

**HUMAN RIGHT- BASED APPROACH TO CLIMATE CHANGE
MITIGATION IN NIGERIA**

By

**Kingsley Osinachi Nnanna ONU
LLB (EBSU), LL.M (IBADAN), BL(YENAGOA)
Matric No: 180447**

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CERTIFICATION

I certify that this work was carried out by Kingsley Osinachi Nnanna ONU (Matric No. 180447) in the Department of Jurisprudence and International Law, Faculty of Law, University of Ibadan, Ibadan, Nigeria.

.....

Supervisor

A. I. OLATUNBOSUN

LL.B (Ife), B.L., LL.M (Lagos), Mphil, Ph.D (Ife)
Professor of Jurisprudence and International Law,
Faculty of Law, University of Ibadan.

DEDICATION

This Research Project is dedicated to my Lord, Saviour, and Friend, Jesus Christ; my beloved mother Elder (Mrs) Louisa Ngozi Onu for supporting and motivating me all through this long journey; and to the loving memory of my academic daughter, Abisola Otueso. Bisola, you are always remembered.

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Kingsley Osinachi Nnanna ONU
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ABSTRACT

Climate Change (CC) has significant devastating effects on humans and their environment. However, anecdotal evidence has shown that climate change mitigation (CCM) measures threaten citizen's human rights globally. Previous studies on CC have focused largely on the Human Right Implications (HRIs) of CCM measures under the Kyoto Protocol, 1997 with less emphasis on the extant international legal regime, the Paris Climate Agreement, 2015. This study, therefore, examined national laws and Nigeria's obligations under the Paris Climate Agreement 2015, with a view to determining the HRIs of their CCM measures.

The Sociological Theory provided the framework, while the mixed methods of doctrinal and survey designs were adopted. Adamawa, Lagos, Kogi, Ebonyi, Delta and Sokoto states with the presence of CCM projects were purposively selected. Data were collected using primary and secondary sources. Primary sources included the Constitution of the Federal Republic of Nigeria, 1999; CC Act 2021; the Paris Climate Agreement 2015; Nationally Determined Contributions (NDCs) of Nigeria and that of Norway under the Paris Agreement; African Charter on Human and People's Right Act, 1983 (African Charter); and case laws. Secondary data included legal texts, journal articles and newspapers. A validated questionnaire on human right-based approach to climate mitigation in Nigeria was randomly administered among civil servants (97), entrepreneurs (123), farmers (58), artisans (43) university lecturers (52) and students (127) across the six states. Key informant interviews were held with staff of the Federal Ministry of Environment (1), Federal Ministry of Petroleum Resources (1), National Environmental Standards and Regulations Enforcement Agency (1) and National Oil Spill Detection and Response Agency (1). Quantitative data were analysed using descriptive statistics, while qualitative data were content analysed.

Majority of the respondents (89.8%) were aware of (CC). The severe environmental hazards associated with CC included traffic/congestion (87.6%), air pollution (79.4%), overpopulation (68.4%), river/sea pollution (58.9%), and flooding (50.8%). However, there was low awareness about NDC (4.2%) and its implementation action plans (4.8%). There was also low knowledge of HRIs of CCM measures (13.0%). The CCM measures did not protect rights to health (49.9%), shelter (42.1%), life (51.0%), property (40.7%), development (44.3%), food (40.6%), inequalities (45.4%), participatory and consultative rights (19.8%) and vulnerable minority (48.4%). There was no right-based legal framework to mitigate the effects of climate change. The implementation of the NDC has provoked some unintended violation of both substantive and procedural human rights, such as access to information, participation and access to justice. Victims of human rights violation induced by CCM measures relied on Article 24 of the African Charter, which prioritises development over environmental protection, to seek redress in court. Public participation and human rights were not fully embedded in the NDC and its sectorial Implementation Action Plans in Nigeria, compared to Norway that had mainstreamed human rights in her revised NDC and climate change mitigation action plans.

Climate change mitigation laws and commitments in Nigeria gloss over human rights implications. Therefore, Nigeria should revise its nationally determined contribution and promote a climate change mitigation that supports human rights and public participation.

Keywords: Climate change mitigation in Nigeria, Human rights and environmental protection, NDC

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Paris Agreement, 2015.

International Convention on Oil Pollution Preparedness, Response and Co-operation, 1990.

UN Climate Conference Bali, 2007.

United Nations Framework Convention on CC, 1992.

Universal Declaration of HRs, 1948.

LIST OF ABBREVIATIONS

• AF	-	<i>Adaptation Fund.</i>
• AFC	-	<i>Africa Finance Corporation.</i>
• AFD	-	<i>Agence Francaise De Development.</i>
• AGRA	-	<i>Associated Gas Re-Injection Act.</i>
• APP	-	<i>Agriculture Promotion Policy.</i>
• ATI	-	<i>Access to Information.</i>
• BAU	-	<i>Business As Usual.</i>
• BOI	-	<i>Bank Of Industry.</i>
• BOOT	-	<i>Build, Own, Operate, Transfer.</i>
• BRT	-	<i>Bus Rapid Transit.</i>
• BUR	-	<i>Biennial Update Report</i>
• CCGT	-	<i>Combined-Cycle Gas Turbine.</i>
• CCS	-	<i>Carbon-Capture and Storage.</i>
• CER	-	<i>Certified-Emission Reduction.</i>
• CHP	-	<i>Combined Heat and Power.</i>
• CIF	-	<i>Clean Investment Fund</i>
• CC	-	<i>Climate Change</i>
• CCA	-	<i>Climate Change Act.</i>
• CNG	-	<i>Compressed Natural Gas.</i>
• COP	-	<i>Conference Of Parties.</i>
• CPF	-	<i>Central Processing Facility.</i>
• CSA	-	<i>Climate Smart Agriculture.</i>
• CTF	-	<i>Clean Technology Fund.</i>
• DCC	-	<i>Department Of CC.</i>
• DFI	-	<i>Development Finance Institution.</i>
• DisCos	-	<i>Distribution Company.</i>
• DNA	-	<i>Designated National Authorities.</i>
• DPR	-	<i>Department of Petroleum Resources.</i>
• EC	-	<i>European Commissions.</i>

- *ECHR* - *European Court of HRs.*
- *ECN* - *Energy Commission of Nigeria.*
- *EE* - *Energy Efficiency.*
- *EEA* - *Energy Efficiency Area.*
- *EEA* - *European Economic Area.*
- *EEN* - *Energy Efficiency Network.*
- *EIS* - *Environmental Impact Statement.*
- *ELPS* - *Escravas-Lagos Pipeline System.*
- *EnMS* - *Energy Management System.*
- *EPSR* - *Electric Power Sector Reform.*
- *EPZ* - *Export Processing Zone.*
- *ERA* - *Environmental Rights Action Nigeria.*
- *ERU* - *Emission Reduction Units.*
- *ESC* - *Economic and Social Council.*
- *ET* - *Emission Trading.*
- *ETP* - *Effluent Treatment Plan.*
- *ETS* - *Emissions Trading Scheme.*
- *FEC* - *Federal Executive Council.*
- *FGN* - *Federal Government of Nigeria.*
- *FME* - *Federal Ministry of Environment.*
- *FMITI* - *Federal Ministry of Industry Trade and Investment.*
- *FMPR* - *Federal Ministry of Petroleum Resources.*
- *FMPWH* - *Federal Ministry of Power Works and Housing.*
- *GACC* - *Global Alliance for Clean Cook Stoves.*
- *GACN* - *Gas Aggregation Company Nigeria.*
- *GBP* - *Green Bond Principle.*
- *GCF* - *Green Climate Fund.*
- *GDP* - *Gross Domestic Product.*
- *GE* - *General Electric.*
- *GIZ* - *Deutsche Gesellschaft für International Zusammenarbeit.*

- *GRIP* - *Gas Revolution Industrial Park.*
- *GW* - *GigaWatts.*
- *HRE* - *HRs Education.*
- *IACHR* - *Inter-American Commission on HRs.*
- *ICCPR* - *International Convention on Civil and Political Rights.*
- *ICESCR* - *International Convention on Economic, Social, and Cultural Rights.*
- *ICJ* - *International Court of Justice.*
- *IEA* - *International Energy Agency.*
- *IET* - *International Emission Trading.*
- *IMO* - *International Maritime Organisation.*
- *IOCs* - *International Oil Companies.*
- *IPCC* - *Intergovernmental Panel on CC.*
- *IPP* - *Independent Power Producers.*
- *JI* - *Joint Implementation.*
- *KP* - *Kyoto Protocol*
- *LNG* - *Liquefied Natural Gas.*
- *LPFO* - *Low Pour Fuel Oil.*
- *LULUCF* - *Land Use, Land Use Change and Forestry.*
- *MAN* - *Manufacturers' Association of Nigeria.*
- *MDB* - *Multilateral Development Bank.*
- *MDG* - *Millennium Development Goals.*
- *MEPS* - *Minimum Energy Performance Standard.*
- *MIGA* - *Multilateral Investment Guarantee Agency.*
- *MO* - *Market Operator.*
- *MW* - *MegaWatts.*
- *NACCIMA* - *National Association of Chambers of Commerce, Industry, Mines and Agriculture.*
- *NAMA* - *Nationally Appropriate Mitigation Action.*
- *NAPIMS* - *National Petroleum Investment Management Services.*

- *NAPTIN* - *National Power Training Institute of Nigeria.*
- *NASA* - *National Aeronautics and Space Administration.*
- *NBET* - *Nigerian Bulk Electricity Trading.*
- *NC* - *National Communications.*
- *NCA* - *National Council on Agriculture.*
- *NCDC* - *National Centre for Diseases Control.*
- *NCDMB* - *Nigerian Content and Development Monitoring Board.*
- *NDC* - *Nationally Determined Contribution.*
- *NDPHC* - *Niger Delta Power Holding Company Limited.*
- *NEEAP* - *National Energy Efficiency Action Plan.*
- *NEPA* - *National Electric Power Authority.*
- *NEPP* - *National Electric Power Policy.*
- *NERC* - *National Electric Regulatory Commission.*
- *NESP* - *Nigerian Energy Support Programme.*
- *NESREA* - *National Environmental Standards and Regulations Enforcement Agency.*
- *NGC* - *National Gas Company.*
- *NGFCP* - *Nigerian Gas Flare Commercialization Program.*
- *NGMP* - *Nigerian Gas Master Plan.*
- *NGOs* - *Non-Governmental Organizations.*
- *NNDC* - *Nigeria Nationally Determined Contribution.*
- *NNPC* - *Nigerian National Petroleum Cooperation.*
- *NOSDRA* - *National Oil Spill Detection and Response Agency.*
- *NREAP* - *National Renewable Energy Action Plan.*
- *NSP* - *Nama Support Projects.*
- *OEMs* - *Original Equipment Manufacturers.*
- *OGPP* - *Oil-Gas Processing Plant.*
- *PA* - *Paris Agreement*
- *PHCN* - *Power Holding Company of Nigeria.*
- *PIDG* - *Private Infrastructure Development Group.*

- *PMS* - *Premium Motor Spirit.*
- *PPAs* - *Power Purchase Agreements.*
- *PPPRA* - *Products Pricing Regulatory Agency.*
- *REA* - *Rural Electrification Agency.*
- *REF* - *Rural Electrification Fund.*
- *RTD* - *Right To Development.*
- *SCCF* - *Special CC Fund.*
- *SCF* - *Standard Cubic Feet.*
- *SD* - *Sustainable Development.*
- *SMEDAN* - *Small and Medium Enterprises Development Agency of Nigeria.*
- *SMEs* - *Small and Medium Enterprises.*
- *SON* - *Standard Organization of Nigeria.*
- *SPA* - *Sectorial Action Plan.*
- *SSA* - *Sub Saharan Africa.*
- *TAF* - *Technical Assistance Facility.*
- *TCM* - *Technology Centre Mongstad.*
- *TCN* - *Transmission Company of Nigeria.*
- *TNC* - *Third National Communication.*
- *TWh* - *Terawatt Hours.*
- *UGEAP* - *Universal Green Energy Access Programme.*
- *UNCSD* - *United Nations Conference on Sustainable Development.*
- *UNDG* - *United Nations Development Group.*
- *UNDHR* - *Universal Declaration of HRs.*
- *UNDP* - *United Nations Development Program.*
- *UNEP* - *United Nations Environment Programme.*
- *UNFCCC* - *United Nations Framework Convention on CC.*
- *UNHRBA* - *United Nations HRs Based Approach.*
- *UNIDO* - *United Nations Industrial Development Organisation.*
- *USAID* - *United State Agency for International Development.*

- *WB* - *World Bank.*
- *WHO* - *World Health Organization*

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Climate Change (CC) is the greatest threat to the survival of the earth and her inhabitants in the 21st century.¹ It is a big threat to the actualization of globally recognized Human Rights (HRs), especially right to life.² Strategies to mitigate of the impacts of CC demands significant efforts towards reducing and limiting the emission of greenhouse gases (GHGs) globally.³ Climate treaties,⁴ therefore demands explicit obligations on parties to mitigate CC through climate actions and policies.⁵ For instance, the Kyoto Protocol (KP) had set three project-based mitigation mechanisms by which developed countries achieve their GHG emission commitments.⁶

The projects were executed locally and in less developed countries to earn credits for emission reduction. The Clean Development Mechanism (CDM) focused on developing countries like Nigeria. These CC projects assisted the less developed host countries to achieve sustainable development, biodiversity protection and lesser environmental issues.

¹ IPCC, 2021: Summary for Policymakers. In: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press, 5, 15. https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf, (Last visited Aug. 10, 2021).

² Parling I., 2021, 'HRs and CC: Are States Violating the Right to Life by Not Cutting Emissions?' Swedish Institute of International Affairs (U.I) Paper 3, 1.

³ IPCC, 2019: Global Warming of 1.5°C. (IPCC special Report). Retrieved May 22, 2021 from https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_Low_Res.pdf.

⁴ United Nations Framework Convention on CC (UNFCCC) 1992, and its KP of 1997; and current PA of 2015. Nigeria is a party to all the CC treaties, and her President Muhammadu Buhari on the 30th of March, 2017 signed the PA.

⁵ Mayer B., 2021, 'CCM as an Obligation under HRs Treaties?' *American Journal of International Law*, 9, 2.

⁶ The three flexible mechanisms: Joint Implementation (JI), Emission Trading (ET) and the Clean Development Mechanism (CDM). See Olawuyi, D.S. 2013. *The HRs Based Approach to CCM: Legal Framework for Addressing HRs Questions in Mitigation Projects*. Thesis. Faculty of Law, Oxford University, London. Xxvii + 500, p. 4.

It also provided opportunity for some social benefits like employment, rural development and poverty alleviation.

Research has shown that the CDM has assisted nations to approximately mitigate 1 billion tons of GHG, and also saved developed nations approximately 3.6 billion dollars in CDM cost. Although the benefits of this mechanism were enormous, CDM was fraught with several challenges, key among them being HRs violation and failure to deliver promised sustainable development.⁷ For instance, over 20 million people are displaced on yearly basis because of CDM projects, and these people are among the poorest people in the developing host countries.⁸

There are also cases of pollution resulting from transfer of insufficient or outdated technologies for CDM.⁹ Other HRs issues include non-participation of citizens in a country in implementations of projects and development plans;¹⁰ designing programs targeted to cater for the needs of the vulnerable population and communities, absence of transparency on the part of government in terms of effective monitoring and evaluation.¹¹ In Nigeria, the implementation of CDM's Kwale Gas Flaring Reduction Project, generated some serious human right issues. The leakage of gases from substandard piles used for the project lead to soil acidification, air pollution and serious health challenges on indigenes of the host community. The promoters of the project did not employ a strategy that accommodated participation of indigenes in project planning and implementation. This led to serious clash between workers at the project site and the members of the host community led to the loss of lives of six people.¹²

The KP implementation ended in December, 2020, and the Paris Agreement 2015 (PA) has replaced it as the extant international framework on CC. Article 2 of the PA requires parties to mitigate climate through the implementation of their Nationally Determined Contribution

⁷ Olawuyi, D.S. 2013, op. cit. 4.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Olawuyi, 2013, op. cit., 4.

¹² Olawuyi, 2013, op. cit., 66.

(NDC). The NDC contains the pledge of the parties to reduce their GHG emissions through national actions. It also stipulates the climate actions and measures that the parties have committed to embark upon in order to fulfill their pledges. However, the implementation of the adaptation and mitigation mechanisms under the PA 2015¹³ by parties may provoke some unintended HRs violations like the indigenous peoples' right, forced displacements, loss of propriety rights, loss of cultural benefits and tradition, loss of right to life, loss of right to food, inequalities and discriminations against vulnerable minorities, loss of participatory and consultative rights in projects sited in one's locality, loss of right to health, poverty on the long run, trafficking in human persons, armed conflicts; as was the case of CDM projects under the KP. Nigeria has to come up with a legal framework that will implement her NDC and mitigate CC without violating HRs.

1.2 Statement of Research Problem

The PA which took over from the KP is the first climate policy to elaborately refer to human right. However, there is no 'independent human right obligation'¹⁴ in the PA, and as such parties may not be compelled to honor, guide and achieve HRs in carrying out their mitigation or adaptation mechanisms. More worrisome is the fact that the human right clause only appeared in the preamble. Therefore, HR violations arising from the implementation of CCM projects cannot be addressed using the instrumentality of the above clause of the PA because it is not enforceable.

Owing to this, Nigeria is in support and has penned down her signature to the PA and deposited her first NDC to the secretariat of the agreement.¹⁵ However, Nigeria has no comprehensive legal framework for CC control that is right-based. The implementation of Nigeria's mitigation measures under her NDC may result to unpremeditated HRs violations

¹³ It is important to note that the agreement was drafted and adopted in 2015, but became effective in 2016.

¹⁴ Mayer, B. 2016. HRs in the PA. *Climate Law* 6:1/2. 109-117, 111.

¹⁵ See O.J. Oyedele & K.O.N. Onu (2022) 'Evidence from Nigeria'. In Chuks Okereke Et al (Ed.) *Beyond Rhetoric and Ambition: Assessing the Feasibility of Climate Pledges by West African Countries* (63-86), Abuja, Nigeria, Centre of Journalism, Innovation and Development (CJID). Available online at <https://thecjid.org/wp-content/uploads/2022/10/Beyond-Rhetoric-and-Ambition-Assessing-the-Feasibility-of-Climate-Pledges-by-West-African-Countries.pdf>.

as was the situation under the KP, hence, a need for a right based legal framework to address such situations.

In the absence of explicit right-based legal framework on CC, the vulnerable population affected by the HRs abuses occasioned by CCM actions may rely on extant environmental regimes in Nigeria to seek redress in such situations, like the 1999 Constitution of the Federal Republic of Nigeria (as Amended);¹⁶ the Climate Change Act;¹⁷ Criminal Code;¹⁸ Oil in Navigable Waters Act;¹⁹ The Petroleum Act;²⁰ Oil Pipelines Act;²¹ Associated Gas Reinjection Act (AGRA);²² The Environmental Impact Assessment Act;²³ Harmful Waste (Special Criminal Provisions, etc) Act;²⁴ The National Environmental Standards and Regulations Enforcement (Establishment) Amendment (NESREA) Act, 2018; African Charter on Human and People's Right Act;²⁵ National Oil Spill Detection and Response Agency (Establishment) Act.²⁶ However, these legal regimes are full of inchoate phraseologies in describing the duty of the duty bearer.

The punishments provided for offenders under these laws are both paltry and obsolete. They do not expressly provide for compensation. This is worrisome to a victim of CC or environmental hazard who is more interested in compensation and clean up than in the punishment of the offender. The right of action in most of these laws lie in the government, which makes it that the direct victims of environmental hazards cannot expressly sue under most of these laws. Of all the above legislations, only the African Charter on Human and People's Right Act in its Article 24 adopted a right approach to environment hazards. However, this article is a subject of a lot of criticisms which we shall discuss in this thesis.

¹⁶ Cap C23, Laws of the Federation of Nigeria (LFN) 2004.

¹⁷ 2021

¹⁸ Cap C38, LFN 2004.

¹⁹ ONWA, Cap O6, LFN, 2004.

²⁰ Cap P10 LFN, 2004.

²¹ Cap 07 LFN, 2004.

²² Cap A25 LFN, 2004.

²³ Now Cap. E12, LFN, 2004

²⁴ Cap HI, LFN, 2004.

²⁵ Cap. A9, LFN, 2004

²⁶ 2006

There is therefore an urgent need to develop a regulatory framework that can mitigate CC using a HRs-based approach in Nigeria.

1.3 Research Questions

1. What are the current impacts of CC on HRs in the Nigeria?
2. Are the relevant Nigerian legal frameworks for the mitigation of CC adequate to the extent that will mitigate CC using a HRs-based approach?
3. Is the relevant provision of the international CC regime strong enough to create positive obligations that will mandate Nigeria to adopt an effective legal framework that will mitigate CC using a HRs-based approach?
4. what are the possible impacts of the mitigation mechanisms that are adopted by Nigeria under the PA on HRs in Nigeria; and can a right-based regime be developed?

1.4 Aim and Objectives of the Study

The main aim of this thesis is to examine Nigeria's obligation under the PA 2016 and the national laws in order to determine their adequacy to mitigate the emission of greenhouse gases in Nigeria using a HRs-based approach

The specific objectives are to:

1. ascertain the current impacts of CC, and the link between CC and HRs in Nigeria
2. examine extant Nigerian regulatory frameworks for environmental protection in order to determine if they can mitigate CC without violating HRs;
3. examine the effectiveness of the relevant provisions of the UNFCCC 1992, the KP 1997 and the PA 2015 that contain obligations that Nigeria have in mitigating CC using a HRs-based approach;
4. ascertain the possible impact of mitigation mechanisms that is adopted by Nigeria under the PA on human right in Nigeria, and develop a right-based regime.

1.5 Significance of Study

This thesis will direct and guide Nigeria in drafting a HRs-based legal framework for effective CC control in Nigeria using right to life, right to property, right to development, right to shelter, right to food, right to health, and indigenous peoples' right as indicators.

It will arm policy makers in Nigeria, and in the third world countries with negotiation benchmarks for future global CC regimes.

It will also add to the volume of literature in this area of legal jurisprudence that have not been thoroughly harnessed.

1.6 Structure of Study

Chapter one deals with the general introduction.

Chapter two focuses on literature review and conceptual framework on CC. It examines the nexus between CC and HRs from literatures. It also clarifies concepts on CC and HRs.

