeiture of concession. Section 4(2) provided further that: 'The minister may withhold all or part of the entitlements of any offending person towards the cost of completion or implementation of a desirable reinjection scheme or the repair or restoration of any reservoir in the field in accordance with good oil field practices.' There were several challenges with implementing this statute. The first was the absence of gas utilization facilities. According to Omorogbe: 'The Law was promulgated despite the absence of any infrastructure for Associated Gas utilisation. At that time only one gas injection plant owned by Mobil existed.'[91] There was also the problem of the Joint Venture Agreements. The bulk of Nigerian oil was produced under Joint Venture Agreement where the government through the erstwhile Nigerian National Petroleum Corporation (NNPC)[92] was the majority partner; NNPC was liable for a commensurate share of the gas reinjection facilities.[93] NNPC could not meet its share of costs.[94] The third challenge with implementing the statue was the difficulty of implementing the harsh penalty of forfeiture of concession in the face of Nigeria's reliance on Multinational Oil Companies for technology and capital. The provisions of sections 4(1) and 4(2) of this Act were criticised as being too severe[95] and an attempt 'to compel gas utilization by the threat of

[86] *Ibid.* Section 17(1).
[87] *Ibid.*, Section 13 (the Schedule of the Act).
[88] *Ibid.* Items 11 and 12 of the Act.
[89] Y Omorogbe, 'The Legal FrameWork for Public Participation in Decision –Making on Mining and Energy Development in Nigeria: Giving Voices to the Voiceless' in D. N. Zillman, A. R. Lucas and G. (Rock) Pring (ed) *Human Right in Natural Resources Development: Public Participation in the Sustainable Development of Mining and Energy Resources* (Oxford University Press, Oxford 2002) 549, 582-583.
[90] *Ibid.*.
[91] Y Omorogbe *Oil and Gas Law in Nigeria* (1st edn, Malthouse Press Ltd Lagos, Nigeria, 2003)59
[92] The Petroleum Industry Act 2022 has replaced the Nigerian National Petroleum Corporation with the Nigerian National Petroleum Company Ltd
[93] Oyewunmi (note 88 above) 10.
[94] T Oyewunmi, 'Natural Gas Exploration and Production in Nigeria and Mozambique: Legal and Contractual Issues' (2015) 13 (1) OGEL 1, 10,14 www.ogel.org; A Akinrele, 'The Current Impact of Global Crude Oil Prices on Nigeria: an Overview of the Nigerian Petroleum and Energy Sector.' (2016) 9 (5) J World Energy Law Bus 313 at 329.
[95] *Ibid.*

a stick.'[96] The unfeasibility of implementing this Act resulted in the enactment of the Associated Gas Reinjection (Continued Flaring of Gas) Regulations of 1984.[97]

8.4 The Associated Gas Reinjection (Continued Flaring of Gas) Regulations of 1984

This regulation was enacted to mitigate the harshness of the Associated Gas Re-injection Act 1979. This regulation provided exemptions from the prohibition of gas flaring under the 1979 Act. The conditions for obtaining an exemption under the Regulation include:

(I.) Where more than 75% of the produced gas is effectively utilized or conserved;

(II.) Where the produced gas contains more than 15% impurities…which render the gas unsuitable for industrial purposes;

(III.) Where an on-going utilization programme is interrupted by equipment failure;

(IV.) Where the ratio of the volume of gas produced per day to the distance of the field from the nearest gas line or possible utilization point is less than 50,000 SCF/KM: and it is technically impossible to reinject the gas in the field.

(V.) Where the Minister, orders the production of oil from a field that does not satisfy any of the conditions specified in these Regulations.