Chapter three deals with the research methodology and theoretical framework.

Chapter four appraises the extant environmental laws in Nigeria to ascertain whether they are comprehensive enough to cater for CCM without HRs violation. It also examined CC litigation.

Chapter five examines the international legal frameworks for CCM. It also examines the interface between these regimes and HRs. The chapter examines the Nigerian NDC, its sectorial implementation action plans and their implications for HRs. The chapter also used an empirical research approach by issuing out questionnaires and conducting interviews. This is to aid the design of a framework that is homegrown. It also drew lessons from the Norwegian rights-based approach to CCM.

Chapter six is on findings, conclusion, and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Many jurists and scholars have struggled to unravel the puzzle otherwise called CC, and the role of energy and environmental laws in mitigating CC.²⁷ In this section, we shall be following an age long research tradition of climbing to the top through the shoulders of juristic and scholastic giants that have toured the paths of this unique area of research before us. Therefore, this section shall review earlier works on CCM vis-à-vis national energy and environmental laws stating their approach to the concept, highlighting the strength of their research work and the lacuna that still exist which necessitated this thesis.

This chapter shall also examine the nexus amid CC and HRs and attempt to trace the historical development of the nexus. It will also appraise the HRs affected by CC and their universal status. The section of the literature review will attempt to justify the right based approach to this study.

2.2 Conceptual Framework

2.2.1 Climate Change

The IPCC²⁸ defined CC as “a transformation of climatic conditions that are characterized by alterations in the mean and or the distinctions of its assets that are consistent and evolve for a long period of time. This transformation of the earth’s climatic condition

²⁷ Oyedele and Onu (2021), supra.

²⁸ (IPCC) 2021, (Supra), n. 1.

could take decades or longer”.²⁹ Amokaye described CC as ‘a product of changes in the concentrations of “greenhouse gases released into the atmosphere”³⁰.³¹ In recent time, the most intriguing debate on development centers on CC.³² Human activities account mainly for the global change of the climate. Records have shown that the warmest period in the entire universal temperature has been between the last 10 years of the 20th century and the 21st century.³³

CC is of crucial importance to the international community because the alterations attendant to it possesses the capacity to alter people’s way of life globally. This universal modification will not only lead to loss of land by man but also threaten the survival of human beings, plants and animals who are unable to acclimatize to the frenzied earth’s climate condition that the world is experiencing.

2.2.1.1 Causes and Effects of CC

CC is mostly caused by human and natural factors.

2.2.1.1.1 Natural Causes

The natural factors that drive CC are ocean current, earth orbital changes, volcanic eruption and solar variations.

2.2.1.1.1.1 Ocean Current

Principal components of the climate system are the oceans. The oceans cover about 71% of the earth. The sun radiation absorbed by oceans equals the double of what the atmosphere and land surface absorb.³⁴ According to Egbule ‘ocean move vast amounts of heat across the planets: - profound ocean current circulations of natural freezing water from the extremes near the latitude and transportation of luke-warm water from the one equator near the extreme poles. Without this transportation and movement across the latitudes, the poles will freeze and maintain coldness and the extremity of the equator will radiate more warmth;

²⁹ (IPCC) 2021, (Supra), n. 1.

³⁰ GHG

³¹ Amokaye O.G. 2004. *Environmental Law and Practice in Nigeria*. Lagos: University of Lagos Press, 405.

³² (IPCC) 2021, (Supra), n. 1.

³³ Ibid.

³⁴ Egbule, Op. cit. 18.

thereby resulting in imbalance in the earth's cooling system.³⁵ The oceans therefore perform a vital role in determining concentration of CO₂ in the atmosphere.

2.2.1.1.1.2 Volcanic eruption

A large volume of CO₂, H₂O (water), ash and dust are released into the atmosphere when a volcano erupts.³⁶ It has been posited that 'large volumes of gases and ashes possess the capacity to affect the patterns of the earth's climatic condition for a long period of time through gradual growth of environmental reflectivity thereby affecting the cold status of the earth's atmospheric conditions. The GHGs and CO₂, are also produced, however, the CO₂ in the cause of volcanic eruption is less consequential than chemical combustions and emissions influenced by human activities.'³⁷

2.2.1.1.1.3 Solar Variations

The earth's climate derives its energy from the sun. Though the output of the sun seems constant from a single viewpoint, CC can result from small changes over an extended time.

2.2.1.1.2 Human Activity Triggered CC

Human activities on earth are altering the natural effect of greenhouse. Human activities that emit GHGs and aerosols (cloudiness and small elements) released into the earth's atmosphere contribute to change in the climatic conditions. Carbon (IV) oxide and burning of fossil fuel are the largest contributors to atmospheric CC.³⁸ The last century has witnessed incessant flaming of fossil fuels like petroleum and coal that in turn has increased the atmospheric concentration of carbon (IV) oxide; this occurs because the burning of fossil fuel combines oxygen with carbon in the atmosphere and then produces carbon (IV) oxide.³⁹

³⁵ Ibid

³⁶ Ibid

³⁷ What Causes CC retrieved September 9, 2018 from www.climatechangechallenge.org/Resources%20centre/Climate-Change/3-what-causesclimate-change.htm.

³⁸ (IPCC) 2021, (Supra), n. 1.

³⁹ National Aeronautic and Space Administration (NASA) 2012. *Global CC: A blanket around the earth*. Retrieved September 9, 2018 from: www.climate.nasa.gov/causes/

The 19th century's industrial revolution ushered in the high-scale use of fossil fuels for manufacturing activities.⁴⁰ There was extensive use of natural resources for industries, construction, consumption and transportation. More so, there was high population increase, and it is still increasing incredibly. These have all contributed greatly to the rise in atmospheric GHG.⁴¹

Deforestation, industrial gaseous releases, gas flaring, use of automobiles, bush burning, crude and refined oil spillage, use of generators, air conditioners, and refrigerators constitute the other human actions that foster CC.⁴²

2.2.1.3 Consequences of CC

Globally, CC has contributed to shifts in growing seasons, rises in sea level, intensity and escalating extreme weather events like droughts, floods and storms. Suffice it to state that change in climatic condition has a varying impact level for different regions of the world with the biggest impact expected in the Small Island Developing States (SIDS), Arctic, the Asian mega-deltas, and sub – Saharan Africa.⁴³

It has been projected that a far-reaching impact of CC will be experienced globally. The effect of CC will go a long way to impact the world's populations, thereby making resources (water, food) to be extremely scarce. Quality of water will certainly be affected, same as animal and human population which depend on water. Human health shall certainly become vulnerable once agriculture, livestock, food production etc. are all affected as a result of the challenges being posed by the changing climate. In Nigeria and other parts of the world, CC will have momentous consequences on all facets of the society, affecting each and every economic sector – agriculture, health, social, tourism etc. It has been predicted that the population in the Nigerian society has the tendency to increase by more than 50% in two

⁴⁰Egbule op. cit. 19. Also IPCC 2021 report (supra).

⁴¹Egbule op. cit. 19

⁴²Egbule, C. L. 2010. *Op cit.*

⁴³Garmer, L. W. 2010. *Gender, CC and community – based adaptation*. Retrieved September 9, 2018 from http://www.undp.org/content/undp/en/home/librarypage/environment-energy/climate_change/gender/gender-climate-change-and-community-basedadaptationguidebook-.html.

decades.⁴⁴ Within this two decades period, agriculture component is projected to slightly grow in lower proportion, this is because agro-productivity is curbed by CC and lack of capital by smallholder farmers.⁴⁵

It was also noted that security of food threats in Africa is occasioned by CC, where agriculture harvests cum food production have progressively been decreasing. As noted by de Chavez and Tauli- Corpuz⁴⁶, CC impacts on people living in different ecosystem will include stormy hurricanes, storm surges, cyclones, which will lead to destruction of houses, infrastructure (ponds, dams, bridges, electrical lines, roads, etc.), lands, forests, livestock, crops, marine and coastal resources; gigantic landslides; increase of pathogenic micro-organisms, loss of freshwater supplies, and loss of electricity, etc. Other impacts especially for the Agriculture sector as noted by Egbule⁴⁷ will include the following: -

1. Massive landslides and floods which will decrease the prospects for people to market their farm produce and marine resources; the destruction of ancestral lands, homes and resources, shortage of food and hunger, increased virulence and prevalence of infectious diseases, etc.
2. Frequent flood and droughts may necessitate the disappearance of animal and plant species that have been fundamental to the ceremonial life of indigenous people or have been a source of subsistent food for them.
3. Extreme cold and wet environment may lead to health challenges like bronchitis, hypothermia and pneumonia, especially among children and old people.
4. Drought can occasion famine, hunger and scarcity of water.
5. CC will also usher traditional livelihoods such as pastoralism, hunting, crop rotation, afro-forestry among other.

⁴⁴Food and Agriculture Organisation 2001. *Farming systems and Poverty: Improving farmers' livelihoods in a challenging world*. Rome, Italy: FAO.

⁴⁵Oyedele & Onu (2021) supra.

⁴⁶De Chavez, R. and Tauli-Corpuz, V. Eds. (2008). *Guide to CC*. Retrieved September 10, 2018 at www.tebtebba.org,

⁴⁷ Egbule C.L. 2014 Gender Vulnerability and Adaptation Strategies to CC Impacts on Agriculture in The Niger Delta Region Of Nigeria. Thesis. Agricultural Extension, Agriculture, University of Nigeria, Xxi+ 160.

6. CC will also impact on traditional knowledge and ecosystem. This will in turn have a negative impact on traditional practices and innovations associated with the ecosystem.

7. Decrease in productivity will also give rise to shortage or loss of revenue, which will have a negative impact on national GDP and the income of rural dealers. This will sprout the young rural population to migrate to urban centres for greener pasture, and in turn lead to urban over population and pollution.

8. Environmental refugees will increase over time due to adverse environmental conditions.⁴⁸

2.2.2 Greenhouse Gases (GHG)

There are four principal greenhouse gases (GHGs) that are emitted resulting from human activities, they include; methane ((CH₄), nitrous oxide (N₂O), carbon (IV) oxide, and halocarbons (consisting of bromine, fluorine and chlo-rine). Increase in atmospheric-concentrations are caused by the accumulation of these GHGs over time. This increase is attributable to largely industrial and domestic activities of man, especially, during the industrial era.⁴⁹

2.2.2.1 Methane (CH₄)

Methane is hydrocarbon CH₄ gas that is odorless, colorless and flammable which is produced from biological decomposition of organic matters and coal carbons. Methane is used in chemical synthesis as a fuel and it is the simplest kind of alkanes.⁵⁰ Methane is produced through a natural process in a wetland. Also, human activities like landfills, agriculture and natural gas distribution has caused methane to increase.⁵¹ However, because growth rate reduced over the last 20 years, methane concentrations have also not been increasing.⁵²

⁴⁸ Ibid.

⁴⁹(IPCC) 2021, (Supra), n. 1.

⁵⁰Retrieved September 7, 2018 from <https://www.merriam-webster.com/dictionary/methane>.

⁵¹Egbule C.L. 2014. Gender Vulnerability and Adaptation Strategies to CC Impacts on Agriculture in The Niger Delta Region of Nigeria. Thesis, Agricultural Extension, Agriculture, University of Nigeria, Xxi+ 160.

⁵² Solomon *et al*, (*supra*).

2.2.2.2 Nitrous oxide (N₂O)

This gas is released both naturally and through human activities.⁵³ N₂O is naturally released through natural processes in the oceans and soils. It is also emitted through the activities of humans like combustion of fossil fuel cum fertilizer use.⁵⁴

2.2.2.3 Carbon (IV) oxide (CO₂)

This is an atmospheric component that plays various germane roles in the cosmic environment. Infrared radiations within the atmosphere are absorbed by carbon di oxide. It also performs some vital functions in the weathering of rocks. The raw material for photosynthesis is carbon di oxide. The atmospheric concentration of carbon di oxide have been influenced by the engagements of human in the combustion of fusel fuel, industrialization, and the production of cement. It should be noted that animals inhale oxygen and exhale carbon IV oxide, whereas, plants inhale CO₂ and exhale oxygen; therefore, deforestation releases much CO₂ but reduces its intake by plants.⁵⁵

2.2.2.4 Halocarbons

The major types of halocarbons are chlorofluorocarbons (CFC-11 and CFC-12) which were extensively used to power air-conditioners, refrigerators, and other industrial processes, before the discovery of the fact that chaotic stratospheric ozone layer depletion was caused by their presence in the atmosphere.⁵⁶

2.2.2.5 Water Vapour

Of all the greenhouse gases water vapour stands out as the most important and most abundant. Direct human activities contribute little to its abundance in the atmosphere. However, water vapour may be affected indirectly through human activities that results in CC. For instance, more water vapours are contained in warmer atmosphere. However,

⁵³Egbule (supra) 16

⁵⁴ Ibid

⁵⁵ Solomon *et al*, (supra)

⁵⁶Egbule (supra)

human activities release methane into the atmosphere which undergoes chemical destruction within the stratosphere, thereby producing a small quantity of water vapour.⁵⁷

2.2.2.6 Aerosols

These are tiny particles that combine various concentration, sizes and compositions of chemical in the atmosphere. Whereas some of these tiny particles are products of compounds released into the atmosphere, others are directly released from the earth into the atmosphere. Aerosols are mostly products of both natural causes and are also generated through human activities. Aerosols comprising of black carbon (soot), sulphur compounds, and organic compounds have increased because of biomass and fossil fuel burning. Industrial processes and surface mining are human activities that have contributed to the increased atmospheric dust. Natural aerosols are generated and release the earth surface, biogenic emissions from oceans and lands, mineral dust, volcanic eruptions dust.⁵⁸

2.2.3 Depletion of the Ozone Layer

Ozone is a kind of oxygen with a harsh smell, which is located in the upper atmosphere at between 10-50 kilometers above the earth's surface. It is an important component of the atmosphere, which protects human beings and other living beings from the effect of short-wave ultraviolet radiation from the sun.⁵⁹ Ozone consists of a particle made up of three difference kinds of oxygen atoms. Moreover, Ozone is more commonly found in the middle of the upper atmosphere i.e. the stratosphere commonly called the "Ozone Layer"⁶⁰. Ozone layer is a stratum of Ozone lying highly above the earth's surface which assists to shield the earth from destructive sun radiation.⁶¹ Ozone layer only absorbs a small fraction of the destructive electromagnetic radiation stemming from the sun. It therefore, protects animal and life from ultraviolet radiation that in large doses can be predominantly harmful to natural life. The absorption of Ultra violet radiation by the ozone layer equally generates heat, thereby performing a chief function in atmospheric temperature.⁶²

⁵⁷Ibid. See also Solomon et al (supra).

⁵⁸ Ibid

⁵⁹Amokaye, O.G., Op Cit. p. 394

⁶⁰Ibid p. 395

⁶¹Oyedele and Onu (2021) supra.

⁶²Amokaye, Op Cit. p. 395

There are many substances which are suspected of contributing to Ozone layer depletion. These substances are called chlorofluorocarbons and Ozone Depleting substances. They are in the form of carbon substances such as methane dioxide, carbon monoxide, methane and non-methane hydrocarbon species. They also come in the form of nitrogen substances like nitrous oxides and nitrogen oxides. Another form is the chlorine substances such as fully halogenated alkenes; Bromide substances such as fully halogenated alkalis while the hydrogen substances come in the form of hydrogen and water.⁶³

These ozone depleting substances can be found in foam production, such as those used for foam blowing by foam manufacturers. They can also be found in the activities of industries producing aerosol sprays as propellants solvents. These chemicals in effect reduce the thickness of the ozone layer by about 40% and the reduction is continuous.⁶⁴

2.2.4 The Environment

Environment includes:⁶⁵-

- a) air, water, land cum atmospheric strata.;
- b) all inorganic and organic matters cum living creatures and,
- c) the interaction between natural-systems that comprise constituents referred to in paragraphs (a) and (b)

2.2.5 Environmental Degradation

The degradation of environment is the resultant effect of several human activities such as bush burning, flood, indiscriminate dumping of domestic and industrial waste, gas flaring, oil spillage etc.

2.2.6 HRs

Allen defines right as a legally guaranteed power to realize an interest.⁶⁶ Jhering defines rights as legally protected interests comprising of state and individual wills. To him, a right

⁶³ Ibid. P. 394

⁶⁴ Ibid.

⁶⁵ Environmental Impact Assessment Decree No. 86 of 1992, Section 63 (1). See also Oxford English Dictionary definition quoted in Umezulike and Nweze. 1996. *Perspectives in Law and Justice*. Enugu: Fourth Dimension Publishers. P. 240.

⁶⁶ Allen, C. K. 1958. *Law in the Making*. 7th Ed. Glasswork, London, P. 614

is based on substance while protection comes from possible intervention of the courts.⁶⁷ It is our view that HRs are privileges every human being is eligible to irrespective of their status, age, sex, race or location. Although HRs may be protected by the instruments of state, they are not creations of the state. HRs are innate in every individual by virtue of their being.

2.2.7 Environmental Rights

Environmental right is a form of social right that obligates nations to deter from actions that are inimical to the environment, and to promulgate laws that favourable to environmental safety and conservation. They are rights of people to live in an environment that guarantees their wellbeing in all facet of life be it physical, social and economic. This right empowers people to protect their environment from any form of activity that may impact the quality of the environment and pose a threat its sustainability.

2.3.1 International Law and CC

Churchill and Freestone examined the international legal regime on CC prior to negotiations to the KP.⁶⁸ The book focused on emission control of greenhouse gases and the inherent international law concerns in developing a regulatory framework for the atmosphere. Luterbacher and Sprinz examined the potential legal and institutional challenges of the early CC convention design.⁶⁹ They equally assessed early negotiations of KP. Cameron and Zilman appraised policy implications of the KP.⁷⁰

Princess Duruike in her work⁷¹ considered CC litigation in USA and Nigeria. She opined that CC related litigations in Nigeria are stunted by lack of political will of the government to recognize environmental protection above economic interest. This work focused solely

⁶⁷Jhering R., 1924. *Law as a means to an End*. Scotland: Jennsion Publishers. Chapter XV, paragraph 7.

⁶⁸ Oyedele & Onu (2021) supra.

⁶⁹ Luterbacher, and .Sprinz D..F. Ed. 2001. *International-Relations and Global CC* London: Graham and Trotman. 22.

⁷⁰ Cameron P.D. and Zilman D Ed. 2001. *Kyoto: From Principles to Practice*. The Netherlands: Klawer Law International. 45.

⁷¹ Princess D. 2018. CC litigation and corporate accountability in Nigeria: the pathway to climate justice? Thesis. The University of British Columbia. 12.

on CC litigation and not on the legal framework. Akinwande⁷² appraised emission trading schemes in the United-States, United-Kingdom, New-Zealand, and Chile. He concluded by recommending that Africa adopt similar scheme in its CCM architecture. His work considered Africa broadly.

The present thesis seeks to focus on Nigeria. Oluduro⁷³ annotated on the international legal regime for CC control for Sub Saharan Africa (SSA). He found that despite the vast number of international legal framework for CC in the sub region, the level of awareness of the dangers of CC is next to zero. He also found that domestic legislations that bordered on CC are grossly delinquent. He recommended for legislative overhauling within the region, especially, in Nigeria. It is important to point out that the work did not discuss the 2015 PCCA and its consequential implications for the SSA region.

2.3.2 Energy Security and CC

There exists a plethora of literature on CC in Nigeria, most of them coming from the fields of economics and social sciences.⁷⁴ In Nigeria, research on energy and environment are minimal, and the few studies conducted within the field have placed emphasis on the effects of burning of fossil fuels on CC with no much focus on the CC upshots on energy security and human right.⁷⁵ Energy security seems relegated to the background in CC discourse.⁷⁶ The energy sector of the developing world is gasping for change, even in the absence of immediate need for exigent reaction to CC within the region.⁷⁷ Also, CC has a profound

⁷² Akinwande, G. 2013. Emissions Trading: A Policy Option for Fighting CC in Africa. *Electronic Thesis and Dissertation Repository*. Paper 1662.

⁷³ Oluduro, O.F., 2016. Mitigating the Effects of CC in Sub-Saharan Africa Via an Effective International Legal Standard: A Case Study of Nigeria. Diss, Law, Gent University. Ix+358, 4.

⁷⁴Egbule, C. L. 2010. Indigenous and emerging adaptive agricultural technologies to CC in the Niger Delta region of Nigeria. Thesis. University of Nigeria, Nsukka, Enugu state, Nigeria 67.

⁷⁵See for example, Opeyemi, A., Adeyemi O., and Philip A. 2014. Energy Supply and CC in Nigeria *Journal of Environment and Earth Science*. 321-335, 321

⁷⁶See for example, Anthony, G. 2009. *Politics of CC*. Cambridge: Polity; John, D., Anne, L., and Widhyawan, P. 2007. *Energy Security and CC* Washington, Paris, Tokyo: The Trilateral Commission, 2007. Retrieved online September 10, 2018 from: <http://trilateral.org/download/doc/Energy%20Security.pdf>

⁷⁷Floater, G., et al., The New Climate Economy Retrieved September 10, 2018, from <https://files.lsecities.net/files/2014/12/The-Transformative-Role-of-Global-Urban-Growth-01.pdf>

effect on energy security because of the diversities of human activities which are unique to the environmental realities existing in different regions of the world.⁷⁸

However, many past studies done on energy security have been geographically dominant in the Global North and the developed world. Existing research on CC in Nigeria have largely focused on the influence of CC without focusing on HRs and energy security.⁷⁹ Hence, there is need for a further research on the unanswered puzzle on how the consequential effects of CC will affect human security and rights.

2.3.3 The linkage between HRs and the Environment

Amokaye⁸⁰ observed that Environmental squalor infringes on a good number of HRs, some of which include: life, privacy, healthy environment and right to self-determination. He also noted that the level of human right abuse arising from oil production activities by multinational oil companies in Nigeria is worrisome. Commenting further, he opined on the absence of a constitutionally guaranteed “environmental right” under Nigerian law to remedy environmental abuses. Opining further that the existence of environmental right in our law will impose an obligation on individuals and government to safeguard the environment and it will remove the barrier of locus standi that confronts many environmental litigants.

According to Amokaye, HRs obligations force a responsibility on the state to enforce the rights and to compensate the injured in case of violation of such rights. But in the instance of environmental rights, states are unwilling to accept the obligation on them. He also pointed out that environmental right being a second generation right cannot be fully ensured in the nonexistence of economic and technical resources, education and planning, the gradual reordering of social priorities and international cooperation. He went on to add that environmental rights are often observed in breach because it implicates development.

⁷⁸Gordon S., et al, 2007. National Security and the Threat of CC. *Virginia: Centre for Naval Analyses*. Retrieved September 10, 2018: <http://www. .org/reports/climate>. See also Mayer B., 2021.

⁷⁹See for example, Gullede, J. and Rogers, W. 2010. Lost in Translation: Closing the Gap between Climate Science and National Security Policy. *Center for New American Security*. Retrieved September 11, 2018 from <http://www.cnas.org/node/4391>

⁸⁰Amokaye,G.O. 2004. *Environmental Law and practice in Nigeria*. Op.Cit.587-687. See also Mayer B., 2021.

Because, developmental processes often have adverse effects on the environment. And a strict devotion to the promotion of environmental rights will undoubtedly and ultimately hinder development.

Amokaye did an examination of environmental rights in Nigeria by first referring to section 20 of the Constitution. He juxtaposes this section with Section 33 that guarantees the right to life. He points out that these provisions suggest that the clean environmental right is guaranteed under extant *grundnorm* and that individuals could institute actions to protect their environment against degradation. He was quick to note that the situation is different in practice because the ability of individuals to invoke Section 20 of the constitution has been crippled by Section 6(6)(c) of the constitution which expressly excludes the judiciary from determining issues or questions set out in chapter 2 of the constitution.

Amokaye pointed another snag on the implementation of environmental rights in Nigeria by laying the blame at the feet of the Courts who have been patronizing the letters of Chapter II rigidly. In his opinion, a liberal interpretation of the provisions of Chapter II by the court as it relates to environmental protection will undoubtedly promote sustainable development goals, public participation and environmental justice. Amokaye added that if such approach is adopted, it will be consistent with current national and international policies, which require governments to consider development holistically by taking into consideration significant environmental factors in the development process. The above position of Amokaye was confirmed by the later work of Omaka.⁸¹

Aaron Sachs⁸² is of the view that HRs and environmental issues largely involve unfair distribution of the cost of ecological damage and inequitable access to ecological benefits. He referred to these as environmental injustices. He also opined that each instance of environmental HRs abuse will require a different solution. Aaron Sachs suggested that the key to working towards environmental justice may be ensuring that people in power do not monopolize the right to determine the meaning of justice itself. Aaron Sachs is of the view that Environmental and HRs movements have substantial common ground on which to build

⁸¹ Omaka C.A. (2022): *Municipal and International Environmental Law*. Abakaliki, Respoint Ltd. p.107.

⁸² Sachs, A., 1995., *Eco Justice: Linking HRs and the environment*. Peterson, J. A. Ed. World watch paper.,127:5-68

further linkages. Especially on expanding ATI and upholding the right of communities to participate in decisions likely to affect their well-being.

Aaron Sachs observed that the actual prevention of environmental injustices will require not just laws but also a commitment to incorporate basic civil liberties into development policies locally, nationally, internationally in corporations. To him, this will spur local people's participation in key decisions and provide access to environmental information. And in so doing, both the environment and the people and the most vulnerable people would benefit substantially. He subscribed to the view that HRs conventions were written too early to reflect an awareness of environmental issues. But he noted that most accepted rights have implicit environmental components.

Adedamola⁸³ in his essay, expressed the view that the development of environmental law in Nigeria is relatively new. He pointed that these provisions are not justiciable in court. Adedamola noted that Nigeria has entered into some international agreements which have influenced her policies on the environment. He strongly suggests that a lot still must be done to guarantee and safeguard this right.

All human beings according to Adedamola have fundamental rights to a healthy environment. He gave some examples of environmental rights, to include the right to freedom from pollution, environmental degradation, right to health, the right not to be evicted from land and right to a safe and healthy working environment. He noted that since these rights are recognized in enhancing Human existence, it is essential that they should be adequately safeguarded. Referring to the constitutions of some countries in the world that expressly provide for a right to a safe environment, Adedamola included South Africa, Malawi, Uganda, India, United States of America, Pakistan and Tanzania in his references, pointing out that these safeguards in these constitutions, enhances Human development and protection when trampled upon.

⁸³Adedamola, A., 2006., HRs and Environmental Pollution in Nigeria. *Contemporary Issues In International Law ;essays in honour of Justice Francis Fedode E. TabaiGasiokwu*, M.O.U. Ed. Enugu: Chenglo limited .p. 161-174, 161. See also Omaka, 2022, op. cit.

Commenting on the nature of Environmental Rights Abuse in the Niger Delta, Adedamola opined that pollution which has resulted mainly from the activities of oil companies is an abuse of the right to a safe and healthy environment. Adedamola went on to state that the general effect of the proliferation of the environment with hazardous substances is the deprivation of the indigenes or communities right to livelihood. Thus, pollution affects their livelihood and right to life since the protection and preservation of the environment is now perceived as crucial to the future of mankind. He upheld the view that, the common law remedies of trespass, negligence, nuisance, and damages available to a victim of environmental degradation, are incapable of dealing with the technological advancement, which is currently taking place in the oil industry.

The learned Author, quoting section 251 of the 1999 Constitution of the Federal Republic of Nigeria, stated that actions for breach of environmental pollution because of oil and gas can only be adjudicated by the Federal High Court. Adedamola noted that one of the problems of enforcing environmental rights lies with the Court that has the jurisdiction to hear matters arising from oil and gas. Adedamola said that the not all states of the federation have a Federal High Court located within its territory, this will work hardship on poor victims who would have to travel to another state to seek redress. Adedamola also noted that the multi-national oil companies have avoided claims of compensation by employing corporate strategies of unnecessary delay, accusing the communities of creating the environmental problems, compromising the Government and technicalities. More so, he pointed another problem of environmental rights enforcement to be the lack of willingness on the path of regulatory bodies responsible for enforcement due to low morale, inexperienced staff, inadequate funding, and inadequate equipment to monitor, protect, regulate and discharge their duties under the law establishing them. He suggested amongst others that environmental rights should be included in the essential rights provision in the constitution rather than being made a policy statement in court.

Atsegbua et al⁸⁴ holds the view that the necessity safeguard the safety of humans; rest on the guarantee of a healthy and clean environmental space. Thus, healthy and clean environment becomes a human right. Referring to the position Emmanuel Kasimbazi and

⁸⁴Atsegbua, L., et al., 2020. *Environmental Law in Nigeria: theory and Practice*. Op.cit (3rd Ed.). 8: 128-147

others⁸⁵, subscribe to the view that if environmental rights are enacted, it would give the public a right to healthy environment and would open a flood gate of policies that will increase the powers of private individuals to protect themselves and their environment from the effects of pollution. Such right besides affording private individuals the opportunity to participate in standard setting process, it would increase powers to institute actions on pollution where government refuses or fails to act.

Atsegbua and others, acknowledged that the international community recognizes the link between HRs and environmental pollution. Citing provisions of some international Declarations and treaties which included: The Stockholm Declaration, The Hague Declaration of 1989, United Nations Environment Program and African Charter on Human and People's Rights. They inferred that the international recognition of environmental right embraces both a right to a healthy environment for everyone, and an obligation to sustain it and enforce its sustainability.

With the domestication of these international treaties, they are an essential fragment of the legal system of Nigerian, hence, fully enforceable. Speaking on the position of the African Charter, learned authors took sides with argument canvassed by Dakas⁸⁶ answering the question of whether environmental contamination can be regarded as HRs violation? Atsegbua and others, opined that environmental pollution is a breach of man's right to live in a clean and healthy environment free from any form of pollution. This is so because, pollution causes damage to the environment, its habitats and other social amenities needed for the survival of man. The point at which the environment is altered to the extent it poses danger to the health and life of those within its vicinity, is the threshold at which the right to a clean environment is breached. They also outlined some of the rights mostly affected by environmental pollution to include: The Right to life, Economic, Social and Cultural Rights and the Right to Health.

On the Nigerian Constitution and Environmental Rights, they lamented that it is regrettable that Section 20 of the 1999 constitution which made express provision of the right to a

⁸⁵Emmanuel, K. 1998. The Environment as HRs: Lessons from Uganda. *African Journal of Comparative Law* p.145.

⁸⁶ See Mayer B., 2021

protected environment is made an integral part of Chapter II. This makes it non justiciable. If it were a provision under Chapter IV of the Constitution, it would have been enforceable. They also did mention that some of the legislations on pollution in Nigeria are in dire need of review. As most of them are too limited in scope to address the trend of modern day Nigeria.

2.4 Human Right and CC

It has been identified that CC is among the most troubling 21st century challenges. It creates a gargantuan universal problem and will have momentous impacts on humanity.⁸⁷ More so, research has forecasted that climate-change will have damming effects on economies, the environment and social life of people globally.⁸⁸

Despite the fact that CC has been globally accepted to be an environmental problem and a serious one for that matter,⁸⁹ examination of the rights impact of CC has not afforded adequate consideration.⁹⁰ The all-important poser whether CC can be considered as human right based concern has arisen lately.⁹¹ HRs scholars have now come to agree that CC directly threaten some fundamental HRs such as right to life, water, food, health and shelter.⁹² Massive landslides and floods which will decrease the prospects for people to market their farm produce; water scarcity and it will also reduce productivity of farmers. This will definitely impact on the right to food, health, and life. Frequent flood and droughts may necessitate the disappearance of animal and plant species that have been fundamental

⁸⁷ Australian HRs Commission. 2008. CC Context – International and Domestic. Native Title Report. Chapter four, Page-91. See also Majid, M, 2021, Human Rights-Based Approach to Climate Change Through Existing Human Rights Regimes. Thesis. Department of Law, Governance & International Relations, London Metropolitan University, London, 15 <http://hdl.handle.net/10919/71517>. (Last visited Jul., 25, 2021). See also Mayer B., 2021.

⁸⁸ *Ibid.*

⁸⁹ *Ibid.*

⁹⁰ *Ibid.*

⁹¹ N.C. Ole, E.H. Nyekwere, C.N. Nwedu, K.O. Onu, & A. Omotola (2023) ‘International Climate Change Regime and Off Grid Renewable Electricity’. In N.C. Ole et al (Ed.) *Regulatory Support for Off Grid Renewable Electricity* (52-70), London, United Kingdom, Routledge, Taylor and Francis, p. 4. Available online at <https://doi.org/10.4324/9781003178088>. See also Robinson, M. 2006. CC and Justice. In her lecture she advocated HRs-based approach to CC. Retrieved September 11, 2018 from http://www.realizingrights.org/pdf/Barbara_Ward_Lecture_12-11-06_FINAL.pdf

⁹² Doussa, J.V., Corkery, A., and Chartres, R. 2007. HRs and CC. *Australian International Law Journal* vol.14, page161.

to the ceremonial life of indigenous people or have been a source of subsistent food for them. This will affect the right of indigenous people.⁹³

More so, extreme cold and wet environment may lead to health challenges like bronchitis, hypothermia and pneumonia especially among children and old people. Decrease in productivity will also give rise to shortage or loss of revenue, which will have a negative impact on national GDP and the income of rural dwellers. This will make the young rural population to migrate to urban centres for greener pasture, and in turn lead to urban over population and pollution.

In a nutshell, the HRs of people living in a CC affected community is being threatened. HRs-based approach to CC helps us to understand that CC is not solely an environmental, technical or economical issue, but an issue of social justice which must be responsive to the asymmetrical burdens from a HRs perspective.⁹⁴ HRs approach motivates us to transfer our focus to people that are more vulnerable to the effects of CC. This approach makes the duty-bearers including the governments responsible and accountable for the mitigation of the vulnerability of their people to the effects of CC, and also helping them to adapt to its impacts. This approach motivates us to instill accountability in Nigeria's framework which is germane in the protection and promotion of HRs in a society.⁹⁵

2.4.1 Are the Effects of CC Grave enough to be treated as a HRs Issue?

Osofsky had earlier suggested an approach with which to determine whether an environmental damage constitutes a human right issue. Her approach that suggests that geographic scope, severity of the damage and its resultant impact on human beings, the duration of the damage be considered and evaluated in order to ascertain whether the effects of CC amounts to a human right issue.⁹⁶

⁹³ *Ole, et al (2023), supra.*

⁹⁴ *Ibid.*

⁹⁵ *Ibid*

⁹⁶ *Ibid*

If the above approach is applied to CC, one will notice that CCs' geographic scope is indeed global, being that its effects spare no country or continent: it affects weather systems, food security, ocean currents, agricultural yields and human and animal health globally.⁹⁷ The effects of CC spans through a broad duration. Although scientists have posited that the sternness of CC on earth will be contingent on emission of GHG in 2050;⁹⁸ however, even if earth stabilizes GHG emissions today, the next century or more would continue to witness rise in sea levels and temperatures due to lag in response time to changes in atmospheric temperature.⁹⁹ Increase in harsh weather conditions such as cyclones, floods, drought; and frequency of occurrence of extreme events are expected to be caused by CC.¹⁰⁰

These extreme and harsh weather conditions will in turn increase cholera and diarrhea. CC induced malaria, cholera, malnutrition is estimated to cause the death of over 150,000 people each year.¹⁰¹ It is also projected that increasing intensity, droughts, floods, and heat waves will cause more deaths.¹⁰² For instance, extra 27,000 deaths occurred due to the 2003 Europe's CC induced heat wave.¹⁰³ It is projected that about 50 million will due to CC be exposed to hunger, and by 2050, it is estimated that additional 132 people will also face similar risk.¹⁰⁴

From the analysis elucidated above, it can be deduced that impacts of CC are stern and worldwide with extensive duration, hence, same qualify to be treated as a human right issue under extant global and municipal HRs regimes.

⁹⁷ *Ibid*

⁹⁸ Holmes, B. 2005. Ocean Heat Store Makes CC Inevitable. NewScientist.

Retrieved August 5, 2019 from: <http://www.newscientist.com/article.ns?id=dn7161>.

⁹⁹ Aminzadeh, S.C. 2007. *Ibid*. See, Omaka, 2022, op. cit.

¹⁰⁰ *Ibid*.

¹⁰¹ N.C. Ole, E.H. Nyekwere, C.N. Nwedu, K.O. Onu, & A. Omotola (2023) 'International Climate Change Regime and Off Grid Renewable Electricity'. In N.C. Ole et al (Ed.) *Regulatory Support for Off Grid Renewable Electricity* (52-70), London, United Kingdom, Routledge, Taylor and Francis, p. 4. Available online at <https://doi.org/10.4324/9781003178088>.

¹⁰² *Ibid*

¹⁰³ *Ibid*

¹⁰⁴ N.C. Ole, E.H. Nyekwere, C.N. Nwedu, K.O. Onu, & A. Omotola (2023) 'International Climate Change Regime and Off Grid Renewable Electricity'. In N.C. Ole et al (Ed.) *Regulatory Support for Off Grid Renewable Electricity* (52-70), London, United Kingdom, Routledge, Taylor and Francis, p. 4. Available online at <https://doi.org/10.4324/9781003178088>.

2.5 HRs Based Approach and CC

Olawuyi,¹⁰⁵ posited that there exist substantive and procedural approaches of mainstream human right under existing global CC laws. The substantive approach views environmental protection as a condition precedent for the enjoyment of globally acknowledged rights like rights to health and life;¹⁰⁶ and for direct recognition under international law a substantive environmental right. The procedural approach seeks for a new interpretation of extant procedural international HRs to provide for environment. This school of thought attempts to establish that there exists a procedural link between HRs and environmental protection.

This approach is exemplified in Aarhus Convention and Rio Declaration's Principle 10 that both guarantees the right of people of information access, participation of public in decision making and execution, and adequate access to justice in environmental related issues, to the effect such concerns are better addressed through the effective participation of the concerned stakeholders.¹⁰⁷ This approach is anchored on procedural rights like 'ATI, participation, access to justice' as the essential basis for incorporating CCM efforts with HRs standards.

This procedural approach is the bedrock of the United Nations HRs Based Approach (UNHRBA), a fivefold HRs policy framework that was designed and promoted by the United Nations since 1997, to wit: ATI (ATI), participation, accountability, equality and non-discrimination; and access to justice.¹⁰⁸ A couple of UN agencies has adopted the UNHRBA as policy framework for the incorporation of HRs into their mandate areas, though the UNHRBA is not legally binding. Sometime in 2012, the United Nations Development Group (UNDG) called on all UN agencies to adopt the UNHRBA as the policy benchmark for the incorporation of HRs principles into their areas of mandate. Much has not been done in mainstreaming HRs principle into CC laws using the template of HRBA. Olawuyi suggested that reason for this could be because of the relative new nature of the

¹⁰⁵ See Olawuyi D.S. 2013. op. cit. p. 217. See also Ole, et al, 2023, op. cit., 24.

¹⁰⁶ This first limb is exemplified in the Stockholm Declaration which placed serious emphasis to the recognition of the attainment of environmental right as a condition precedent for the enjoyment of extant recognized rights.

¹⁰⁷ See Olawuyi, D.S. (2013) op. cit. p. 217.

¹⁰⁸ Ibid, 218.

principle, hence, there is no theoretical framework on how this HRBA can be applied in the area of CC.¹⁰⁹

This procedural approach shall be adopted in this thesis; however, an attempt shall be made to analyze the two approaches below in order to draw lessons from their previous applications in terms of their strengths and weaknesses for CCM projects.

2.5.1 Substantive Approach

Since the trailblazing edited work of Boyle and Anderson,¹¹⁰ learned writers have advanced the argument for environmental protection using extant international human right regimes. The crux of the proposition of the scholars is that HRs can be mainstreamed in environmental protection by establishment or acknowledgement of the existence of environmental rights (direct substantive approach), or a re-interpretation of existing fundamental rights in a way that environmental protection would form part of their elements (indirect substantive approach). Boyle called this indirect approach the ‘greening’ of extant rights to provide for environmental protection.¹¹¹

2.5.1.1 Re-Interpretation of Existing Rights (Indirect Substantive Approach)

The indirect approach seeks for a broad re-interpretation of extant HRs in a manner that it will cater for environmental protection. Harding posited that rights such as life and health are broad enough to accommodate environmental protection, hence, contentions for the establishment of a separate environmental right is superfluous.¹¹² He further contended that environmental protection can be catered for through this approach silently without arousing a form of drama by greening or amending these exiting rights.¹¹³ Anderson alluded the above position by asking for an imaginary but vigorous expansive interpretation of existing rights to cater for environmental protection which was not thought of at the time of the

¹⁰⁹ Ibid.

¹¹⁰ N.C. Ole, E.H. Nyekwere, C.N. Nwedu, K.O. Onu, & A. Omotola (2023) ‘International Climate Change Regime and Off Grid Renewable Electricity’. In N.C. Ole et al (Ed.) *Regulatory Support for Off Grid Renewable Electricity* (52-70), London, United Kingdom, Routledge, Taylor and Francis, p. 4. Available online at <https://doi.org/10.4324/9781003178088>,1

¹¹¹ Ibid.

¹¹² Ibid, 227.

¹¹³ Ibid

formulation of these rights.¹¹⁴ He further stated that extant internationally recognized HRs are well detailed and clearly comprehensive to cater for environmental protection. This approach is usually pursued through the channel of litigation.

By and large, to some extent, this earlier approach of placing environmental matters under HRs yielded some positive and negative results in litigation, and such has helped in the development of this aspect of jurisprudence. For example, the International Court of Justice (ICJ) through per Justice Weeramantry held that the protection of the environment is a prerequisite for the enjoyment of rights to life and health in the case of *Hungary vs. Slovakia*. Also, in the case of *Endorois Welfare Council v Kenya*, the African Commission in finding the Kenyan Government in violation of the rights of the Endorois peoples' to culture, religion, environment, freedom, property, development and natural resources, established and linked environmental protection with HRs. The African Commission also linked environmental safeguard to rights to health, property, food and in the famous case of *SERAC v Nigeria*.¹¹⁵

The European Court of HRs has adopted this approach in several cases in the past.¹¹⁶ For instance, the court had in *Lopez Estra case* held that series of environmental pollutions has the capacity to deprive a person the enjoyment of his home.¹¹⁷ Similarly, the Inter-American Commission had also adopted this approach in the case of *Mossville Environmental-Action Now v United-States*, by overruling the submission of the USA that the petition was void on the ground that right to a safe environment does not exist whether directly or as a part of rights such as right to health or food;¹¹⁸ held that although the United States of America may not acknowledge the right to a healthy environment, the petition was indeed admissible by the Commission by virtue of a broad community reading of international and Inter-American HRs regimes.

¹¹⁴ N.C. Ole, E.H. Nyekwere, C.N. Nwedu, K.O. Onu, & A. Omotola (2023) 'International Climate Change Regime and Off Grid Renewable Electricity'. In N.C. Ole et al (Ed.) *Regulatory Support for Off Grid Renewable Electricity* (52-70), London, United Kingdom, Routledge, Taylor and Francis, p. 4. Available online at <https://doi.org/10.4324/9781003178088>.

¹¹⁵ 2001 A.HRLR 60 (ACHP.R 2001). Communication .155/96.

¹¹⁶ See *Olujeic v Croatia* (Apps no .2233.0/05) 2009, 5th Feb.

¹¹⁷ ECHR (16798/1994).

¹¹⁸ See Olawuyi (2013) supra.

It is pertinent to note that this approach is fraught with uncertainties and lack of scope, being that there is no global international human right treaty that expressly recognized the right to environment, since the application of this approach a given environmental litigation is solely dependent on the liberality of the court of tribunal before whom such a dispute is tabled. Hence, some conservative judges and tribunals have insisted that laws, treaties, or conventions must be given their literal meaning without an extraneous expansive interpretation of same to include environmental rights. For instance, the case of *Hatton v. United Kingdom*, exemplified this resentment.¹¹⁹

In this case, the European Court of HRs in quashing an application brought by some Britons against the U.K. government for an order compelling the U.K. government to reduce the night flights from Heathrow international Airport as same causes sleeping disturbances for people resident close to the airport. The court held that the U.K.'s economic wellbeing outweighed the sleeping interest of the concerned few people. The court further held that it will be inappropriate to go beyond its margin by making reference to a distinctive rank of environmental rights; hence, it refused to accord any exceptional acknowledgement to environmental rights.