These clauses had the effect of exempting 86 out of 155 fields from the anti- flaring provisions of the Associated Gas Re-Injection Act of 1979.[98] The remaining fields were subject by this regulation to a penalty of 9 United States Cents (US $0.9) per 1,000 cubic feet of gas flared. This insignificant penalty for gas flaring served only to increase gas flaring as it made economic sense for MNCs to flare the gas and pay the fine given the huge capital outlay required to harness the gas. Furthermore, the fine was inconsequential when compared to the amount Nigeria lost from flaring annually. The World Bank observed that:

> 'It is worthwhile noting that in recent years, oil companies in Nigeria have been charged a total of between US$150,000-370,000 annually for flaring associated gas. However, this has to be seen in the overall context of gas flared. A recent study carried out for the Bureau of Public Enterprises of Nigeria estimated that each year the country loses between US$500 million and US$2.5 billion to gas flaring.'[99]

Another criticism of this regulation is the fact that the penalty was only imposed on Multinational Oil Companies. The Nigerian government which was a Joint Venture Agreement partner with the Multinational Oil Companies through the NNPC was never fined for gas flaring according to the proportion of its share of the Joint Venture Agreement.[100]

By exempting half of the fields in Nigeria and providing a paltry sum as fine, it may be concluded that this regulation served to encourage gas flaring. The contradictory position between this regulation and the Associated Gas Re-injection Act 1979 can be explained by the fact that the Nigerian government were bowing to pressures from Multinational oil companies to reduce the effectiveness of the Associated Gas Re-Injection Act of 1979, which they perceived as a hostile statute.[101] The enactment of this statute was accompanied by a shifting of the deadline to end gas flaring from 1 January 1984 to 1 April 1984; It was postponed to 1 January 1985, and subsequently postponed indefinitely.[102] The

---

[96] G Nnona, 'New Policy Regime for Gas in Nigeria: a Perspective on Tax and Related Incentives'(2003) 21 J.E.N.R.L 285.

[97] This was done pursuant to sections 3 and 5 of the Associated Gas Re-Injection Act of 1979 which empowered the Minister of Petroleum to make regulations that aid the further implementation of this Act.

[98] Omorogbe (note 91 above) 58.

[99] 'Global Gas Flaring Reduction Initiative: Report No.3: Regulation of Associated Gas Flaring and Venting - a Global Overview and Lessons' (World Bank, March 2004), page 64. http://www.ifc.org/ogc/global_gas.htm. Accessed January 20 2022.

[100] Omorogbe (note 91 above) 60

[101] N E Ojukwu-Ogba 'Legal and Regulatory Instrument on Environmental Pollution in Nigeria: much talk, less teeth' (2006)8(9) I.E.L.T.R. 208, 215;

[102] Omorogbe (note 91 above) 59

implication of this is that this Act is the reason that Nigeria makes a huge contribution to the problem of climate change.

9. The Climate Change Act 2021

This radical law was signed by the president of Nigeria in the year 2021. The background to this law is as follows is that in the year 2008, 2 bills were introduced in the House of Representatives to address the problem of climate change. The first bill proposed the creation of a climate change agency with close ties to the Ministry of the Environment, while the second bill aimed to create an Independent National Commission on Climate Change. Eventually, the first bill was subsumed into the second. However, this bill became trapped in the legislative process. In 2011, both House of Representatives and Senate passed the Bill, but it did not receive assent by the President.[103] This bill was subsequently signed into law in the year 2021. The purpose of the Act is given as the mainstreaming of climate change actions and the establishment of the National Council of Climate Change.[104] The objectives of the Act are to provide a framework for achieving low Green House Gas emissions, inclusive green growth and sustainable economic development by:

(a) Ensuring that Nigeria formulates programmes for achieving its long term goals on climate change mitigation and adaptation;

(b) Facilitate the coordination of climate change action needed to achieve long term climate change objective

(c) Mainstream climate change action in line with national development priorities

(d) Facilitate the mobilisation of finance and other resources necessary to ensure effective action on climate change;

(e) Ensuring that climate change policies and action are integrated with other related policies for promoting socio-economic development and environmental integrity

(f) Setting a target for year 2050-2070 for the attainment of net zero Green House Gas emission in line with Nigeria international Climate Change obligations.