In similar vein, the United States of America (USA) courts have been consistent in refusing to acknowledge the existence of right to environment whether municipally or internationally.¹²⁰ Earlier efforts to claim redress for pollution on international scale through the US Aliens Torts Act (ATCA) did not record much success.¹²¹ In the case of *Amlon Metals Inc. v FMC Corp* the US Court decided that the law of nations does not include Stockholm Declaration on Human Environment; it hinged its decision on the principle that

¹¹⁹ Ibid.

¹²⁰ For instance, in case of *Tanner v Armco Steel* 1972 340 F. Supp 532, 537, the court pronounced the Fourteenth neither the Amendment of the American Constitution nor any other part of the Federal Constitution make provision for a binding and enforceable right to the environment. See also *Upper W. Fork River Watershed Association V Corps of Engineers* 1977 414 F. Supp. 908 (N.D.W.Va) where the court declined to recognize environmental right.

¹²¹ By virtue of Section 1350 of Alien Torts Act 28 U.S.C. § 1350 (ATCA) non-US indigenes are allowed to initiate suits in U.S. federal courts for violations outside the US of the law of nations. Victims of human right abuses outside the US have clinched on this law to obtain redress from US courts.

the ATCA can only be applied to international norms that are ‘specific, obligatory and universal’. In the same manner, the US court held that environmental principles of precaution and polluter pays have not been adequately defined to form part of ‘laws of nations.

The challenges that these cases unveiled has shown the disadvantage of using this indirect approach anchored on litigation to link environmental issues with HRs. These challenges serve as a warning for any attempt to try linking CC with HRs through this indirect substantive approach through the vehicle of litigation. There is prevalence of arguments in favour of the link amid CC and fundamental rights.¹²² The United Nations has also in three different resolutions acknowledged that CC is a threat to humanity all over the world and poses a big threat to the enjoyment of HRs globally.¹²³ Although these declarations are not binding but they can positively influence the mitigation of CC.

There is no gainsaying that CC is a serious HRs concern, which has the tendency to lead to damning violations of extant HRs both directly and indirectly if not mitigated. There have been several calls for recognition of the linkage between CC and HRs. Some scholars have proposed to achieve this linkage between CC and HRs through the indirect approach of litigation.¹²⁴ Of recent, there are avalanche of suggestions that HRs effects of CC can adequately be protected through litigation. These suggestions lead us back to the earlier contention on whether this indirect approach of litigation is broad enough to cater for HRs affected both directly and indirectly by CC. If these suggestions are considered in the light of the lessons learnt from the use of this indirect substantive approach for environmental rights general, one would find out the disadvantages of this approach far outweighs the advantages.

Though this approach must be applauded for raising awareness of the fact that the effects of CC can escalate into HRs violation; however, this approach bequeaths on a claimant the herculean task of being as imaginative as possible in pigeonholing the direct and indirect

¹²² See Olawuyi *op cit.*, 134.

¹²³ U.N. HRs Council Res. 18/22, in U.N. HRs Council, Report of the HRs Council on Its eighteenth Session, at A/HRC/RES/18/22 (30 September 2011).

¹²⁴. Olawuyi (*supra*)

effects of CC within the extant international HRs regime. This pigeonholing process is not a straight jacket affair, particularly when brought before a conservative tribunal or judge. A good example is the Inuit Circumpolar Conference (ICC) petition against the U.S.A. before the Inter-American Commission on HRs in 2005 for her acts and omission in relation to CC.¹²⁵

The Inuit inhabitants of the Arctic alleged in the petition that the USA being the highest emitter of GHGs through its climate laws and policies and non-subscription to the KP is violating their HRs to physical well-being, cultural life, property. The commission in rejecting the petition held that the facts adduced by the petitioners were not sufficient to disclose if same constitute an infringement of rights enshrined under the American Declaration.¹²⁶

Seeing therefore that a petitioner before an international court or committee must first cross the hurdle of establishing a *prima facie* case before the petition can be admitted for consideration of its merits, a petition or claim seeking for linkage between CC and human right may appear to be speculative and essentially derivative.¹²⁷

Stating that CCM mechanism projects infringe on HRs can easily succeed when it is linked directly to a recognized human right; it might not succeed in other cases where such projects or efforts cannot be directly linked to a recognized right. For example, an execution of a CCM project that results to loss of life can easily be linked to violation of right to life. However, were a host community of a mitigation project is not allowed to participate in the project or carried along with same, which may not be easily linked to HRs even though there is substantial HRs issue involved in it. This approach appears to whittle down

¹²⁵ Ibid

¹²⁶ Ibid. Although the Commission rejected the petition, it however called and had the Representatives of the Inuit make presentation before it on the linkage between CC and HRs. See also Omaka, 2022 supra.

¹²⁷ For instance, the Human Right Commission (HRC) has always remained mute on right to property when it falls part of application brought since the right to property is recognized in neither the International Covenant on Civil and Political Rights (ICCPR) nor the International Covenant on Economic Social and Cultural Right (ICESCR). Like in the case of *Diergaardt of Rehoboth Baster Community et al. v. Namibia*, (cited un Olawuyi Supra), where the claims disclosed *prima facie* unjust encroachment on right to property, the HRC only ruled on freedom from discrimination and was silent on the propriety rights.

environmental values to individual interest thereby contaminating their innate nature of public indispensable goods for survival of the whole society.

Francioni posited that this approach should not be scrapped, but that the approach should be more imaginative in the examination of the bond between fundamental rights and CC.¹²⁸ If Francioni's suggestion is followed, then, the success of an application or petition seeking for a linkage of HRs and climate will depend largely on how imaginative the petitioners are and the understanding of the adjudicating body. Hence, success will vary on case to case basis, and the chances dependent on the knowledge of the adjudicating tribunal and the imaginative strength of the petitioners.

This indirect approach through litigation is reductive in nature and cannot be used carter for the indirect effects of CC. This approach is as well deficient in that it is invoked when the violation has already taken place, it cannot be used to prevent and forestall such occurrence. There is therefore need for an approach that is anticipatory and preventive in nature linking HRs with CC.

2.5.1.2 The New HRs (Direct Substantive Approach)

The last two decades has experienced unprecedented agitations and demands on the necessity of connecting fundamental rights and the protection of the environment through the creation of substantive right to a safe environment. Some scholars have opined that an international direct acknowledgement of environmental rights will definitely cover CC being that CC forms part of the environment.¹²⁹ Some other scholars have clamored for a direct acknowledgement of HRs against the effects of CC (both direct and the indirect) which they referred to as right to be cold.¹³⁰ The substantive approach appears to be the most debated approach for mainstreaming HRs and environmental protection.

¹²⁸ See Asteguba et al, 2020.

¹²⁹ See Omaka 2022, supra.

¹³⁰ See Olawuyi (supra).

Scholars like Paellemarts,¹³¹ Shelton,¹³² and Atapattu have been on the forefront with the demand for a direct recognition of international substantive right to environment. These learned scholars strongly believe that the adoption by international law of the right to environment will be the ultimate approach towards addressing the menaces resulting from pollutions emanating from transboundary movement of hazardous wastes, global warming, CC, and other pressing environmental trepidations. The center point of the argument of these authors is that environmental protection deserves to be accorded the status of HRs under extant international law due to the severity of impacts of environmental concerns.¹³³

In recent past, some countries have codified, defined and recognized the right to environment. Olawuyi submitted that as at 2013 about 177 countries have recognized this right to environment. Some European countries that have constitutional provision on the environment including Ukraine,¹³⁴ Poland,¹³⁵ France,¹³⁶ Norway,¹³⁷ Spain,¹³⁸ Hungary,¹³⁹ Turkey,¹⁴⁰ Portugal,¹⁴¹ Croatia,¹⁴² Bulgaria¹⁴³ and Russia.¹⁴⁴

American countries like Venezuela,¹⁴⁵ Ecuador,¹⁴⁶ Argentina¹⁴⁷ Paraguay¹⁴⁸ Chile,¹⁴⁹ Costa Rica,¹⁵⁰ Brazil,¹⁵¹ and Columbia¹⁵² have also constitutionalized the right to a healthy

¹³¹ Ibid.

¹³² Ibid.

¹³³ Ibid.

¹³⁴ Article 50, Chapter 2 of the Ukrainian Constitution.

¹³⁵ Article 86(1-4) of the Polish Constitution.

¹³⁶ Article 1 of the French Charter of the Environment of 2004.

¹³⁷ Part E, Article. 110 b of the Norwegian Constitution.

¹³⁸ Article 45 of the Spanish Constitution.

¹³⁹ Chapters 1 & 18 of the Revised Hungarian Constitution of 1990 made provisions for every person's right to a healthy environment.

¹⁴⁰ Article 56, Chapter VIII of the Turkish Constitution of 1982.

¹⁴¹ Article 66(1) of the 1982 Constitution of Portugal.

¹⁴² Article 69, Chapter II, Section II, Part III of the Croatian Constitution.

¹⁴³ Article 55 of the Constitution of Bulgaria.

¹⁴⁴ Article 42, Chapter II, Section I of the Russian Constitution.

¹⁴⁵ Article 127, Chapter IX of the Venezuelan Constitution.

¹⁴⁶ Article 86, Section II, Chapter 5 of the Ecuadoran Constitution.

¹⁴⁷ Article 41, Chapter 2, Part I of the Argentine Constitution.

¹⁴⁸ Article 7, Section 1, Chapter 1, Part 1 of the Paraguayan Constitution.

¹⁴⁹ Article 19, Chapter III of the Constitution of Chile.

¹⁵⁰ Article 50 of the Costa Rican Constitution.

¹⁵¹ Paragraph LXXIII, Article 5, Chapter I of the Brazilian Constitution.

¹⁵² Article 79, Chapter III of the Colombian Constitution.

environment. In the African zone, countries such as Mali,¹⁵³ South Africa¹⁵⁴ Benin,¹⁵⁵ Togo,¹⁵⁶ Ethiopia,¹⁵⁷ Nigeria,¹⁵⁸ Niger,¹⁵⁹ Kenya,¹⁶⁰ and Cameroon,¹⁶¹ have equally constitutionalized the right to environment. The same goes for Asian countries like East Timor,¹⁶² India,¹⁶³ and South Korea.¹⁶⁴

From the foregoing, it appears that the question as to whether there exists a definition of the right to environment has been convincingly answered. It is pertinent to note that at the regional level, Article 11 of the San Salvador Protocol (1988) to the 1969 Inter-American Convention on HRs gives every person right to a healthy environment and access to public services.¹⁶⁵ Similarly, Article 24 of the African Charter on Human and Peoples Right (ACHPR) created the people's right to a healthy environment.¹⁶⁶ Although there is no mention or acknowledgement of environmental rights in any of the frontline international HRs regimes, it has been accorded recognition in some international instruments such as the Aarhus Convention.¹⁶⁷

This improved awareness offers a leeway to invoke HRs in environmental protection. Despite the above awareness, scholarly inks still flow towards questioning the international status of environmental rights and mechanisms for its enforcement, being that same has not been accorded recognition by frontline international HRs regimes.¹⁶⁸ Although the Aarhus Convention which was drawn by the Economic Commission for Europe is also open to countries outside Europe for ratification, bulk of the ratifications have come from European

¹⁵³ Article 15 of the Malian Constitution.

¹⁵⁴ Article 24, Chapter 2 of the Constitution of South Africa.

¹⁵⁵ Article 27 of the Benin Republic Constitution.

¹⁵⁶ Article 41 of the Togolese Constitution.

¹⁵⁷ Article 44(1) of the Ethiopian Constitution.

¹⁵⁸ Section 20 of the Nigerian Constitution (As amended in 2018).

¹⁵⁹ Article 27 of the Niger Constitution.

¹⁶⁰ Section 42 of Kenya's Constitution, 2010.

¹⁶¹ Paragraph 65 of the preamble to the Constitution of Cameroon.

¹⁶² Article 61(1), part II of the East Timor Constitution.

¹⁶³ Article 48-A of the Indian Constitution .

¹⁶⁴ Article 35(1), Chapter II of the Constitution of the Korean Republic.

¹⁶⁵ Olawuyi supra.

¹⁶⁶ Adopted 27 June 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), entered into force 21 October 1986.

¹⁶⁷ Olawuyi supra.

¹⁶⁸ Olawuyi (supra)

Countries.¹⁶⁹ The above shows the importance of considering addressing the linkage between CC and HRs by the incorporation of the procedural HRs provisions in the Aarhus Convention in CC laws.¹⁷⁰

There is therefore a need for a direct and clear recognition in CC laws that creates link between HRs and CC in order to draw up a clear threshold of HRs that can fill the extant gaps in CC laws globally.

2.5.1.3 CC and HRs

The global quest to deal with CC has birthed debates and demands for the recognition of substantive right to CC otherwise called a ‘substantive right to be cold.’¹⁷¹ Some learned scholars have argued that failure to mitigate the effects of CC in one country may be a threat to HRs of people in another country.¹⁷² This argument has to be clearly addressed in order to establish a clear cut linkage between indirect impacts of CC effects and HRs. There is a further need to examine how HRs principles can guide in addressing the indirect effects and HRs violations arising from CCM processes and projects such that they can be anticipated and crafted into CC regimes. Arguably, a process-based approach is a better approach as same provides avenue to comprehensibly incorporate HRs procedures and guidelines into CC regimes, in a manner that secondary impacts of CC and CCM projects can be anticipated and incorporated in CC regimes.

In the same vein, it can be argued that the recent demands for a acknowledgement of a new right to a healthy climate will amount to proliferation and multiplication of rights, and the said right could also be a redundant right being that same can safely be protected under right to environment.¹⁷³ Similarly, an approach that can be utilized to prevent HRs violations that can be caused by CCM projects is a better approach. It is therefore cogent to adopt an approach that mainstreams extant HRs in CC laws. Olawuyi suggested that well-articulated

¹⁶⁹ Ibid

¹⁷⁰ Ibid

¹⁷¹ See Omaka, 2022, op. cit.

¹⁷² See Hunter, D. 2009. HRs Implications for CC Negotiations’. *Review International Law*. 331, 332; and Knox, J. 2009. CC and HRs Law. *VA. J. INT’L L.* 163, 168.

¹⁷³ Olawuyi (supra).

environmental HRs protection procedure in the Aarhus convention can be leveraged on in designing and implementing CCM projects.¹⁷⁴

2.5.2 Procedural Approach (The New HRs Based Approach)

The approach focuses on mainstreaming HRs principles and norms in CC policies and regimes in such a manner that the interests of the public are constantly sheltered at every given time. It seeks for the mainstreaming and an interpretation of the people/individual's right in the society to participation and information in decision-making in environmental matters and access to review such procedures. This is an expedition because, to assume that the mere acknowledgement of a substantive right to the environment, or right to be cold; or just an addition to CC regimes of paragraphs stating commitment to HRs will be enough to address the indirect effects of CC such as HRs violations emanating from CCM projects would amount to a costly assumption, being that same misses the point.

Mainstreaming of HRs in CC regimes should be done in a manner that will reform extant CC regimes and its governing institution in a way that HRs will be reflected at every stage of decision making. The above point resuscitates the argument on the importance of linking human right with CC. The teething question is at what stage should HRs come in CC discussion? Should it be at the point of an act or omission that is CC related that results to HRs violations that HRs should be on the table, or should HRs be protected and respected at every point and stage of decision making? Should we continue to think of HRs as being remedial, only to be consulted when addressing the damages or harms caused by CC, or should we push a better approach that calls for a restructuring of CC regimes such that HRs will be considered at every stage including mitigation mechanisms or procedures?

Undoubtedly, this approach is the more sustainable approach being that it ensures that HRs are also safeguarded even in CCM mechanisms and moves. This will engineer changes in both the structure and organization of relevant international institutions and bodies such that the right holders will be involved in the decision-making process, even before the registration and commencement of mitigation projects. This will in no small way reduce

¹⁷⁴ Olawuyi (supra)

HRs violations and curb resistance and litigations from members of the host communities of such mitigation projects.

This Procedural right approach appears to anticipate HRs violations at the project's execution stages, hence, it mainstreams HRs at all stages and also involves the right holders in both the decision making and project execution stages. Climate actions could be better strengthened through participatory rights being that all stakeholders are involved at their decision making, approval and execution. Procedural rights also systematically integrate HRs in CC regulation structures which provides long-term/preventive processes so as to avoid problems that may arise from this source.¹⁷⁵

The approach is in agreement with the tenet of the precautionary principle of environmental law which is to the effect that States should anticipate and prevent the occurrence of environmental damages, especially where failure to anticipate and prevent same in addition to the occasioning environmental degradation also violate HRs.¹⁷⁶

States are urged by Article 3(3) of the United Nations Framework Convention on CC (UNFCCC) to anticipate, prevent, and mitigate effects of CC by taking precautionary measures.¹⁷⁷ This approach demands that governments anticipate and respond to the excruciating effects of CC within their territories and the world generally. This would include both the direct effects of CC and its mitigating measures/projects that violate HRs. By affording the general public opportunities to raise their genuine concerns on the HRs implications of mitigation projects, such concerns could be addressed and effectively prevented at the earliest given opportunity.

When it comes to environmental and HRs threats emanating from CCM projects or actions, the people that are likely to be affected by those projects/actions are the most reliable sources of information. This procedure of allowing the people to air their view will afford the government a chance to know about the existence of such a threat, anticipate and also

¹⁷⁵ Olawuyi (supra).

¹⁷⁶ See Rio Declaration's Principle-15.

¹⁷⁷ See The United Nations Framework Convention on CC, Retrieved 9th of September, 2019 from <<http://unfccc.int/resource/docs/convkp/kpeng.html>>

prevent same. The risk information, risk management and risk assessment are all components of the precautionary principle. Environmental threats can be circumvented when useful information on such threats are transparently assembled, circulated proficiently and collectively dealt with by all concerned parties.

The principle 10 of Rio Declaration (though a soft law being that it is not binding in law) acknowledges public ATI, participation in making of decisions and remedies for wrongs done.¹⁷⁸ The above 3 components have been recognized as the pillars of procedural approach by many international treaties. For instance, the Aarhus Convention provides a model suite for a procedural mechanism by the entrenching of right to information, right to participation in the making of decisions, and right to seek for redress in case of a violation.¹⁷⁹ This convention is binding and enforceable among its signatories. Although the Aarhus Convention is currently being bedeviled by implementation challenges, it nevertheless serves an example of a regime that mainstreams HRs safeguards which anticipates and prevents HRs violation through a democratic process of information access, participation in decision making, due process and access to justice for breach of the standards. To this end, the procedural rights approach appears to be the best approach to tailor and mainstream HRs in international CC legal framework in such manner that mitigation projects are carried out in a way that rights violations and social exclusions are anticipated and prevented through the enforcement of procedural rights.

2.5.3 The United Nations HRs Based Approach

The United Nations HRs Based Approach (HRBA) framework is a policy framework based on the procedural rights approach. The HRBA offers a framework that is procedural in nature which is focused on institutionalizing HRs into extant CC regimes. The HRBA aims at mainstreaming five inter-related HRs principles into making decisions, they include: ‘participation and inclusion; accountability and rule of law; equality and non-discrimination; empowerment; and access to justice.’¹⁸⁰

¹⁷⁸ Olawuyi (supra) 235

¹⁷⁹ The Aarhus Convention.

¹⁸⁰ Olawuyi (supra).

HRBA harmonized and incorporated procedural HRs into programmes and project actions, and as such furnish the people with bases for enforcement of such rights. The HRBA presents a departure for the need driven approach that demands that proponents of projects and government consider the impact of such engagement on existing HRs. HRBA incorporates HRs safeguards and benchmarks into planning of projects and their execution. The HRBA clearly identifies rights-holders and duty-bearers alike, and also defines their entitlements and obligations respectively. It also strengthens the right-bearers capacity in making their claims when the need arises, and the corresponding responsibility of the duty-bearers to fulfil their obligations.

We submit that the HRBA appears to provide a less problematic and hypothetically a less contentious approach to mainstreaming HRs safeguards into CC legal frameworks. Since the HRBA builds on extant HRs, and their recognized principles, it evades arguments like legitimacy, proliferation, and definition that have followed the substantive right approach. Being that the HRBA affords stakeholders opportunity to resolve their differences and also focuses on due process, HRs conflicts that usually arise in the substantive right approach are greatly minimized.

This approach is less problematic in operation because parties to the CC regimes are also parties to major international HRs regimes. So, these parties are to take climate actions in relation to CC and also fulfil their obligations under international HRs regimes to respect, protect and fulfill HRs. The HRBA avails States a systemic and an all-inclusive framework by which they are to meet their obligations under the two regimes. In essence, it permits States in the course of meeting up with their climate action demands to respect, protect and fulfil HRs. Therefore, no new obligation is sought to be imposed by HRBA aside from the ones already agreed by the parties.

The application of HRBA in CC regimes will mean incorporating procedural HRs norms such as ATI, participation and involvement in decision making, accountability, non-discrimination and equality, access to justice in global CC so that the climate actions are

planned and executed with full involvement and participation of the masses.¹⁸¹ The HRBA also enables the people to be actively involved and play significant roles in the planning, approval, and application of CCM projects. The approach also favours the people to effectively call their rights and to be actively involved in CCM efforts, thereby addressing the core bases of HRs abuses in such efforts.

2.5.3.1 Rights Experts Arguments on HRBA

The HRBA presents a promising framework for the mainstreaming of HRs in CC regimes, however, it is not devoid of some dissenting voices. Some HRs experts have expressed some pessimistic views towards the HRBA. These arguments are not ill conceived but are born out of sincere desire to preserve the sanctity of HRs. We shall be discussing some of these arguments below.

2.5.3.1.1 Can Non-Rights Experts understand and Mainstream HRs?

The HRBA framework promotes a legal synergy with CCs regimes and HRs in such a manner that HRs norms are incorporated into CC regime. It means the alteration or expansion of extant international CC regimes such as the PA 2015, UNFCCC and its KP to accommodate HRs provisions, and the expansion of CC regulatory bodies and secretariats to cater for HRs in their operations, structure, and coordination of CCM projects and actions. These definitely expose these environmental agencies to some untapped and changes will recondite areas of HRs consideration in project planning and execution.

The teething question now is whether an institution like UNFCCC secretariat which has environmentalists and scientists as bulk of its workers, has the capability to shadow such a great but complex reform of interpreting and mainstreaming HRs in CC actions? The proponents of this question consider that these fellows being outsiders to the HRs family may infuse liberalism into the sacred concept of HRs, thereby devaluing same.¹⁸²

¹⁸¹ See N.C. Ole, E.H. Nyekwere, C.N. Nwedu, K.O. Onu, & A. Omotola (2023) 'International Climate Change Regime and Off Grid Renewable Electricity'. In N.C. Ole et al (Ed.) *Regulatory Support for Off Grid Renewable Electricity* (52-70), London, United Kingdom, Routledge, Taylor and Francis, p. 4. Available online at <https://doi.org/10.4324/9781003178088>.

¹⁸² N.C. Ole, E.H. Nyekwere, C.N. Nwedu, K.O. Onu, & A. Omotola (2023) 'International Climate Change Regime and Off Grid Renewable Electricity'. In N.C. Ole et al (Ed.) *Regulatory Support for*

McCrudden noted that these proponents considers HRs interpretation as a function or task that can only be performed by HRs experts.¹⁸³ The nub of their argument centers on the notion that the interpretation of HRs instruments should be left for those whose primary functions centers on the interpretation of HRs, else, HRs may be stripped of its radical promise.¹⁸⁴ They also see it to be dangerous for administrators to venture into the task of HRs interpretation, because, these administrators are not learned in HRs law and as such may misinterpret it.

We admit that these administrators lack the requisite capacity to interpret HRs, however, this is not weighty enough to cause an intellectual surrender of this approach. Like Tallant noted, this contention is propelled by lack of inter-institutional fluid between the concerned international institutions like the Office of the High Commissioner for HRs (OHCHR) and the United Nations Environment Programme (UNEP); and lack of collaboration among civil rights actors.¹⁸⁵ This challenge can be remedied through training of CC administrators on short courses or special courses on HRs. The UNFCCC secretariat can make it a policy that people to be appointed into such positions must be trained in HRs. The Secretariat can also develop a Human right unit to train and retrain its staff on HRs.

HRs Education (HRE) can also be used in the area of CC. The UN Declaration on HRs Education, although, not legally binding, encourages all the agencies of the UN to subject their staff to HRs education.¹⁸⁶ The above steps can be taken to close the gap between HRs experts and their perceived outsiders.

2.5.3.1.2 Issue of Resources

Another contentious issue which is similar to the expertise issue discussed above is the issue of resources. The HRBA seeks to introduce institutional expansion and restructuring which will require extra resources to implement. HRBA implementation will require training and

Off Grid Renewable Electricity (52-70), London, United Kingdom, Routledge, Taylor and Francis, p. 4. Available online at <https://doi.org/10.4324/9781003178088>.

¹⁸³ McCrudden, J. 2005. Mainstreaming HRs. Harvey, C. Ed., *HRs in the Community*; Retrieved October 5, 2019 from <<http://ssrn.com/abstract=568642>>

¹⁸⁴ Ibid

¹⁸⁵ Cited in Olawuyi op. cit. 210

¹⁸⁶ Ibid.

re-training of staff, programme funding and institutional expansion, in the face of limited resources and competing budgetary priorities.¹⁸⁷

The UNDP emphasized on the use of an approach which builds on extant resources and capacity in order to reduce cost. Linking new institutions that may spring as a result of the implementation of the HRBA with already existing institutions will help save cost. One of the starting points for such linkages in mainstreaming HRs to CC regimes will be leveraging on the resources of the UNFCCC and HRs bodies like the Office of the High Commissioner for HRs (OHCHR) which has the integration of HRs standards and principles into UN entities as its aim.

2.5.3.1.3 Absence of Operational Precedence

Lack of operational precedence of HRBA in CC regulation is another strong argument against it. There is dearth of literature on the practical implementation of HRBA in CC actions or projects. In essence, the practicability of the HRBA in mitigation of CC actions has remained within the realm of theory, as it has not been tested. This thesis will also attempt to design a regime for the implementation of HRBA in CC actions from empirical data collected from questionnaires, interviews with regulatory body and lessons from Norway.

2.5.4 A comparative Summary analysis of the Substantive Rights Approach and the Procedural Rights Approach

The substantive rights approach places emphasis of the immediate causes of HRs infringement and violations; while the procedural rights approach places emphasis underlying, institutional and structural causes of HRs infringements and violations. The substantive rights approach has human beings as the objects and recipients; whereas the procedural rights approach has humans as the subjects of HRs hence are empowered to protect and claim them.

¹⁸⁷ McCrudden, J. (supra).

The substantive rights approach places emphasis on HRs protection whereas the procedural rights approach emphasizes on the achievement of HRs. Substantive rights approach focuses on input and outcome, whereas the procedural rights focuses on process and outcomes. The substantive rights approach is remedial, reactive, and corrective in its approach to HRs, while the procedural rights approach is anticipatory, precautionary, and preventive in nature in its approach to HRs. Rights protection under the substantive rights approach focuses on top to down approach, while, the procedural rights approach focuses on locally owned bottom up approach for rights protection.

2.6 HRs currently affected or projected to be affected by CC and Its Mitigation Efforts

Many scholars in the field of HRs have posited that to ascertain whether the effects of CC violate HRs, it is imperative to view such effects or impact through the lanes of rights guaranteed by existing international HRs regimes.¹⁸⁸ This section shall be examining the rights affected by the effects of CC.

2.6.1 Right to Life

Right to life of all human persons is enshrined under Article 3 of the Universal Declaration of HRs (UDHR)¹⁸⁹ and article 6(1)¹⁹⁰ of the International Convention on Civil and Political Rights. Children's Right to life is also protected by Article 6 of the Convention on the Rights of the Child (CRC).¹⁹¹ This right is inherent in man. It inures to him simply by being a human. Aminzadeh posited that it is the States responsibility to be proactive in the protection of their environment, and where they slack or fail to take action in such responsibility that CC is one of the resultant effects, so, people injured by the effects of CC may approach the court for a redress of the innate right to life.¹⁹²

CC effects are upsetting the gratification of the fundamental right to life of persons living in affected communities both directly and indirectly. Heat waves, expanding deserts, rise in

¹⁸⁸ Olawuyi supra.

¹⁸⁹ Article 3 of the Universal Declaration of HRs. It is important to note that this Declaration is a soft law, but is universally accepted.

¹⁹⁰ Article 6(1) of the ICCPR.

¹⁹¹ Article 6 (1) (2).

¹⁹² Olawuyi supra.

sea level, flood induced by weather, storms all caused by CC are the reasons for the degrading quality and standard of life. Inhabitants of CC affected communities will not have access to clean water, suffer from poor health and nutrition. They are more exposed to diseases.

It has been estimated by the World Health Organisation that the impacts of CC account for 150,000 deaths in the 1970s.¹⁹³ Increase in harsh weather conditions such as cyclones, floods, drought; and frequency of occurrence of extreme events are likely to be caused by CC.¹⁹⁴ These extreme weather conditions will in turn increase cholera and diarrhea. CC induced malaria, cholera, malnutrition is estimated to cause the death of over 150,000 people each year. It is also projected that increasing intensity, droughts, floods, and heat waves will cause more deaths.¹⁹⁵ For instance, extra 27,000 deaths occurred as a result of 2003 Europe's CC induced heat wave.¹⁹⁶ It is projected that CC will expose more than 50 million people to hunger, and by 2050, it is estimated that an additional 132 people will also face similar risk.¹⁹⁷

On the other hand, CCM efforts unintentionally threaten right to life in developing countries, including Nigeria. The killing of members of Kwale community that resisted the siting of Kwale Gas Flare reinjection project in their community due to lack of involvement is a vivid example.¹⁹⁸

2.6.2 Right to Food

All humans have a right to food and decent standard of living as recognized under Article 11(1) & (2) of the International Convention on Economic, Social and Cultural Rights (ICESCR).¹⁹⁹ This right inures to all human persons and are inherent.²⁰⁰ The right to food

¹⁹³ Ibid.

¹⁹⁴ Ibid.

¹⁹⁵ Majid, M, 2016, supra.

¹⁹⁷ Ibid.

¹⁹⁸ Olawuyi, supra, p. 4.

¹⁹⁹ Article 11(1) and (2) of the ICESCR.

²⁰⁰ Majid op. cit. 45.

has four basic components to wit: Food availability; Access to food; Stability of food supply; and Utilisation of food. The current and projected effects of CC on right to food shall be analysed based on the above components.

Food availability will decrease because of fall in food production as a result of harsh weather conditions such as droughts, cyclones, storms, floods which affects the arable state of land. These extreme weather conditions also induce diseases for both plants and animals. This in all result in shortage of availability of food.²⁰¹ Moreover, stability of food supply will also be affected by price fluctuations and over reliance of food aids and imports by affected communities.²⁰²

Even when food is available, access to such food is another challenge. CC has occasioned institutional breakdowns which have resulted into loss of employment and means of livelihood of many families; hence, they cannot be able to access food.²⁰³ Food utilization will also affect food safety hazards linked with animal diseases in addition to increasing human diseases.²⁰⁴ It is projected that by the year 2020, about 850 million people will be at the risk of hunger and an additional 132 by the year 2050.²⁰⁵

2.6.3 Right to Water

Right to water is not expressly mentioned in the frontline UN HRs regimes, however, it is inherent in some recognised rights such as as the right to health,²⁰⁶ right to food and adequate standard of living,²⁰⁷ and right to life.²⁰⁸ The Economic and Social Council (ESC) also noted that right to water is among the fundamentals for survival of mankind.²⁰⁹

²⁰¹ Ibid, 2.

²⁰² Ibid, 2.

²⁰³ Ibid, 2.

²⁰⁴ Ibid, 3.

²⁰⁵ Majid 2016, op. cit. 45

²⁰⁶ Article 12(1) of ICESCR.

²⁰⁷ Article 11(1) of ICESCR.

²⁰⁸ Article 25 of the Universal Declaration of HRs of 1948.

²⁰⁹ Economic and Social Council, General Comment 15. 2002. The right to water (arts 11 and 12 of the International Covenant on Economic, Social and Cultural Rights). Paragraph 3. Available at: <http://www.unhchr.ch/tbs/doc.nsf/0/a5458d1d1bbd713fc1256cc400389e94?Opendocument>

It is article 24 conventions; the Convention on the Rights of the Child (CRC)²¹⁰ and the article 14 Convention on the Elimination of All Forms of Discrimination against Women (CEDAW)²¹¹ that expressly mentioned and recognized the right to water. CC has affected and will continue to affect both the quality and quantity of water, which will lead to violations of other guaranteed rights like right to health and life. Ocean rise, droughts, and tidal waves decrease oceanic freshwaters. Polluted water will affect the activities of peasant rural farmers in the world, especially in Africa and Asia.²¹²

2.6.4 Right to Health

Article 25 of UNDR though a soft law institutionalized the right to health. This right is also recognised under Article 24 of CRC, Article 12 of CEDAW, and article 12 (1) of ICESCR which all binding international regimes. CC has been predicted to cause frequency of occurrence of extreme events such as cyclone, droughts, floods among others.²¹³ These extreme weather conditions will in turn increase cholera and diarrhea.

CC induced malaria, cholera, malnutrition is estimated to cause the death of over 150,000 people each year.²¹⁴ It is also projected that increasing intensity, droughts, floods, and heat waves will cause more deaths.²¹⁵ For instance, extra 27,000 deaths occurred because of 2003 Europe's climate-change induced heat wave.²¹⁶ CC may expose more than 50 million people to hunger, and by 2050, it is estimated that an additional 132 million people will also face similar risk.²¹⁷

It has also been predicted that changes in rainfall and weather conditions in the Pacific will make the control of dengue fever harder. On the other hand, waste products from CCM projects results in serious medical condition for workers at such sites and the members of

²¹⁰ Article 24(2) (c) of the CRC.

²¹¹ On 18 December 1979, the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW).

²¹² Olawuyi supra

²¹³ Ibid.

²¹⁴ Majid 2016, op. cit. 45.

²¹⁵ Ibid

²¹⁶ Ibid

²¹⁷ Ibid.

the host community. This was the case of the Kwale Gas Flare Reinjection Project in Nigeria under the KP.²¹⁸

2.6.5 Right to Development (RTD)

RTD is one of the late comers within the international HRs jurisprudence.²¹⁹ The Right is established pursuant to a UN declaration, hence, a soft law, but it is universally accepted as it forms part of the fundamental rights.²²⁰ It is a right to a route of development which all mankind are both right holders and duty bearers.²²¹ RTD recognizes human person as being central to every developmental stride, and as such, all human persons must work towards the actualization of this right. RTD unifies all the other fundamental HRs. It therefore connotes that a violation of any one of the fundamental HRs will prejudice RTD.

CC (CC) is currently impairing the availability of food and access to good water; decreasing the earth's mass through ocean rising; causing dangerous weather conditions like cyclones, flood and droughts; increasing disease outbreaks; and as such a threat to right to development,²²² especially among developing countries.

2.6.6 Right to Property

UNDHR though a soft law at the regional level, Article 14 of the African Charter also protects the right to property.²²³ The adverse effects CC like floods, storms, and rise in sea level may impede on the people's right to property in vulnerable communities like Island and coastal territories. This may result into displacement of the members of the acted communities.²²⁴

²¹⁸ Olawuyi (*supra*), 125.

²¹⁹ *Ibid.*

²²⁰ *Ibid.*

²²¹ Majid 2016, *op. cit.* 45.

²²² *Ibid.*

²²³ Article 14. Nigeria is a signatory to all these international regimes.

²²⁴ Majid 2016, *op. cit.* 45.

2.6.7 Rights of Indigenous Peoples

The indigenous peoples live mostly in the earth's most vulnerable ecosystem and are prone to the effects of environmental disasters.²²⁵ This explains why the world accords the inhabitants of these vulnerable regions some special protection for their survival and preservation of their cultural heritage and institutions.²²⁶

The rights of indigenous people are often threatened by CC due to their close affiliation to the environment and their dependence on them for their sustenance.²²⁷ They depend on the environment for everything, so, CC has impaired on their rights to food, shelter, health, and survival. Moreover, these indigenous people have natural attachment to their culture and environment. CC may result into their displacement and as such deprive them permanently of their ancestral antiquity.²²⁸ CCM efforts such as the construction of hydroelectric power station have led to the displacement of indigenous people in Brazil and Nigeria.²²⁹

2.6.8 CC induced Refugees

CC is also making people to be refugees because of its effects. Although the current definition of refugees do not extend to victims of the effects of CC, but records abounds of communities completely displaced by floods who now live as refugees in other places and countries thereby creating CC refugees.²³⁰ Migration induced by environmental disasters are proliferating in the 21st century.²³¹ These refugees lose their ancestral homes and their right to self-determination. They are also prone to HRs abuses in their host communities or countries.

2.7 Existing Gap

CC effects are evident in the society, however, CCM (CCM) measures put in place to mitigate these effects of CC threaten citizen's HRs globally, especially in Nigeria. Previous studies have focused largely on human right impacts of CCM measures under the KP, 1997

²²⁵ Ibid.

²²⁶ Ibid. See also article 1 and 27 of ICCPR.

²²⁷ Ibid.

²²⁸ Ibid.

²²⁹ Mayer B. 2020, CCM and HRs, (London, Oxford Press), 6.

²³⁰ Ibid.

²³¹ Majid 2016, op. cit. 45.

with less emphasis on the extant International legal regime- the Paris Climate Agreement, 2015. This study, therefore, examined national laws and Nigeria's obligations under the Paris Climate Agreement 2015 with a view to determine the human right impacts of their CCM measures in Nigeria. This thesis will also contribute to existing scholarship.

2.8 Conclusion

This chapter examined the concept of CC and factors that cause CC and the effects of CC. This chapter also considered the link between CC and HRs and concludes that there exist both direct and indirect links between the two. The chapter also appraised the essence of a HRs-based approach and found that there exist a substantive and procedural rights approach. This thesis shall be adopting the procedural rights approach in its discussion. This thesis finally appraised HRs that are affected and projected to be affected by CC.

CHAPTER THREE

METHODOLOGY AND THEORETICAL FRAMEWORK

This chapter explains the methodology adopted in this study described the rationale for the application of specific scientific procedures or techniques used in the study to identify, select and analyse data. It explains how the data was collected and analysed as well as the various ethical considerations that was strictly adhered to.

This thesis is generally anchored on the sociological theory of jurisprudence, and particularly on the Roscoe Pounds theory of social engineering. This chapter shall first justify the choice of this theory. This chapter shall also discuss the theories of HRs that relate to CCM.

3.1 Research Design

The study employed doctrinal, quantitative and qualitative techniques and the use of both primary and secondary data to answer the research objectives.

Primarily, doctrinal research approach was used in this research. Primary data from local and international laws (enactments), treaties, conventions, declarations, governments' reports and correspondence; case law; and secondary data from books, articles, magazines, journals, newspapers, reports from research organizations were employed in this thesis.

The quantitative and qualitative techniques were descriptive and cross-sectional in nature. It employed the use of both primary and secondary data. The quantitative technique involved administration of questionnaires electronically which helped in identifying the perception on CC and HRs and also the use of secondary data on to provide a review of right based approach to CC.

The qualitative technique involved key informant interviews. The key in-depth interviews explored the state of CC litigation and policy implementations designed to improve social welfare for all in Nigeria. Understanding this was important as the demographic, social,

and economic environments are transformed into attitudes and behaviours geared towards the improvement of CC. The secondary data provided a holistic view and understanding of the global and national dimensions to CC litigation.

3.2 Study Area

The study was piloted in Nigeria, a country located in west Africa.²³² The country is blessed with many mineral resources such as petroleum, bitumen, and natural gas.

3.3 Study Population

For the survey, the population for this study were individuals living in Nigeria from the ages of 21. The study was also interested in the account of the CC experts within the context of Nigeria. These categories constituted the study population. Qualitative and quantitative data was elicited from the general public and CC experts. Key Informant Interviews (KIIs) was conducted among these experts. The study location was conducted in six selected states across the geo-political zones in Nigeria.

3.4 Sample Determination and size

The Cochran's (1977) guided the calculation of sample size for the selected for unknown population. This is because in Nigeria, there is no agreed figure on the total number of people affected by impacts of CC. Therefore, the formula for determining minimum sample size for unknown population by Cochran²³³ will be used to determine the minimum number of respondents for the study. This is explained below

$$n = Z^2 \frac{P(1 - P)}{E^2}$$

Where

n means the sample size

z means the standard normal score corresponding to 95% confidence level (1.96)

²³² Nigeria, accessed June 3, 2021 from <https://www.britannica.com/place/Nigeria>.

²³³ *Ibid.*

P is the estimated proportion of the population or prevalence of the phenomenon under Study (spinal cord injury). The assumed rate here is 50% (0.5).

E = sampling error that can be tolerated 5% or 0.05

$$n = \frac{1.96^2 * [0.5*(1-0.5)]}{0.05^2}$$

$$0.05^2$$

$$n = \frac{3.84 * [0.5*0.5]}{0.0025} = 3.84*100$$

$$0.0025$$

$$n = 384$$

Considering the likelihood of attrition at a rate of 30%, the number of respondents that were engaged in the study was = 500

The collected data from the survey was presented and analyzed by using simple statistical methods of univariate analysis like tables, frequencies and percentages.

Selection Criteria

- The selection criteria of the study population were Nigerians who were at least 21 years old.
- CC experts in governmental agencies responsible for CC governance in Nigeria.

3.5 Sampling procedure

For the primary data, this research employed the use of a multi-stage sampling technique.

Stage 1: In this stage Nigeria was purposively selected and then clustered into the six geo-political zones.

Stage 2: All the states in each geo-political zone were listed and clustered accordingly.

Stage 3: This stage involved the purposive selection of states based on incidence of environmental hazards due to CC. (These states purposively selected include Delta State, Lagos State, Kogi State, Ebonyi State, Kano State, and Adamawa State).

Table 3.1: Justification for the selected States

Geo- Political Zone	State	CC Issues	Mitigation Action/Project
North-East	Adamawa	Flooding	Climate Smart Agriculture, Ending Gas Flaring
South- West	Lagos	Flooding, Air Pollution	Efficient Energy, industrial, waste and Transportation systems
North- Central	Kogi	Flooding	Climate Smart Agriculture
South-East	Ebonyi	Flooding	Climate Smart Agriculture
South- South	Delta	Black shits, flooding, respiratory diseases	Efficient energy and transportation systems. Ending gas flaring through improved taxation and regulation.
North East	Sokoto	Drought, dissertation	Climate Smart Agriculture

3.6.0 Research Instruments and procedure for administration

The primary data was collected using a structured questionnaire and key informant interviews. The secondary data included documentation and analysis of right based approach to CC adopted both globally and within the context of Nigeria. In the sequential procedure of administering the instruments, the qualitative method (key informant interview) preceded the quantitative (questionnaire) Below is the matrix for the data collection process.

Table 3.2: Objectives Matrix Showing Instrument for Data Collection

Research Instrument	The current impacts of CC, and HRs in Nigeria	The international CC regime	Nigeria's mitigation of CC using a HRs-based approach	Nigerian regulatory framework for environmental protection	Impact of mitigation mechanisms adopted by Nigeria	HRs based approach and CC
Questionnaire	✓					
KII	✓				✓	
Secondary data		✓	✓	✓		✓

3.6.1 Questionnaire

A total number of 500 copies of the questionnaire form was administered to Nigerians living in the six geo-political zones. The questionnaire was administered electronically. Section A of the questionnaire focused on the socio-demographic characteristics of respondents. Section B was designed to elicit information on respondent's extent of awareness of CC. Section C addressed respondent's experience of environmental hazards. And section D addressed the HRs based approach and CC.

3.6.2 Key Informant Interview (KII)

The key informant interview was conducted among CC practitioners who have firsthand information and detailed understanding of HRs based approach to CC in Nigeria. It helped to generate information which other instrument were not be able to get from respondents. Four KII was conducted across the regulatory institutions related to CC.

3.6.3 Secondary data

Archival records were obtained from international and national bodies. For this study, the secondary data was used as a preliminary measure to identify HRs based approach to CC.

3.7 Validity and Reliability of Instruments

Validity

Validity refers to the degree to which the research truly measures and accurately answers what it is intended to measure/answer. The instrument which was designed in English was translated to the local language by experts who are proficient in both English, Yoruba, Igbo and Hausa language. Content validity was adopted to verify the authenticity of the research instruments.

Reliability

This has to do with research instrument consistency in yielding the same results helped in verifying its reliability. In this study, this was carried out before the actual data collection. Twenty-five (25) copies of questionnaire was administered to Nigerians above 15 years. At the end of the pretest, lessons learnt were incorporated in the final instrument and methods.