(g) Identifying risk and vulnerabilities, building resilience and strengthening existing adaptive capacities to the impact of climate change;

(h) Implementing mitigation measures that promote low carbon economy and sustainable livelihoods;

(i) Ensuring that private and public entities comply with stated climate change strategies, targets and National Climate Change Action Plan.[105]

Zero Green House Gas emission by the year 2050 as provided in paragraph f above requires that Nigeria must address the problems of gas flaring and deforestation. Nevertheless, this Act provides the blue print for addressing the problem of climate change in Nigeria. The Act also established the National Council on Climate Change with the responsibility of making policies and decisions on all matters concerning climate change.[106] It is also the responsibility of the Council to *inter alia* coordinate the implementation of sectoral targets for the regulation of Green House Gases emissions and to oversee the action plan on climate change.[107] The Act also establishes the Climate Change Funds.[108] This funds shall be obtained from 4 sources: monies allocated to climate change by the National Assembly, grants and fees from services from services rendered or publications made by the council, funding from international organizations, fines and charges from private entities who violate the climate change mitigation obligations, carbon tax and emission trading and such other fund as may

[103] I A Noah, 'Nigeria's Legal Responses to Climate Change Obligations' https: //uwe-repository.worktribe.com Accessed 1 June 2021
[104] See the preamble of the Climate Change Act.
[105] Section 1 of the Climate Change Act.
[106] Section 2 of the Climate Change Act.
[107] Section 4 of the Climate Change Act.
[108] Section 15 of the Act.

be prescribed by the National Council on Climate Change.[109] This fund shall be used for the running of the Council, the remuneration of staff of the Council, for creation of awareness about climate change and for research on the impact of climate change on Nigeria.[110] Section 19 of the Act provides that the Federal Ministry of the Environment and the Ministry of National Planning shall periodically prescribe Carbon budgets for Nigeria. In addition, section 20 of the Act provides that the secretariat of the National Council on Climate Change, the Federal Ministry of Environment and the Ministry of National Planning shall formulate a 5 years action plan on climate change. This plan shall be renewed every 5 years.[111] Nigeria primarily contributes to climate change through gas flaring and deforestation. Therefore, section 28 of the Act gives the Federal Ministry of Environment the responsibility of implementing the reduction of emission from deforestation. However, the Act failed to make any provision for the ending of gas flaring in Nigeria.

In the overall analysis, the Act is detailed and comprehensive. It provides a comprehensive approach for climate change response in Nigeria. However, it is still too early to examine if the Act would be effectively implemented.

10. Federal Government Policy Responses to Climate Change

Before the passage of the Climate Change Act in 2021, Nigeria's primary response to climate change was through policies. In contrast to laws, policies are unenforceable in court. They are merely guiding principles to direct the government in responding to and implementing Nigeria's obligations under international agreements such as the United Nations Framework Convention on Climate Change and the Kyoto Protocol to the United Nations Framework Convention on Climate Change. The policies on Climate Change in Nigeria fall into 3 categories: Policies that directly address climate Change, Policies on Renewable Energy and Policies on Deforestation.

10.1 Federal Government Policies that Directly Affect Climate Change

For the purpose of improving policy formulation and co-ordination on climate change, the Ministry of the Environment created the Special Climate Change Unit which in the year 2011 was been transformed into the Department of Climate change.[112] In the year 2012, the Department of Climate Change signed a co-operation agreement with Germany and Republic of Benin, Burkina Faso, Cote d'Ivoire, Ghana, Gambia, Mali, Niger, Senegal, and Togo for the sole purpose of collaborating in the review and development of cross boundary climate change policies.[113] This corporate agreement was upgraded in the year 2013, when the Nigerian Federal Executive Council approved the agreement for ratification.[114] This collaboration has now been given a definite structure and will take place within the framework and under the auspices of the newly created West African Science Service Centre on Climate Change and Adapted Land Use.[115] Another mile stones in the policy governance on climate change is seen in the fact that since 2007, civil society organisations, non-governmental organizations and international donor organisations have been working together and in partnership with the Federal Ministry of Environment to identify climate change vulnerabilities in Nigeria and develop a comprehensive adaptation and response strategy.[116] This collaboration was titled the Building Nigeria's Response to Climate Change (BNRCC) project.[117] In 2011, this collaboration resulted in the publications of the National Adaptation Strategy and Plan of Action on Climate Change for Nigeria