3.8 Method of Data Analysis

Quantitative Data Analysis

Collected data were descriptively statistical analysed through the use of simple percentages. The analyses gave a description of the extent of awareness of CC among Nigerians, CC litigation and right based approach to CC in Nigeria.

Qualitative Data Analysis

The interviews were tape recorded. Written notes were also used to document the aspects of the interview that the audiotape couldn't document (e.g. facial expressions or gestures) and they were considered while transcribing. Data was organised by transcribing notes from tape recorder. Transcription involved the use of non-verbal cue like the mood and facial expression of informants during interview. Transcription was done verbatim i.e. word for word, all filters, reported words and phrases and truncated words were also transcribed. Content analysis was adopted in analysing the qualitative data.

3.9 Ethical Considerations

The principles governing human research was observed and the protocol was approved by the Social Sciences and Humanities Research Ethics Committee, University of Ibadan, Ibadan, Nigeria. Basic ethical considerations necessary for a good research and the following was observed:

Confidentiality of data: The data obtained was made anonymous as possible. The data gotten can't be linked to any of the participants. Identification numbers was assigned to survey participants and this was derived from the numbers already assigned to the instrument and the study area. This made it difficult for any other person to recognize the data collected. Only the signatures of participants were indicated on the consent form, which was collected and stored in a safe place.

Beneficence to participants: Respondents were informed that there were no direct and immediate benefits or any form of monetary benefit for participating in the study. However, the results of the study will be useful for management of asthma patients.

Non-maleficence to participants: The study respected the right of the respondent to discontinue participation in the study. There were no physical risks associated with participation in this study. No measure of force, mental or physical coercion, in the course of the study.

Voluntariness: Participation in the study was completely based on respondent's free will nothing was done by the researcher to force or coerce people to participate in the study. Their right to withdraw from the study was guaranteed without penalty of any kind.

3.10 Theoretical Justification

This thesis is anchored on the sociological/functional school of jurisprudence, and the theory of social engineering as postulated by Dean Roscoe Pound in particular. He believed that law must appreciate the needs and prevailing values of the people living in a society with a view to balancing the conflicting interest. Dean Pound described law as a tool for social engineering meaning that the role of law in the society is to balance societal competing interests through the application of principles of applied sciences in settling problems.²³⁴ He compared the lawyer's functions, which by extension lawmaking to engineering.

Hence, considering the fact that CC is a ravaging epidemic, law can be used as a tool to social engineer this problem. The two conflicting interests are development and quest for a healthy environment. If engineers can fix bad roads, law can also fix the problem of CC or at least, mitigate its effects on Nigeria by balancing the above interests.

²³⁴Mani Tripathi B.N., 2003. *Jurisprudence Legal Theory*, 16th Ed. Delhi: Allahabad Book Agency, pg.49, para 1.

CHAPTER FOUR

LEGAL FRAMEWORK FOR ENVIRONMENTAL PROTECTION IN NIGERIA AND CC LITIGATION

4.1 Introduction

The environment in its birth had no need to be subjected to legislative protection bring that it was exclusively owned by nature. The origin of legislative protection of the environment could be traced with some authority and confidence to the development of world science-and-technology. The need for legal safeguard on the environment was necessitated by the recognition of the fact that the environment is the center-point of development at both international and municipal hence deserves protection else it face annihilation²³⁵.

Therefore, ecological protection is principally vindicated as a means of shielding not only the environment *per se* but human lives. Hence, having human beings as the focal point of concern for environmental protection entitled them a decent and protected surrounding in accordance with nature²³⁶. Nigeria has no direct or explicit legislation that comprehensively address for CC from a right-based perspective. Various environmental laws have therefore been enacted not only for the environment but also to manage it for human survival. CCM can be inferred from such environmental laws. We shall therefore be looking at some of the laws as well as the effectiveness of such laws.

Also, since victims of damages emanating from CCM mechanisms may resort to litigation in order to get redress, this chapter will examine litigations across different jurisdictions on this subject, and particularly in Nigeria. The chapter will as well consider the various factors militating against CC litigation.

²³⁵N.C. Ole, E.H. Nyekwere, C.N. Nwedu, K.O. Onu, & A. Omotola (2023) 'International Climate Change Regime and Off Grid Renewable Electricity'. In N.C. Ole et al (Ed.) *Regulatory Support for Off Grid Renewable Electricity* (52-70), London, United Kingdom, Routledge, Taylor and Francis, p. 4. Available online at <https://doi.org/10.4324/9781003178088>.

²³⁶ Principle 1, Rio Declaration, UNCED Rio De Janeiro, 1992.

4.2 Environmental Legislations in Nigeria

4.2.1 The 1999 Constitution of the Federal Republic of Nigeria (As Amended)²³⁷

In order to promote environmental sustainability in Nigeria, the government of Nigeria through her 1999 constitution made provision for environmental sustainability²³⁸. Despite the benefit of the provision, Section 20 of the said 1999 Constitution falls under the Chapter II of the Constitution which is non-justiciable²³⁹, except other specific provisions of the Constitution outside chapter II equally entrench them. The breach of Section 20 of the Constitution cannot on its own form the basis for the assertion of an environmental right which the Court can recognize and enforce²⁴⁰.

However, the law will grant remedies to persons for environmental pollution which result in health problems. More so, remedies could be granted to environmental pollution victims by reliance on the provisions of the African Charter on Human and People's Rights (Enforcement and Ratification) Right²⁴¹. Article 24 of the African Charter's Act²⁴² provides that all peoples shall have the right to a general satisfactory environment favourable to their development. The status of the African Charter has earlier been held justiciable by the Apex Court in the celebrated case of *Abacha & Ors v. Fawehinmi*,²⁴³ although it did not make a pronouncement on article 24.

This provision is the first regional and international instrument to create a binding right to healthy environment. However, the phraseology deployed has been criticized as it appears to be ambiguous and vague. The Charter did not also define the terms 'satisfactory,' 'environment' and 'people' in order to ascertain what they entail.²⁴⁴ Linde and Louw²⁴⁵ noted that the lack of clarity in the phraseology has plunged the article to different forms of interpretations, which may be positive or negative. On the positive light, the ambiguous

²³⁷ LFN, 2004.

²³⁸ *Ibid*

²³⁹ Section 6(6)(c) CFRN.

²⁴⁰ Akintayo, J. O and Akinbola, B. R., *op. cit.*

²⁴¹ Cap. A9, LFN, 2004

²⁴² *Ibid.*

²⁴³ [2000] NWLR (Pt. 660) 288.

²⁴⁴ *Ibid.*

²⁴⁵ *Ibid.*

phraseology may give room for an expansive interpretation of the article. On the other hand, a negative approach will mean a very restrictive interpretation of the said article.

Furthermore, the provisions of the African Charter's Act inclusive of Article 24 are subject to CFRN and any subsequent legislation that may repeal or modify it. Amechi posited that where the provisions of article 24 of ACHPR Act is in conflict with rights to property and compulsory acquisition of properties under sections 43 and 44 of CFRN, the latter will prevail.²⁴⁶ He further stated that a right created by a legislation cannot override a constitutionally guaranteed right.

Article 24 of the African Charter was the subject of litigation in the case of *the Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria* the applicants filed this petition before the African Commission against the government of Nigeria over the unsustainable oil exploitation in the Niger Delta region of Nigeria which have directly and indirectly led to the violation of the Ogoni people's right to health, housing and property. The African Commission found for the applicants and ordered the Nigerian government to clean up Ogoni land. Unfortunately, the decision of the African Commission is not binding on State Parties of the African Charter, hence, this decision was never implemented or executed in Nigeria.²⁴⁷

Domestically, Article 24 of the ACHPR Act have only be tested once in Nigeria in the celebrated case of *Gbemre v. Shell*.²⁴⁸ In this case the plaintiff filed the suit against oil companies and the Nigerian government contending *inter alia* that the practice of gas flaring is infringing on his community's right to a healthy environment as enshrined under article 24 of the African Charter. The Federal High Court, Benin Division in a landmark decision held that the existing Nigerian laws on gas flaring was at variance with the constitutionally guaranteed rights of the applicant in the African charter's Act and the constitution.²⁴⁹

The inclusion of the environmental clause in the 1999 Nigerian Constitution can be said to be a step in the right direction, however, the fact that the Constitution does not recognise

²⁴⁶ Ibid, 238.

²⁴⁷ See Ekathor (supra).

²⁴⁸ Unreported Suit No. FHC/B/CS/153/05.

²⁴⁹ See Ekathor (supra).

the right to a good and healthy environment as a fundamental right coupled with the reality that no government in Nigeria can be sued for failing to perform its obligations under the said Section 20 of the 1999 Nigerian Constitution is a major lacuna that most times stand in the way of pollution victims in seeking remedies for pollution and harm done to them.

A look at the Constitution of other jurisdiction will reveal that the Government is alive to its responsibilities to protect the people irrespective of the economic implications and this they have done by enshrining in their own ground norm justiciable environmental rights. In Africa, at least 35 countries have constitutional provisions ensuring the right to a healthy environment and the number is a remarkable increase from just two countries²⁵⁰ that had environmental provisions in their constitutions for the Democratic 1980s²⁵¹. The 1999 Nigerian Constitution has been amended three times between 2010 and 2011 and despite the glamour for change by environmentalists and the trend in other jurisdictions of the world, our legislators seem not be concerned about the obvious degradation of the environment and the need to protect the people from harm.

4.2.2 Criminal Code²⁵²

The Criminal Code though not a principal legislation on environmental protection, in its sections 245-247 made provisions that prohibited environmental pollution through contamination of water sources, atmospheric air pollution. The aforementioned provisions are applicable to environmental pollution caused, *inter alia*, by oil pollution of water and gas flaring, as the case may be. A polluter may be prosecuted under the relevant provisions of the Code. The above provisions have been criticized by Ekpu²⁵³ for only providing for imprisonment without an option of fine which is not suitable for corporate offenders (who are the major polluters) although the court may impose fine where appropriate by virtue of section 382 of the Criminal Procedure Act²⁵⁴.

²⁵⁰ Equatorial Guinea and Ethiopia

²⁵¹ Okoji C. O. Environmental Rights and Duties in the Context of Management of National Resources. *Constitution of Kenya Review Commission* available at www.kenyaconstitution.org/index.shtml retrieved 01/06/2015.

²⁵² LFN, 2004.

²⁵³ Ekpu, A. 1995. Environmental Impact of Oil on Water: A comparative Overview of the Law and Policy in the United States and Nigeria. *Denver Journal of International Law and Policy*, 24:1.

²⁵⁴ LFN, 2004

4.2.3 Oil in Navigable Waters Act²⁵⁵ (ONWA)

This Act was enacted in 1968 in response to the International convention for the Prevention of Pollution of the Sea by Oil 1954 which Nigeria adopted on becoming independent. The Act specifically outlaws the discharge of oil into watercourse and has further revealed in Regulation 5 of the Oil in Navigable Waters Regulations contains provisions on ideal strategies to prevent escape of oil. However, the Act has been rightly, criticized for containing numerous defences which make nonsense of its usefulness²⁵⁶. It is rather worrisome and alarming that the Act appears to attach more importance to the safety of a vessel or a single life than the untold number of lives, which may be endangered by the pollution. The Act also provides for the defences of sabotage.

More so, the amount payable as fines for offences created under Sections 1, 3, and 5 are not specified. It lies with the court in the exercise of its discretion to impose such fines as would serve the purpose of the Act. Where the Act prescribes the amount payable as fines, the sums are too paltry as to have any deterrent effect. We submit that the sums are long overdue for upward review considering the present value of the naira and the cost of clean-up operations.

Another major shortcoming evident in the Act is the fact that it is basically criminal without providing for civil liability. Nevertheless, the aggrieved party may bring an action in tort against the tortfeasor²⁵⁷. The Act also fails to provide for compensation of victims even under criminal liability notwithstanding that pollutants may flow from the navigable watercourses into inland waters, which are not navigable.

4.2.4 The Petroleum Act²⁵⁸

This is the principal legislation regulating the petroleum industry in Nigeria. However, its provisions relating to the impact of the activities of the industry on environment appear terse. It merely empowers the Minister of Petroleum Resources to make regulations, *inter*

²⁵⁵ Cap 06 LFN, 2004.

²⁵⁶Emole, C. E., 1998. Regulation of Oil and Gas Pollution. *Environmental Policy and Law*. 28: 2.

²⁵⁷ The challenges of the common law torts to environmental pollution victims have earlier been highlighted in the earlier part of this study.

²⁵⁸ Cap P10 LFN, 2004.

alia, for the prevention of pollution of watercourses and the atmosphere²⁵⁹ and for the maintenance and operations of installations used in petroleum operations²⁶⁰. Some of the regulations which have been made in exercise of the Minister's authority under section 9(1) include the Petroleum Regulations, the Petroleum (Drilling and Production) Regulations and the Petroleum Refining Regulations.

The Petroleum Regulations expressly prohibits the discharge of petroleum into the waters of a port, while Regulations 59 and 60 provide for security measures, which are required to be taken to avoid breakages and damages in the course of transport of petroleum.

The Regulations have been criticized for using general terms such as "good oil-field practice", "good refining practice", "up-to-date equipment" and "all practicable precautions" without defining these terms. In spite of the absence of definitions, the terms may create very high standards since they are subject to the recommendation and approval of the Director of Petroleum Resources.

Another criticism is that the Petroleum (Drilling and Production) Regulations are bereft of any specific sanction against violation of the regulations²⁶¹. However, the Minister of Petroleum Resources may order the suspension of operations²⁶² or revocation of license or lease for non-compliance with the provision of the Petroleum Act or any regulations made thereunder²⁶³. Where a polluter has become recalcitrant and human lives are seriously endangered by his operations, the Minister may invoke the very stiff and costly sanction of revocation.

Although the Petroleum Refining Regulations provide for sanction against violation of any of the regulations, the prescribed fine of N100²⁶⁴ is so grossly inadequate as to have any deterrent effect. "Unreasonable exercise" of the licensee's or lessee's right will ordinarily

²⁵⁹ Section 9(1)(b)(iii) of the Petroleum Act.

²⁶⁰ Section (9)(1)(c).

²⁶¹ Akanle, O. 1991. *Pollution Control Regulation in the Nigerian Oil Industry*. Lagos: Nigerian Institute of Advanced Legal Studies.

²⁶² Section 8(1)(f) of the Regulation.

²⁶³ Paragraph 24 of Schedule 1 to the Petroleum Act.

²⁶⁴ Regulation 45(1) of the Petroleum Refining Regulation provides for a fine of N100 or imprisonment for a term of six months.

include negligence since negligence is measured by “unreasonableness”. We submit that it will be onerous for the aggrieved party, who often is a poor and illiterate fisherman to establish the “unreasonableness” in the exercise of the licensee’s or lessee’s rights²⁶⁵. This is due to the financial capacity of the oil companies, which enable them to procure expert evidence but a poor and an illiterate fisherman cannot afford to match such expertise.

4.2.5 Oil Pipelines Act²⁶⁶

The Act was enacted in 1956 and it contains very little on the prevention of oil pollution in spite of the high probability of oil spills resulting from oil pipelines and ancillary installations. The closest the Act went in regulating environmental degradation can be found in Section 17(4) which provides that all license issued pursuant to the Act must stipulate that the licensee must not pollute but land and waters.

Also, the duration of an oil pipeline license which is fixed for a term not exceeding twenty years²⁶⁷ may be in recognition of the fact that the nature of pipelines may make them less fit due to corrosion and other wear and tear²⁶⁸, arising from pressure and long usage. This provision is apposite considering that ruptured old pipelines have caused many oil spillages.

Section 11(5) of the Act affords compensatory relief to persons who suffer damage as a result of the exercise of rights conferred on the licensees by the license. For example, section 11(5)(a) provides that any person whose land or interest in land is injuriously affected by the exercise of such rights is entitled to compensation if the injury has not been made good. Also, under Section 11(5)(b) the licensee shall be liable to pay compensation for any neglect on his part or his agent or servants for work executed under the license.

Most importantly, Section 15(c) confers compensatory rights on any person suffering damage as a result of any breakage of or leakage from oil pipeline or ancillary installation if the damage was not occasioned by the injured person’s default or the malicious act of a third person. This Section 15(c) which ought to be a source of consolation to the victims of

²⁶⁵ Keeton, C. W. *The Role of Technological Expert in Complex Environmental Litigation*. 54 C.B.R.

²⁶⁶ Cap 07 LFN, 2004.

²⁶⁷ See Section 17(1)

²⁶⁸ Olisa, M. M. 1997. *Nigerian Petroleum Law and Practice*, 2nd Ed. Lagos: Joint Ventures Ltd.

environmental pollution has been under-utilized probably due to ignorance of its existence and the defence of sabotage, which is often raised by the oil companies.

4.2.6 Associated Gas Reinjection (AGR) Act²⁶⁹

The purpose of the Act is to ban gas flaring. Gas flaring has been identified as one of the main sources of environmental degradation in the oil producing areas. Section 1 of the Act obligates every company producing oil and gas in Nigeria to submit by 1 April 1980, a preliminary programme for the viable utilization of all associated gas produced. The initial deadline fixed for cessation of gas flaring was January 1, 1984 but the deadline was shifted twice to April 1, 1984 and then January 1, 1985. It appeared that the deadlines were fixed without due consideration of the requisite infrastructure and capital.

Pursuant to section 3(12) of the Act, the Minister may grant a waiver or permit a company to continue to flare gas if he is satisfied that gas utilization or re-injection is not feasible. However, the permittee may be required to pay a prescribed fee.

The penalty for violation of the provisions of the Act is forfeiture of concessions granted to the violator in a particular field(s) in relation to which the offence is committed. This penalty was considered very stringent and likely to have negative economic implications if the oil companies stopped operations and was relaxed by the promulgation of the AGR (Continued Flaring of Gas) Regulation 1984. Under the Regulations, certain fields are exempted from anti-flaring provisions, and due penalty for gas flaring remained a paltry sum which made gas flaring more economical than re-injection or utilization of the associated gas.

It is observed that the reason for the promulgation of the AGR (Continued Flaring of Gas) Regulation was because there were no gas re-injection plants and the oil companies were not ready to embark on what was then a gigantic project coupled with the fact that the NNPC, could not meet its financial obligations in the several joint venture arrangements so as to provide the desired capital. However, the situation is no longer the case as the oil companies are very capable to stop the flaring of gas in Nigeria especially as gas flaring has serious health implications on the victims. More so, the Nigerian Government seem to be

²⁶⁹ Cap A25 LFN, 2004.

very comfortable with the situation despite the risk it holds as the Government has remained mute despite loud agitations to stop the flaring of gas.

4.2.7 Flare Gas (Prevention of Waste and Pollution) Regulations 2018

President, Muhammadu Buhari in his capacity as the Minister of Petroleum in Nigeria and pursuant to section 5 of the AGRA; section 9(1) Petroleum Act; and paragraph 35 of the First Schedule of the Petroleum Act, issued the Flare Gas (Prevention of Waste and Pollution) Regulations 2018. The regulation just like the NGFCP focuses on elimination of gas flaring (thereby minimizing the environmental and social impacts of gas flaring); protection of the environment; reduction of waste of natural gas; and fostering of socio-economic development in Nigeria.²⁷⁰ The Regulations aimed to ‘incentivize the commercialization of flare gas because of the zero royalty regime but disincentivize continued gas flaring through the imposition of a new flaring fee regime.’²⁷¹ In essence, the Regulation is made to implement the NGFCP, especially the process for permit bidding.²⁷²

The Federal Government of Nigeria takes over all flares of natural gas (emanating from all petroleum licences or lease, and oil marginal fields) at the point of flare, free of any royalty or cost.²⁷³ The regulation created two categories of persons that can utilize flare gas on behalf of the Federal Government of Nigeria (FGN), to wit Permit Holders and Producers.²⁷⁴ The permit holders are the qualified applicants who emerge successful in a competitive bidding process for the grant of permit to access and take flare gas on behalf of FGN at any flare site specified in the permit, and so granted the permit to access flare gas by the Minister of Petroleum.²⁷⁵ On the other hand, a producer²⁷⁶ may also apply to the Minister of Petroleum to commercialize flare gas through its midstream subsidiary company, provided that such flare gas has not been appropriated by FGN through a bidding process.²⁷⁷ A

²⁷⁰ Regulation 1. See also *Templars* (supra) 1.

²⁷¹ *Ibid.*

²⁷² *Ibid.*

²⁷³ Regulation 2(1 and 2).

²⁷⁴ Regulation 3. By this dichotomy, the FGN has achieved its long desire to recognize gas a natural resource, independent of oil.

²⁷⁵ Regulation 3(1). See also Regulation 24 which defined a permit holder to be a company that have been granted permit to access flare gas by the Minister of Petroleum.

²⁷⁶ Regulation 24 defined a producer to mean a holder of Oil Mining lease or Marginal Field license.

²⁷⁷ Regulation 3(2).

producer may also apply to the Minister of Petroleum for permit to utilize the associated gas for its own purpose; provided that such will not interfere or reduce the volume of flare gas that has already been appropriated by FGN through a permit.²⁷⁸ It is pertinent to note that both the permit holders and producers are not expected to pay royalty to FGN for flare gas utilization.²⁷⁹

Regulation 8 reemphasized the exclusive right of FGN over natural gas deposits and makes provision for the procedure to obtain Permit to Access Flare Gas by both a prospective Permit Holder and a producer. The regulation also made provisions for the processing fees; the grounds for revocation,²⁸⁰ and assignment of a permit to access flare gas.²⁸¹ A permit granted to a permit holder to access flare gas may be revoked by the Minister of Petroleum where a permit holder defaults: in filing in logs of flare gas as stipulated under regulations 15 and 18;²⁸² installing and maintaining a metering facility in accordance with regulation 20;²⁸³ and/or supply complete or accurate Flare Gas Data, log or records.²⁸⁴

A Producer through any person acting on its behalf is mandated to furnish the Department of Petroleum Resources (DPR) with Flare Gas Data within 30 days of such request.²⁸⁵ Such a person will be liable to a fine of NGN50, 000.00 or a term of imprisonment not exceeding 6 months (or both fine and imprisonment) should such Flare Gas Data be incomplete or inaccurate.²⁸⁶ The Flare Gas Data will enable bidders for flare gas volumes to access flare gas data before bidding by applying and obtaining Data Access Permit from DPR.²⁸⁷ Qualified applicants (bidders) may also be permitted to inspect the flare site before bidding, however, producers at such flare site must be given seven days' notice prior to the

²⁷⁸ Regulation 3(3).

²⁷⁹ Regulation 4.

²⁸⁰ Regulation 9.

²⁸¹ Regulation 10.

²⁸² Regulation 22(a).

²⁸³ Regulation 22(b).

²⁸⁴ Regulation 22(c).

²⁸⁵ Regulation 4 (1 and 2).

²⁸⁶ Regulation 5.

²⁸⁷ Regulation 6.

inspection.²⁸⁸ DPR may revoke the Data Access Permit, if the terms and conditions stipulated therein are breached.²⁸⁹

Producers are obligated to record daily record of associated gas produced and to submit the report to DPR within 21 days of each month.²⁹⁰ Producers are also mandated to fill in Annual Report of associated gas produced to DPR by 31st of March every year.²⁹¹ Similarly, producers and permit holders are mandated to maintain a daily log of flared gas and forward the report to DPR within 21 days of each month.²⁹²

Notwithstanding the provisions of regulation 13, where a producer fails: to provide Flare Gas Data, or accurate/complete flare gas data under regulation 4;²⁹³ avail a permit holder access to flare site pursuant to regulation 8;²⁹⁴ prepare, maintain and file flare logs with DPR pursuant to regulations 16-18;²⁹⁵ install and maintain metering facility;²⁹⁶ or enter connection agreement with a permit holder;²⁹⁷ and shall for each day in default of the above regulations be liable to pay additional USD2.50 per 28.317 standard cubic meters (1000 standard cubic feet (SCF)) venting or flared gas within the Oil Marginal Field or Oil Mining Lease.²⁹⁸ Where the producer remains in default of the above regulations in regulations 21(1), the minister may suspend or revoke the producer's Oil Mining Lease or Oil Marginal Field License.²⁹⁹

The logs must be in accordance with Metering and Data Collection Standards issued by DPR;³⁰⁰ hence, producers and permit holders are expected to install metering devices at

²⁸⁸ Regulation 6(5).

²⁸⁹ Regulation 7.

²⁹⁰ Regulation 16(1)

²⁹¹ Regulation 17 (1 and 2).

²⁹² Regulation 15 (1 and 2).

²⁹³ Regulation 21(1) (a and b).

²⁹⁴ Regulation 21(1)(d).

²⁹⁵ Regulation 21(1)(e).

²⁹⁶ Regulation 21(1)(f).

²⁹⁷ Regulation 21(1)(g)

²⁹⁸ Regulation 21(1).

²⁹⁹ Regulation 21(2).

³⁰⁰ Regulation 15 (4); Regulation 16 (2) and Regulation 20.

their flare sites. Permit to access flare gas holders are required to file in their annual report to DPR³⁰¹ of gas utilized,³⁰² gas vented and gas flared at its flare site.³⁰³

In turn, the DPR is required to compile all the above reports and publish on its own Annual Report on its website by June 30 each year.³⁰⁴

The Flare Gas Data will also assist Nigeria in meeting with her obligations under Article 13(7) of the PA which deals with national GHGs Inventory Report and global GHG stock take under article 14 of the PA. From the effective date of the regulation, a producer (that is a holder of an oil mining lease or marginal field) in control of a lease or field that per day produces 10,000 barrels or more of oil shall be liable to pay to the FGN USD2.00 for each 28.317 standard cubic meters (1000 standard cubic feet (SCF)) of gas vented or flared within such Oil Marginal Field or Oil Mining Lease area.³⁰⁵ On the other hand, a producer (that is a holder of an oil mining lease or marginal field) in control of a lease or field that per day produces less than 10,000 barrels of oil shall be liable to pay to the FGN USD 0.50 for each 28.317 standard cubic meters (1000 standard cubic feet (SCF)) of gas vented or flared within such Oil Marginal Field or Oil Mining Lease area.³⁰⁶

In both scenarios, it is immaterial that the flare is routine or non-routine; however, a producer shall not be liable for gas flare under force majeure events.³⁰⁷ It is pertinent to note that with effective date of this regulation, any project to develop oil or natural gas based on an oil mining lease or oil marginal field shall be referred to as a Greenfield project.³⁰⁸

The above is a big improvement when compared to the AGRA Regulation 1985 which fixed the penalty for flaring of natural gas at NGN10.00.³⁰⁹ It is submitted, although the 2018 Regulation improved on the penalties for gas flaring, the new penalty is still paltry when

³⁰¹ Regulation 18 (1).

³⁰² Regulation 18(2)(a).

³⁰³ Regulation 18(2) (b-c).

³⁰⁴ Regulation 19.

³⁰⁵ Regulation 13(1).

³⁰⁶ Regulation 13(2).

³⁰⁷ Regulation 13.

³⁰⁸ Regulation 24.

³⁰⁹ Equivalent of USC0.27. See *ibid*.

compared with the resources at the disposal of IOCs. They may regard continued flare gas since it is still cheaper to flare and pay fine than to utilize and commercialize natural gas.

Also going forward, producers are only permitted to flare gas on the strength of a Deliver or Pay Agreement between such a producer and a permit to access gas flare holder for such gas volumes.³¹⁰ This provisions places the burden of accounting for non-harnessing of such gas volumes on the permit holder.³¹¹ It also means that producers that fail to key into the Federal Government's NGFCP, will not have an excuse to continue to flare gas.³¹²

It is pertinent to note that the regulation empowers the Minister of Petroleum to issue or revoke an AGRA Certificate issued to a producer pursuant to section 3(2) of Associated Gas Reinjection Act, where the producer commercializes flare gas with regard to regulation 3 or the stipulations of the entire regulation.³¹³ Such projects are referred to as brownfield projects.³¹⁴

The main objective of this regulation is to eliminate gas flaring in Nigeria through a gas commercialization approach. It therefore means that Nigeria's environment will be protected, and the revenue fortune of the government will equally increase. The approach adopted by this regulation to Greenfield producers and permit holders are exclusively prohibited from routine flaring of gas; while brownfield producers are put under stringent regulations that will compel them to either comply totally with their AGRA Certificate and the new Regulation or face some serious penalties which may include the possibility of forfeiture of their licences.

4.2.8 The Environmental Impact Assessment Act³¹⁵

Due to the importance of environmental impact assessment as a veritable tool for environmental management and in consonance with major international instruments, the Environmental Impact Assessment Decree³¹⁶ was promulgated by the then military

³¹⁰ Regulation 13(3).

³¹¹ Aye and Wingate (supra).

³¹² Ibid.

³¹³ Regulation 14

³¹⁴ See Templars (supra) 6.

³¹⁵ Now Cap. E12, LFN, 2004.

³¹⁶ Ibid.

Government in 1992. The Environmental Impact Assessment Act is an act to set out the general principles, procedures and methods to enable the prior consideration of environmental impact assessment on certain public or private projects.

While Section 1 of the Act provides for the object of environmental impact assessment in environmental protection, section 2(1) restricts the taking off certain projects whether public or private, without an environmental impact assessment. Section 2(2) therefore requires that environmental impact assessment of certain projects be carried out where the extent, nature or location of proposed project or activity is such that is likely to significantly affect the environment. Certain projects to which an environmental impact assessment is mandatory are stated in the Schedule to the Act³¹⁷.

The Environmental Impact Assessment Act prescribes the minimum content of an Environmental Impact Statement (EIS)³¹⁸. Information provided in the EIS shall be examined impartially by the Agency charged with environmental protection prior to any decision to be made thereto³¹⁹. Once this standpoint is reached the Act requires that before the Agency gives any decision, whether in approval or otherwise on the EIS submitted by a proponent, the Agency shall give opportunity to government agencies, members of the public, experts in any relevant discipline and interested groups to make comments on the environmental impact activity of the proposed project³²⁰.

Furthermore, Section 8 of the Act provides that no decision shall be reached whether in favour or otherwise of the submitted EIS by a proponent until the appropriate period for comments from the necessary bodies has elapsed. The Act in its Section 9 went further to provide that any decision reached by the Agency whether approving the EIS or in refusal of the EIS submitted by a proponent shall also be made available to any interested groups.

³¹⁷ Section 12 of the EIA makes EIA mandatory for projects specified in the Schedule to the EIA Act. There are items in the Schedule. These are: Agricultural land development covering 500 hectares, Airport construction with 2,500 metres runway, Drainage and irrigation, Fisheries (construction of harbour etc), Forestry conservation, Housing in excess of 50 hectares, Industrial development, Infrastructural development.

³¹⁸Section 4, EIA, Act.

³¹⁹Section 6, EIA, Act.

³²⁰ Section 7, EIA Act.

The Act can be said to have provided adequately for public participation in decision making in matters of environmental protection in consonance with international best practices. In fact, Principle 10 of the Rio Declaration provides that environmental issues are best handled with the participation of all concerned people at the relevant level. What this principle portends in the development of environmental law is the recognition of individual rights to participate in the decision-making process in environmental issues, have ATI on environment held by public authorities and have access to judicial and administrative remedies. It can therefore be said to aim at providing effective means for the exercise of procedural rights in an environment context.

4.2.9 Harmful Waste (Special Criminal Provisions, etc.) Act³²¹

The Act, which was enacted in 1988 in the wake of the Koko incident, prohibits all activities relating to the purchase, sale, importation, transit, transportation, deposit and storage of harmful wastes. “Harmful waste” is defined in section 15 to include “injurious poisons, toxic or noxious substance, if the waste is in such quantity as to subject any person to the risk of death, fatal injury or incurable impairment of physical or mental health”. There is no doubt that environmental pollutants come within the purview of this Act as they are noxious, toxic and harmful.

The above definition seems restrictive. Harmful waste may cause serious injury which may not lead to death if properly treated or may cause a serious impairment which may be curable. It is suggested that the definition of harmful waste should encompass any serious injury or impairment not necessarily fatal or incurable, as the case may be. The use of the word ‘include’ in the definition does not seem to cure the deficiency as injuries to be included can only be in the class of those enumerated i.e. there has to be an element of fatality.

The Act provides for both criminal and civil liability. Any person who violates the provisions of the Act is guilty of an offence punishable with life imprisonment. In addition, any carrier used in the transportation or importation of harmful waste and any land on which

³²¹ Cap HI, LFN, 2004.

harmful waste is deposited will be forfeited and vested in the Federal Government. Moreover, the person responsible for the dumping shall be liable for any damage caused by the harmful waste.

4.2.10 The National Environmental Standards and Regulations Enforcement (Establishment) (NESREA) Act 2007, as Amended in 2018.

In 1999 the Federal Ministry of Environment was established. This Ministry took over environmental protection functions of various Federal Government Agencies, Ministerial Departments and Units. The functions and powers of the Federal Environmental Protection Agency (FEPA) were absorbed by the ministry. Though the FEPA Act that established FEPA continued to exist, with the establishment of the Ministry of Environment, Federal Environmental Protection Agency was eclipsed. After much lobbying, in 2007 a new legislation was enacted to establish an environmental protection agency that takes over the overall environmental protection of Nigeria.

The National Environmental Standards and Regulations Enforcement Agency (Establishment) Act³²², was enacted in 2007 as Act No. 25 and commenced on the 30th day of July, 2007. The Act repealed the Federal Environmental Protection Agency Act³²³. Section 1 provides for the establishment of the NESREA, which shall be the enforcement Agency for environmental standards, regulations, rules, laws, policies and guidelines³²⁴. Section 3 provides for the establishment and composition of the NESREA Governing Council.

The act was however amended in 2018 and made some key provisions, to wit: the deleting the provision section 3 (1)(c) (vii) of the Act³²⁵ and replacing it a new section 3 (1)(c) (vii) which provided that a representative of the Ministry of Health shall be a member of the governing council of the Agency. This new provision connotes that representatives of oil exploration companies are explicitly excluded from membership of the governing council of the Agency. Powers and functions of the Agency are provided for under section 7 of the

³²² Hereinafter called NESREA Act.

³²³Section 36, NESREA Act.

³²⁴ Section 1(2)(a), NESREA Act.

³²⁵ which provided for a representative of the Oil Exploratory and Production Companies as a member of the Governing Council.

Act. Section 7(c) of the Act gives NESREA the power to enforce and ensure the compliance in Nigeria of environmental multilateral agreements. However, the Amendment Act amends section 7(c) by deleting oil and gas international instruments. The foregoing connotes that NESREA has been fully divested with jurisdiction or control over environmental protection in the oil and gas sector in Nigeria.

Section 3(1)(e) was also amended to set the relevant qualification of the members of the public to be appointed in the governing council of the Agency. The NESREA Act empowered the minister to appoint 3 persons to serve as members of the governing council of NESREA without prescribing their qualifications. The Amendment Act has set the qualification of people to be so appointed by the minister to be relevant qualification in environmental related disciplines and a minimum of 10 years' post qualification experience in environmental field.³²⁶ This amendment is a laudable one as it ensures that only people with requisite experience and expertise man the board of NESREA, and it also gives room for private sector participation.

Section 7(i) was amended to require governmental agencies to comply with environmental regulation through the insertion of 'Government' to the section. The amended section now reads; "the Agency shall ensure that environmental projects funded by the Government, donor organizations and external support agencies adhere to regulations in environmental safety and protection." The purport of this provision is that projects funded by the government are now required to comply with environmental regulations, hence, making the other governmental agencies responsible, committed and accountable for environmental protection. Section 7(k) of the act that empowered the agency to conduct environmental audit was equally amended by the deleting of 'conduct' and the replacing of same with 'review and certify'.³²⁷

Section 8(q) was amended to empower the agency to charge administrative fees for services rendered by the agency.

³²⁶ Section 2(c) of the Amendment Act.

³²⁷ Section 3(c) of the Amendment Act.

The functions of NESREA as set out under the Act are enormous and comprehensive³²⁸, and includes; law enforcement, and stakeholder coordination. More so, Section 34 of NESREA Act empowers the Minister to make regulations generally for the purpose of carrying out or giving full effects to the functions of the Agency, the Minister charged with the responsibility of the environment made a number of Regulations in this respect in 2009. The regulations made by the Minister includes Regulation on Setting Standards to Protect and Enhance the Quality of Nigeria's Air Resources³²⁹, Regulation on the Protection of the Ozone Layer³³⁰, Regulation on Noise Emission, Control and Abatement³³¹, Regulation of Water Bodies, Water Quality Standards and Effluent Limitation³³², Regulation on Protecting the Nigerian Environment from Hazardous Substances.

Despite the attempt by the above Agency to effectively protect the Nigerian environment, the fact that the Agency has no prosecutorial powers (enforcement mechanism) is a major flaw. Enforcement mechanism in environmental protection has been defined as any mechanism which could be used to secure compliance with a legal obligation which affords environmental protection. Under the Act, the Agency lacks prosecutorial powers as an officer of the Agency may only institute criminal proceedings with the consent of the Attorney-General of the Federation³³³.

More so, the Act does not empower private indigenes to legally enforce its provisions under citizen's suit programme. Onyeabor, observed that the effectiveness of enforcement of the relevant regulations has been significantly hindered by the absence of statutory provisions empowering this regulatory agency to bring actions against violators. He further opined that the position of the Agency in this regard is akin to one with responsibility without authority. We therefore advocate that this trend should change in line with current trends across the globe.

³²⁸ See Section 7(a) –(m), NESREA Act.

³²⁹ Section 20(1) NESREA Act mandates the Agency to make regulations setting standards to protect and enhance the quality of Nigeria's air resources.

³³⁰Section 21(2), NESREA Act.

³³¹ Section 21(3).

³³²Section 23(1) and (2), Section 24 (1) and (2), Section 25(1), and Section 26(1) and (2).

³³³Section 32(3) NESREA Act.

For instance, in the USA in 1990 it became imperative to amend the various environmental laws to be in line with existing situations especially after the 1989 Exxon Valdez disaster. The amendment enhanced the powers of civil and criminal enforcement authorities. The powers of Environmental Protection Authority to bring actions against violators of environmental protection law directly without going through the Department of Justice were enlarged. More so, the amendment authorised private persons to seek civil penalties for violations of her environmental protection laws. USA Congress also authorised EPA to pay a bounty of up to \$10,000 to anyone who provides information that leads to a criminal conviction, or civil liability, of a violator³³⁴. Having said that, there is need to amend the relevant sections of the NESREA Act to address the concerns just raised.

4.2.11 National Oil Spill Detection and Response Agency (NOSDRA)³³⁵

At inception when it was said that NOSDRA was to be established, it was thought that it was to be a regulatory agency to take up the regulation of the environment as it relates to the oil and gas sector in Nigeria, since NESREA was said to be established to regulate other aspect of the environment.

The only real regulatory function NOSDRA can be said to have is that when an oil spillage remains unreported for more than 24hours, or the oil company fails to clean up the impacted site to all practical extent, NOSDRA has the responsibility to apply sanctions against the erring oil company³³⁶. The implication of scraping the then Federal Environmental Protection Agency (FEPA) and establishing NOSDRA and NESREA to take up the responsibilities is that where NOSDRA responds to oil spills, NESREA regulates the environment other than the oil and gas sector, and no institution has the responsibility to regulate the environment as it relates to the oil and gas sector.

Although it may be argued that the DPR is saddled with the responsibility of regulating the oil and gas sector, we dare to submit that the DPR has no right to regulate the Nigerian environment as it relates to the oil and gas sector because it is a small department of the

³³⁴ Thomas, F. 1999. *Environmental Law Handbook*. 15th Ed. Rockville, Maryland: Government Institute.

³³⁵National Oil Spill Detection and Response Agency (Establishment) Act 2006 available at www.nosdra.org.retrieved on 24/07/2015.

³³⁶ See Section 6(2) NOSDRA Act which provides for the fine of N500,000 in case of failure to report oil spill on time and in case of failure to clean up the impacted site to all practicable extent 1m.

NNPC, a principal polluter, and where a department of a major polluter is saddled with the responsibility of regulating the activities of itself, your guess would only be as good as mine. The pretentious regulation of the oil and gas sector by the DPR has given room for the operation of the concept of regulatory capture in the sector.

4.2.12 The Department of Petroleum Resources (DPR)

This is a department under the Nigerian National Petroleum Corporation (NNPC). The Department of Petroleum Resources performs an administrative function as its responsibility is to ensure compliance with prescribed regulations and standards within the oil and gas industry.

In many instances, oil companies are required to adopt good oil-field or oil refining practices and to use up-to-date equipment as prescribed and approved by the Director of Petroleum Resources. The DPR in carrying out its functions is expected to conduct compliance monitoring from time to time to ensure compliance with regulations and directives. However, most oil spills in Nigeria have resulted from the faulty practices and equipment used by the oil companies. In 1994, a U.S. petroleum executive noted that foreign companies can operate in Nigeria in ways they cannot do just a few miles off the coast of California³³⁷. This was corroborated by Shell, which in 1995 admitted that 50% of its recorded oil spills was caused by corrosion of its ageing facilities, especially flow lines³³⁸.

Similarly, disregard for good oil field practices might have caused the January 1996 oil spillage recorded by Mobil in its Ubit platform in Akwa-Ibom State where in defiance to warning of in-house experts, Mobil sought to enlarge the platform while production was on-going. This led to leakages resulting in fire and explosion which ruptured the pipeline linking the platform with the Qua Iboe Terminal. More than 200,000 barrels of crude oil were discharged into the Atlantic Ocean as a result of that incident³³⁹.

More so, the Minister has the power to delegate any or all of the duties conferred on him by the Act and the said powers he delegated to the Department of Petroleum Resources. Thus,

³³⁷ Oil and Politics make for Dangerous Mix in Nigeria, Los Angeles Times, September 11, 1994.

³³⁸ Shell Bulllletin, June 1995.

³³⁹Newswatch, January 8, 1996.

the Director may suspend the operations, which are contrary to the provisions of the legislation. In addition, the Minister may even revoke the license or lease of oil prospecting licensee or oil mining lessee who fails to carry out his operations according to good oil-field practices.

It is unfortunate that in spite of the powers of the Department of Petroleum Resources, environmental regulations in the oil and gas industry are often violated without the agencies invoking the stipulated sanctions. McLaren, had this to say while commenting on the apparent unsuitability of administrative agencies in ensuring compliance with regulations and the reluctance or unwillingness of the agencies to enforce regulations is very worrisome. The DPR may keep a blind eye in order to cover up an irregularity in practice owing to a lapse on its part or as a consideration for gratification obtained or obtainable. It is necessary to create an offence of neglect to detect faulty equipment or practices by the DPR and its officials. The factors responsible for the failure to enforce regulations and laws on environment may be predicated on the fact that the regulator is a partner in and major financial beneficiary of the oil projects, confusion and lack of capacity within the regulatory system, under resourcing of the regulatory bodies dealing with environmental issues³⁴⁰.

Furthermore, the Department of Petroleum Resources even when they may want to effectively carry out their functions under the regulations has no powers to prosecute offenders unlike the position in the U.S. where the Environmental Protection Agency (EPA) and the Coast Guards may prosecute polluters. In addition, the Nigerian legal regime does not empower Nigerians to legally enforce the laws and regulations as evident in the U.S law, where private indigenes are entitled to bring actions against violators under most of the federal environmental regulations.

4.2.13 The Climate Change Act 2021

Nigeria on the 18th November 2021 gave domestic legitimacy to its commitments under the PA through the assenting of the Climate Change Bill, by President Muhammadu Buhari to

³⁴⁰ Steiner, R. 2009. *Petroleum, Pollution and Poverty in the Niger Delta*. University of Alaska in Amnesty International June, 2009.

the Climate Change Act (CCA).³⁴¹ The Act is in line with Nigeria's net-zero carbon emission pledge made by Nigeria at the COP26. The Act for the first time in Nigeria's history provides a framework for the attainment of Nigeria's obligations under its Amended NDC and Long Term Vision (LTV).

4.2.13.1 Overview of CCA

The CCA is uniquely fashioned to apply to public and private entities and it mandates them to strictly comply with all CC regulations in Nigeria. The Act sets the time frame for the attainment of net-zero carbon emissions to between the year 2050-2070. This broad objective is to be achieved through financial support, resilience and policies outlined in the Act. CCA established a regulatory institution called the National Council on Climate Change (NCCC) which is headed by the Nigerian President that is saddled with the responsibility of policy formulation and implementation on CC-related matters in Nigeria.³⁴² The functions of NCCC enumerated under section 3 of the Act.