[109] *Ibid.*
[110] Section 16 of the Climate Change Act.
[111] Section 20 of the Climate Change Act.
[112] 'Climate Change in Nigeria: An Excerpt from The 2015 Global Climate Legislation Study, A Review of Climate Change Legislation in 99 Countries' (Grantham Research Institute on Climate Change and the Environment 2015) 1
[113] *Ibid.*
[114] *Ibid.*
[115] *Ibid.*
[116] *Ibid.*
[117] 'Building Nigeria's Response to Climate Change' https://www.devex.com/.../building-nigeria-s-response-to-climate-change-bnrcc-3141 2 June 2022.

(NASPA-CNN).[118] The NASPA-CNN outlined proposed responses of the Nigerian government to climate change in key areas of the Nigerian society such as agriculture, fresh and coastal water resources, fisheries, forest, biodiversity, health and sanitation, human settlements and housing, energy, transportation and communications, industry and commerce, disaster, migration and security, livelihoods, vulnerable groups, and education.[119] The NASPA-CNN was never implemented because it did not find official and governmental support.[120] But it was not a complete failure, because it provided inspiration for another document. In 2012, the Executive Council of the Nigerian government approved the adoption of a new policy document on climate change for Nigeria. This document is the National Climate Change Policy and Response Strategy (NCCP-RS).[121] The NCCP-RS aims at providing a framework for responding specifically to climate change-induced challenges such as increased flooding and rising sea levels in and around Nigeria.[122]

In the year 2013, a National Policy on Climate Change was finally approved and adopted by the Federal Executive Council of Nigeria.[123] The National Policy on Climate Change is a national strategic policy response to climate change in Nigeria which has as its aims the fostering of low-carbon emission in a high growth economic development path and the building of a climate-resilient society through the attainment of predetermined targets.[124] The National Policy on Climate Change explicitly identifies climate changes as one of the primary threats to the economic development goals and food and energy security of Nigeria.[125] To address these challenges, the National Policy on Climate change includes concrete targets in the areas of climate change adaptation, afforestation, and energy supply.[126] The National Policy on Climate Change adopted the vision of the NCCP-RS which is to develop a climate change-resilient Nigeria ready for rapid, all round and sustainable socio-economic development.[127] Its mission of strengthening national initiatives to adapt to and mitigate climate change in Nigeria and involve all sectors of society, including the poor within the overall context of advancing sustainable socio-economic development was also adopted in the National Policy on Climate Change. The main objectives of the National Policy on Climate Change are:

- Provide a framework for Implementation and mitigation measures that will promote low carbon as well as sustainable and high economic growth
- Provide mechanism to strengthen national capacity to adapt to climate change
- Strengthening of Nigeria's national institutions, framework and mechanisms for establishing a sustainable, reliable and functional framework for climate change Governance
- Raise climate change based technology; and Research to a new level that will enable Nigeria to better participate in international and regional scientific and technological co-operation and collaboration on climate change;
- Significantly increase public awareness about climate change and involve and increase the participation of the private sector in addressing the challenges of climate change.[128]

[118] 'National Adaptation Strategy and Plan of Action on Climate Change for Nigeria' csdevnet.org/.../NATIONAL-ADAPTATION-STRATEGY-AND-PLAN-OF-ACTION 2 June 2022.
[119] Climate Change in Nigeria (note 112 above).
[120] *Ibid.* 2
[121] 'National Policy and Response Strategy on Climate Change' www.epa.gov.lr/.../National%20Policy%20and%20Response%20Strategy%20on%20C *Accessed 2 June 2018*
[122] Climate Change in Nigeria (note 112 above) 3
[123] *Ibid.*
[124] *Ibid.* 3
[125] *Ibid.*
[126] *Ibid.*
[127] *Ibid.*
[128] *Ibid.*

10.2 Federal Government Policies on Renewable Energy

Nigeria has also responded to climate change by intensifying its policies on renewable energy. These policies have come in several ways. Firstly, in its national development plan under Vision 2020, the government had set targets to promote the maximum production and use of renewable energy in Nigeria by the year 2020.[129] Renewable energy forms targeted in this policy include wind, solar, hydro, and biomass.[130] Among these forms of energies, solar and Hydro forms of renewable energy has been given the greatest priority. The Vision 2020 includes planned to increase the utilization of solar and Hydro plants in Nigeria by the construction of several solar and hydro power plants in different parts of Nigeria.[131] In 2010, the Ministry of the Environment announced Nigeria's ambitious plans to increase the percentage of renewable energy utilization in Nigeria to 20% of Nigeria's entire power and electricity requirements by the year 2020.[132] Although these targets were mostly not met due to poor implementation, they demonstrated Nigeria's commitment to renewable energy.

The government has in addition to solar and Hydro forms of renewable energy also put up a policy document on Biofuel. Nigeria adopted a National Biofuel Policy in 2007, the aims of which was to create an enabling environment for Nigeria's biofuel sector.[133] In contrast to other forms of renewable energy, the biofuel sector has yielded some measures of success. A Biofuel Energy Commission and a Biofuel Research Agency have been established.[134] In addition, the National Biofuel Policy offers tax exemptions and other incentives to any business which undertakes the production of biofuel in Nigeria. Recently, the Federal Government of Nigeria announced that it had finalized plans to launch a National Policy on Renewable Energy and Energy Efficiency.[135]

In a bid to further advance its pursuit of renewable energy, Nigeria has also sought international assistance in the area of energy efficiency by applying for international Clean Technology Fund's (CTF) support of energy efficiency projects. The CTF Investment Plan envisages a total of USD1.3bn to support low-carbon growth objectives.[136] Nigeria is also considering a national legislation on clean technology.[137]

10.3 Federal Government Legislation on Deforestation

Nigeria already has a statute to address the problem of deforestation. This legislation statute is the Natural Conversation Act of 1989. In spite of this statute, Nigeria also produced policies on deforestation. This also came within the framework of vision 2020. Nigeria's Vision 2020 includes measures that proposed to reduce the rate of deforestation. Vision 2020 targets were to increase forest cover from currently 4.05% to 10%.[138] This target was also not met due to lack of will power on the part of the government. In addition to deforestation, Vision 2020 also included a number of prevention of desertification targets such as the establishment of a 1,500km "green wall" in the 11 Nigerian states that border the Sahara desert to slow down the rate, extent and speed of desertification.[139] Again these targets were not met due to poor implementation and lack of will power on the part of the government.

---

[129] 'Nigeria Vision 20:2020-Country Planning Cycle Data Base' www.nationalplanningcycles.org/sites/default/.../nigeria/nigeria-vision-20-20-20.pdf Accessed 1 August 2022.
[130] *Ibid.*
[131] *Ibid.*
[132] Climate Change in Nigeria (note 112 above)2
[133] 'Nigerian Biofuel Policy and Incentive'
www.lse.ac.uk/GranthamInstitute/wp-content/uploads/laws/1517.pdf Accessed 1 August 2022.

[134] *Ibid.*
[135] Climate Change in Nigeria (note 112 above)2
[136] *Ibid.*
[137] *Ibid.*
[138] 'Nigeria's Vision 2020' (Gratham Research Institute on Climate Change)
www.lse.ac.uk/GranthamInstitute/law/nigeria-vision-2020/ Accessed 1 June 2022.

[139] *Ibid.*

11. State Responses to Climate Change in Nigeria: Case Study Of Lagos State

In Nigeria, environmental issues come under the concurrent legislative list of the Constitution of the Federal Nigeria 1999. The Nigerian legislative power arrangement in the Constitution is divided into an Exclusive Legislative List, a Concurrent Legislative List and a Residual Legislative List. The Concurrent Legislative Lists is a list of issues which both the Federal and State government of Nigeria can legislate on.[140] This is in contrast to the Exclusive Legislative list which only the federal government can legislate on. [141] The import of this is that both the federal government and state government can make laws and policies on environmental issues including climate change. In practice, most states in Nigeria have shown very little regard for the issue of climate change. This is perhaps attributable to the lack of awareness about the threats of climate change. However, Lagos State has taken several steps in response to the threat of climate change. Firstly, Lagos State hosted the Lagos State Submit on Climate Change. In addition, Lagos State, enacted an Environmental Law that includes provisions on climate change. Finally, Lagos State has launched the Green Initiative Policy for Lagos. The Lagos State Climate Change Summit is an annual event that has been held in Lagos State since the year 2008. The Summit is aimed at creating awareness at the grass roots and among the ordinary citizens about the potential dangers of climate change.[142] The summits are aimed at creating greater awareness on the causes and consequences of climate change in Nigeria and beyond as well as sharing and spreading information on world best practices on climate change mitigation and adaptation measures.[143] The Summits are given a theme[144] and are addressed by experts on climate change and are open to the general public and are attended by the representatives of the government of Lagos State. These summits are invaluable in creating public awareness about climate change and encouraging public participation in climate change mitigation.

The Lagos State government enacted the Lagos State Environmental Management and Protection Law 2017. This law is not specifically targeted at the issue of Climate Change but its aim is to consolidate all the laws relating to the environment for the management, protection and sustainable development of the environment in Lagos State.[145] Nevertheless, this law provides for air quality standards that must be respected, limits of noxious gases into the atmosphere etc.

Lagos state also introduced the Green Initiative Policy for Lagos State in the year 2017[146] as an initiative to make Lagos State cleaner to ensure a greater amount of green covering in Lagos through the establishment of parks and gardens in different parts of Lagos.[147] Since the commencement of the program, several green parks and gardens have been established in Lagos State.[148]

From a regulatory perspective, there is no regulatory body, established specifically to address the issue of climate change in Lagos State. However, the Lagos State Environmental Protection Agency (LASEPA) was established under the Lagos State Environmental Protection Agency Law. LASEPA's regulatory role extends to all environmental issues in Lagos State (including climate change) and its duties includes monitoring, regulating and controlling the disposal of waste in Lagos State and playing an advisory role to the Lagos State Government on all environmental management policies.

The steps of the Lagos State government are inadequate. But they demonstrate the fact that there is growing awareness at the state level that climate change poses a great threat.

---

[140]. Section 318(1) of the Constitution of Nigeria 1999.
[141] Section 4(2) of the Constitution
[142]'Nigeria: Lagos Hosts Third Climate Change Summit' The Daily Champion 7 February 2011 https://allafrica.com/stories/201102070834.html Accessed 1 June 2022.
[143] *Ibid.*.
[144] For instance the theme for the 3rd edition is: "Charting a New Course for Combating Climate Change in Nigeria." *Ibid.*.
[145] See the Commencement of the Law.
[146] It has been introduced severally in the past but it was re-introduced in the year 2017.
[147] 'Lagos Unveils Strategic Plan for Greening Initiative' *https://lagosstate.gov.ng › All News* Accessed 1 September 2022.
[148] *Ibid.*.

12. Conclusion

This article examined the legal, regulatory and institutional response to climate change in Nigeria. The primary question that was addressed in this article was: 'To what extent has Nigeria put up an effective legal, regulatory and institutional regime in response to the global challenge of climate change?'

The finding of this article is that Nigeria is yet to have a robust legal, regulatory and institutional regime for addressing climate change. This is notwithstanding the fact that Nigeria contributes to climate change through gas flaring that releases Green House Gases into the atmosphere and deforestation.

This article notes that before the year 2021 there was no statute in Nigeria that specifically addressed climate change. Similarly, there were no regulatory bodies or institutions that are established to specifically monitor climate change and coordinate national response to climate change. This was true both at the national level and at the state level. Nigeria has drafted several policies on climate change. But these policies have largely not been implemented.

However, in the year 2021, Nigeria signed the Climate Change bill into law. The purpose of the Climate Change Act is given as the mainstreaming of climate change actions and the establishment of the National Council of Climate Change. This Act has come to fill the vacuum caused by the lack of a statute on Climate Change. It is therefore recommended that this statute be effectively implemented.