CCA also establishes a Secretariat and the office of a Director-General.³⁴³ The secretariat is responsible for the daily duties of the NCCC and also gives technical and administrative support to the NCCC to enable it effectively to perform its functions.³⁴⁴

The CCA saddled the Federal Ministry of Environment with the duty of fixing Nigeria's carbon budget³⁴⁵ every five years subject to the approval of the Federal Executive Council.³⁴⁶ The carbon budget is to be revised periodically in line with Nigeria's NDC.

CCA also established the climate change fund (CCF) which is to be administered by the NCCC.³⁴⁷ The fund is to be financed from national fiscal allocation, fines and penalties from public and private entity violators of Act and Nigeria's obligation under the Paris

³⁴¹ O.M Ayotebi, Climate Crises: Nigeria's Climate Change Act, 2021, Nigeria's Antidote to Global Climate Crises. Retrieved February 2, 2022, from <https://omaplex.com.ng/climate-crises-the-nigerian-climate-change-act-2021/>

³⁴² Section 3(1), CCA.

³⁴³ Section 8, CCA.

³⁴⁴ Ibid.

³⁴⁵ Carbon budget simply means the permissible volume of carbons that can be emitted in a country over a given period. See Templars (supra).

³⁴⁶ Section 35, CCA.

³⁴⁷ Section 15, CCA.

Agreement. The funds will be used in funding CC mitigation and adaptation measures in Nigeria and other related activities.³⁴⁸

The Act empowers the secretariat in collaboration with ministries to frame the National Climate Change Action Plan within a circle of 5 years.³⁴⁹ The Action Plan shall be approved by the Federal Executive Council after public consultation.³⁵⁰

The CCA created tripartite obligations on climate change. The obligations are on Ministries, Departments and Agencies of government (MDAs)³⁵¹, public entities³⁵² and private entities,³⁵³ to ensure that their establishments set and attain emission reduction targets which must be submitted to the secretariat. Private establishments are only qualified for this commitment if they have 50 or more employees.³⁵⁴ Where any of the above entities fail to comply with the obligations, it shall be liable to fine/penalty to be determined by the NCCC.³⁵⁵ The CCA also empowers court before who a suit related to CC or environmental related matters is filed to give verdicts that will ameliorate the damage, compel the wrongful party (including the government) to stop, and order for restitution or compensation in deserving cases.³⁵⁶ The Act also made provisions for incentives for establishments that comply with their emission reduction targets.³⁵⁷

The CCA made provision for climate education under section 26. It charges the secretariat subject to the endorsement of the council to collaborate with the relevant Ministries, Departments and Agencies (MDAs) responsible for education to develop curricula that will integrate climate change education across all levels of education in Nigeria.

Another innovation of the CCA is the provision of Public Engagement Strategy (PES).³⁵⁸ The secretariat is required by the CCA to prepare and publish the council's PES no later

³⁴⁸ Oyedele & Onu (2022) supra, n. 15.

³⁴⁹ Section 20(1-2), CCA.

³⁵⁰ Section 20 (3), CCA.

³⁵¹ Section 22, CCA

³⁵² Section 35, CCA.

³⁵³ Section 24, CCA.

³⁵⁴ Section 25, CCA.

³⁵⁵ Section 34(1), CCA.

³⁵⁶ Section 34(2), CCA.

³⁵⁷ Section 20(5)(f) of the CCA. The incentives will be sourced from the Climate Change Fund, as provided in section 15(2)(j) of the CC Act.

³⁵⁸ Section 30, CCA.

than 6 months before the end of each year, for the following year.³⁵⁹ The PES is meant to include the strategies to be used to carry out the Act's objectives, including educating the public about the Action Plans, recognizing actions, cum enlisting their support in achieving those goals.³⁶⁰ The council is required to review the PES as the need arise and to publish the reviewed PES in the Federal Government Gazette one month after the review.³⁶¹

4.2.14 Petroleum Industry Act 2021 (PIA)

The PIA repealed the previous Petroleum Act 2004.³⁶² This new law contains a number of provisions and innovations that will have an impact on the oil and gas industry's private, public, and stakeholder sectors.

The PIA was passed to establish the upstream, midstream, and downstream petroleum industry's regulatory, fiscal, legal, and administrative frameworks as well as to construct and develop host communities and address other associated issues.

The Act created new regulatory institutions for the petroleum sector: the Nigerian Upstream Petroleum Regulatory Commission (the "Commission"), which saddled with the sole responsibility of regulating the upstream petroleum activities;³⁶³ and the Nigerian Midstream and Downstream Petroleum Authority (the "Authority") that is in charge of the downstream and midstream petroleum operations.³⁶⁴

The Act made provision for environmental management in the petroleum sector according to Section 102 for operators of both streams. When a plan conforms with applicable environmental laws and the applicant can control and remediate negative environmental effects, the plan will be authorised.³⁶⁵ Operators must also contribute to environmental remediation fund.³⁶⁶ The sum payable by a licensee or lessee is to be determined by the relevant institution on case-to-case basis.³⁶⁷ Sections 104 and 105 provides for penalties for

³⁵⁹ Section 30(1), CCA.

³⁶⁰ Section 30(2), CCA.

³⁶¹ Section 30(3), CCA.

³⁶² Ibid

³⁶³ Section 4 of PIA, 2021.

³⁶⁴ Section 29 of PIA, 2021.

³⁶⁵ Mondaq, op. cit. See also section 103 of PIA, 2021.

³⁶⁶ Section 103(1), PIA, 2021.

³⁶⁷ Section 103(2), PIA, 2021.

gas flaring. It retained the penalty provided for under the Flare Gas Regulation 2018 for gas flaring by licensee. In order to ensure that gas is adequately supplied to the local market of Nigeria, the Act created a national gas supply commitment for oil licensees.³⁶⁸

The Act fully commercialized the Nigerian National Petroleum Corporation (NNPC) into the NNPC Ltd.³⁶⁹

The Petroleum Host Community Development (PHCD) programme is described in Chapter 3 of the Act and is covered in Section 234. The PHCD's goals comprise promoting long-term development within host-communities, giving those communities immediate communal and economic benefits from petroleum activities, developing a framework to aid in those communities' development, among other things.³⁷⁰

By virtue of Section 235, the Host Communities Development Trusts is established. The settler is required to do so for the advantage of the host-communities for which they are accountable, and the Act specifies the timeframe for incorporation.³⁷¹

The Act establishes the Hydrocarbon Tax under Section 260 of the Act, which shall be applicable and imposed against the earnings of companies offshore upstream petroleum operations, due during each accounting period.

4.3 Short Coming of the Regulatory Regime

An examination of the regulatory regime reveals that some inadequacies exist in the Nigerian legal framework and this by extension has affected the victims in ventilating their claims of pollution in the court. The pitfalls evident in the above discussed legal framework include:

1. The statutes and regulations considered above do not offer much hope to the victims of environmental pollution as most of the legislation do not confer rights of compensation on the victims. Compensation is more important to the victims of pollution than punishment of polluters and this issue needs urgent attention.

³⁶⁸ Section 110, PIA, 2021.

³⁶⁹ Section 53

³⁷⁰ Mondaq, op. cit.

³⁷¹ Ibid.

Compounding the problem of lack of compensatory rights is the attitude of the Courts in handling actions brought in tort. Judicial activism is demanded from our courts as they move away from the common law limitations to awarding punitive and adequate damages in order to assuage the feelings of pollution victims.

2. The enactments appear to be more interested in the outcome of pollution without much regard for preventive measures. Prevention of spills and gas flaring is the best strategy towards avoiding the adverse impact of petroleum operations on human health and environment. The adage that prevention is better than cure is relevant in environmental legislation. There is need for provisions relating to precautionary measures to be inserted in the statute and regulations. This will accord with the “precautionary principle” which requires that action which anticipate, prevent or minimize the causes of environmental hazards to be taken.
3. The provisions of the statutes and regulations on liability for removal costs are quite inadequate. With the exception of NESREA Act, the other statutes do not expressly provide for removal of the pollution. The polluter pays principle which requires the polluter to bear the cost of cleaning up the pollution should be entrenched in our laws.
4. The sanctions provided in most of the statutes and regulations under consideration are ridiculous, being so paltry and thereby have no deterrent effect on the polluters.
5. Prosecutorial powers are not conferred on the regulatory agencies to institute legal proceedings against violators of the laws and regulations. Also, the various legislations do not provide for indigenes suits. Therefore, the task of prosecuting violators rest on the Attorney General of the Federation who has done little in ensuring that violators are brought to book. More so, the regulatory agencies have not shown enough enthusiasm in their pursuit of ensuring compliance with the statutory provisions. Despite the numerous cases of environmental degradation especially in the Niger Delta region, the blade of the regulatory agencies is yet to cut the culprits.

4.4.1 CC Litigation

The CC problem has been described as the most 'super wicked' policy problem of our time with the capacity to even frustrate the efforts of policymakers.³⁷² UNEP posited that three things make CC 'super wicked'.³⁷³ First is that its traceability depreciates over time. In other words, the more greenhouse gases (GHGs) we emit, the more we continue with the emission, then, the more complex the problem becomes, and the more unlikely for us to find a solution to it.³⁷⁴ Second, the best-positioned actors to solve the problem of CC are those that are at the forefront of causing it,³⁷⁵ or lack the needed incentive to swing into action. Third, the lack of alignment of the global scope of the problem with any institution's legal jurisdiction and authority.³⁷⁶ Hence, CCM and adaptation efforts are perceived to be costly, futile, unnecessary, and far-flung from immediate policy and economic benefits.³⁷⁷

At the international level, this 'super wicked' nature of CC problem was exemplified in the inadequate participation of the global community in the KP,³⁷⁸ and the insufficient Intended Nationally Determined Contributions (INDCs) submitted by parties during negotiations to the PA and NDCs registered by parties after the coming in force of the PA.

PA offers its state parties the legal avenue for the implementation of climate-oriented laws adopted by them. Before the ratification of the PA, no international instrument comprehensively made provision for international coordination of GHGs emission reduction. In order to place climate action within a significant context, countries outside the European Union could not point to any legal authority other than their countries' constitution, law, cases, common law, and international HRs instruments ratified by the party.³⁷⁹ The PA makes it possible for parties (including people within such countries) to articulate with precision the existing gaps between extant policy and the needed policy to actualize adaptation and mitigation objectives.

³⁷²United Nations Environment Programme (UNEP) 2017. The Status of CC Litigation- A Global Review. Retrieved online March 16, 2020, from <http://hdl.handle.net/20.500.11822/20767>. P. 5

³⁷³ Ibid

³⁷⁴ Ibid

³⁷⁵ Like International Oil Companies (IOCs), the extractive industries, and manufacturing companies.

³⁷⁶ Ibid

³⁷⁷ Ibid

³⁷⁸ Ibid.

³⁷⁹ Ibid.

In countries that have ratified the Agreement, people can now hold their governments accountable to back up their politically easy statements on rights and objectives with strong and concrete political measures like high taxation on fossil fuel activities, and restrictions on fossil fuel usages.³⁸⁰ Lawsuits emanating from countries that have prioritized development over climate action like Pakistan,³⁸¹ and in countries where the government is actively engaged in climate actions like the Netherlands, Switzerland, and Sweden shows that the courts are being used sometimes to push for concrete climate action.³⁸² Has the role of litigation been changed by the PA? Law encompasses thickets of covenants among members of the society *inter se*, and between them individually and collectively with their governments.³⁸³ Litigation, therefore, serves to test the compatibility of particular actions or inactions with those covenants. Litigation also serves to articulate how stated obligations to defend a particular right can be transformed into concrete action irrespective of unsteady political minds both municipally and internationally.³⁸⁴

The PA did not expressly provide litigants with a cause of action, and it did not also impose on state parties a binding and legally enforceable emission limits. However, it bequeaths on litigants an international CC policy context to anchor their actions against their governments or private organizations.³⁸⁵ Placing actions or suits at both national and regional levels in line with this context seems easier to categorize such suits along with the parts of political commitments and environmental needs.³⁸⁶ Ideally, the PA does not set a carbon emission reduction target for parties, however, it offers a basis for the deduction of the emission reduction target of parties through their NDCs. It also disfavors policies that lead to net emission increase.

³⁸⁰ Ibid

³⁸¹ Pakistan's Intended Nationally Determined Contribution, Nov. 6, 2016, retrieved online March 17, 2020, from <https://perma.cc/QJH8-9EXM>.

³⁸² UNEP, 2017 (*supra*), 9.

³⁸³ Ibid

³⁸⁴ Ibid

³⁸⁵ Ibid

³⁸⁶ Ibid

4.4.2 Meaning of CC Litigation

CC litigation, therefore, connotes attempts to the use of the instrumentalities of the court by individuals, non-governmental organizations, or groups to pressure governments and GHGs emitters to regulate or reduce GHGs emissions.³⁸⁷ The judiciary itself has alluded to the above postulation when the Court of Appeal of the United States of America held that issues surrounding damages caused by global warming can be resolved through the judiciary.

While it is seemingly straight and direct to decide what amounts to litigation, it is more difficult and demanding to decipher what amounts to CC litigation. This is because billions of human actions can be attributed to the effects of CC be it personal, governmental, or commercial. To this end, almost all litigation can be regarded as CC litigation. Hence, the context of our discussion of CC litigation is not this general perspective, but litigation where CC argument is explicitly presented as part of the case of either the claimant or defendant.³⁸⁸

4.4.3 Justification for CC Litigation

CC is a major challenge of the 21st century. It affects every facet of the legal system all over the world, to wit, the law/regulation, the people, the legislature, the judiciary, and the law enforcement agencies. There is a consensus among all the concerned bodies that impacts of CC affect all, hence, litigating CC becomes expedient.³⁸⁹ Sampson and Kaiser posited that since CC is a universal problem, that future climate suits may have us as both plaintiffs and defendants.³⁹⁰

They further posited that all the elements of a national legal system stated above, environmental education and awareness, as well as the level of law development, all affect CC litigation, whether or not an international CC instrument is achieved or not.³⁹¹ Christoph

³⁸⁷ Ibid

³⁸⁸ Ibid. See also Hilson, C. CC Litigation in the UK: An Explanatory Approach (or Bringing Grievance Back in). (n.d.) retrieved March 28, 2020 from www.Reading.ac.uk/web/FILES/law/Milan_Climate_Change_Litigationin_the_UK_v2.pdf.

³⁸⁹ See Onyeabor, et al. 2016. (supra), 146. See also Sampson, B. and Kaiser, S. 2011. CC Litigation – How Soon is Now. retrieved online April 1, 2020, from <http://whoswholegal.com/news/features/article/29096/climate-change-litigation-soon-now>

³⁹⁰ Ibid.

³⁹¹ Ibid

Schwartz and Ruth Byrnes reinforced the above position by stating that CC is pressing and requires urgent attention, failure of which will have catastrophic consequences to most parts of the earth.

They concluded that a credible cause of action can be sustained with CC. They maintained that individuals, communities, groups, and states affected by the effects of CC do have a substantive right to demand a reduction in the emission of carbon dioxide (CO₂) to mitigate the damages they suffer and guarantee their survival.³⁹²

On his part, Eric A. Posner is of the view that climate litigation appears to be more attractive to a larger percentage of people because the governments at various levels have resisted the conventional approaches for addressing CC such as the KP. He further posited that climate litigation against foreign states may likely be stalked in domestic courts because of the state sovereign immunity, the weakness of international environmental instruments and customary international laws.³⁹³ He concluded by stating that domestic litigation remains the most promising avenue for CC litigation, and he cited the instance of the Alien Tort Statute (ATS) in the USA that allows foreign nationals to initiate suits against foreign corporations, Americans, and governmental officials in US courts on tortious claims arising from the violation of international treaties and customary international laws though foreign sovereign immunity precludes such suits.³⁹⁴

Posner's position seems not to be the conclusion of the matter as some scholars with pro-climate litigation views.³⁹⁵ Brian J. Preston,³⁹⁶ for instance, observed the overwhelming impacts of CC in the environment. He posited that in the absence of a comprehensive international treaty and domestic responses to CC, that litigation is a sure and attractive

³⁹² See Onyeabor, et al. 2016. (supra), 146.

³⁹³ Ibid

³⁹⁴ See Onyeabor et al 2016 (supra), 147.

³⁹⁵ Ibid

³⁹⁶ Preston, B. J. 2007. The influence of CC litigation on Governments and the Private Sector. Retrieved online April 4, 2020, from:

http://www.leg.justice.nsw.gov.au/agbbasev7wr/assets/lec/m4203011721754/preston_influence%20of%20climate%20change%20litigation.pdf. See also Michael Byers, Kelsey Franks & Andrew Gage, 2017 'Internationalization of Climate Damages Litigation', *Washington Journal of Environmental Law & Policy* 264-318, 265.

alternative pathway for the mitigation and adaptation to the effects of CC. Preston noted that most of the climate litigations have not been successful especially in federal courts, nevertheless, they highlight areas of law that need reforms and revision of government laws and policies.³⁹⁷

On his part, Robert Blomquist posited that climate litigation has been metamorphosed from an innovative lawyering strategy to a revolutionary force in GHGs emission transnational regulation.³⁹⁸

The above postulations give credence to the fact that combatting CC is a possibility despite the inability of states to arrive at an international legally binding instrument on GHG regulation.³⁹⁹

4.4.4 Prospects of Combating CC through the instrumentality of Litigation

Damages arising from the effects of CC may be a source of claim in tort (such as negligence, nuisance, strict liability, and trespass) and constitutional law of HRs infringement.⁴⁰⁰ Faure and Nollkaemper identified three ways by which a petitioner may approach the judiciary for the redress of losses arising from the impact of CC.⁴⁰¹ First, claimants can initiate an action against the Federal government or its agencies challenging a law, omission to act, or lacuna in existing law. Second, the claimants can initiate a suit against companies and private individuals for their acts or omissions that are contributing a CC, which has resulted in specific damage to the claimants. Third, the claimant seeks redress against a government before an international tribunal.⁴⁰²

Onyeabor et al⁴⁰³ also added that a government under the rule of no-harm or State Responsibility maintains an action against a GHGs emitter. The no-harm or the principle of state responsibility which has its foundation on the precautionary principle and sovereignty of states is a well-recognized principle of international law that mandates a state to ensure

³⁹⁷ Ibid.

³⁹⁸ Ibid

³⁹⁹ Ibid

⁴⁰⁰ Such as right to life, right to dignity of the human person, right to property, minority rights, etc.

⁴⁰¹ See Onyeabor et al 2016 (supra), 149. See also Faure, M. G. and Nollkaemper, A. 2007. International Liability as an Instrument to Prevent and Compensate CC. 23 *A STAN Environmental Law Journal*, 123.

⁴⁰² See Onyeabor et al 2016 (supra), 150.

⁴⁰³ Ibid.

that activities within her territory do not cause environmental harm in another state. The *locus classicus* of this principle is the celebrated case of *USA vs Canada* (popular known as the *Trail Smelter Arbitration* case). In this case, the USA successfully claimed damages and compensation from Canada, for the emission of *sulphur dioxide* into the USA which resulted in air pollution damages by a Canadian smelting company across the USA borders.

Advancements in scientific research⁴⁰⁴ on CC has solidified the link between anthropogenic activities/emissions and extreme changes in weather conditions. Flowing from the above premise, some legal actions had been initiated against the emission of GHGs. For example, individuals have in the past instituted action to enforce environmental laws that require GHGs emitters to mitigate such emissions⁴⁰⁵ or demanding a government under the doctrine of public trust to take action by setting a standard limit for GHGs emissions.⁴⁰⁶

These scientific discoveries now make it possible for litigants to accurately pinpoint the environmental impacts of specific policies, laws, or projects. These advancements in climate science have also proven that CC is preventable, and its associated extreme weather conditions also reasonably foreseeable.⁴⁰⁷ Individual claimants have explored common law torts remedies such as negligence, trespass, strict liability, and nuisance in seeking redress for damages caused by GHGs emissions.

These suits have in one way or the other contributed to CCM and adaptation. The courts have leaped beyond their traditional function of the resolution of disputes between contending parties, to be a vehicle for social engineering and attainment of sustainable development through public interest litigation. It is pertinent to note that factors are militating against CC litigation.⁴⁰⁸ It is also important to note the emerging trend of 'climate refugees' which can become a subject of climate litigation soon. The term 'climate refugees' is mainly used in media reportage and documentaries. This is because the extant definition

⁴⁰⁴ (called climate attribution science (CAS)).

⁴⁰⁵ See, *Gray v Macquarie Generation* [2010] NSWLEC 34;

⁴⁰⁶ *Ibid*

⁴⁰⁷ *Ibid*

⁴⁰⁸ We shall discuss them in this paper.

of refugees precludes migrants displaced solely because of environmental changes.⁴⁰⁹ This definition did not contemplate that people may be displaced primarily because of the effects of CC like flooding, rise in the ocean level, and so on. It also erroneously suggests that displacement of people because of CC is predominantly international and not domestic; whereas there exist many instances of people that have been internally displaced as a result of flooding and other effects of CC.⁴¹⁰ People may begin to seek refuge in foreign territories to escape the effects of CC and this may give birth to both international and domestic litigation on whether migrants can be accepted as climate refugees in the absence of an explicit legal framework to that effect.

4.4.5 An Overview of Global CC Litigation

CC is gaining momentum globally. As of January 2020, approximately 1444 CC suits had been instituted in 33 countries (aside the ones filed in the international and regional court), with 1143 suits instituted in the USA alone, and over 301 cases in all the other 32 countries combined. Wit et al categorized climate litigation cases into constitutional law and HRs claims; private law; company law and climate risk; and planning and permitting.⁴¹¹ The doctrine of public trust is rooted in Roman property law principle of *res communis*. The doctrine connotes that ownership and control of natural resources are vested in the government as public trustees, with the people as the beneficiary.⁴¹² The doctrine plays a fiduciary duty on the state to manage the trust property (communal natural resources) in a manner that will be beneficial to the people, the actual beneficiaries.

In CC context, the citizens of a country see their government as trustees in ensuring greenhouse gas emission mitigation. Where their governments fail in this duty, they seek for remedy under common law, constitution or statute.⁴¹³ The doctrine of public trust was first applied in the US case of *Illinois Central Railroad vs. Illinois*.⁴¹⁴ Recently, the UK Supreme Court in the case of *Newhaven Port and Properties Ltd. vs. East Sussex County*

⁴⁰⁹ UNEP (supra) 19. See Article 33(1) of the United Nations Convention Relating to the Status of Refugees of 1981, 189 U.N.T.S. 150.

⁴¹⁰ UNEP (supra) 19.

⁴¹¹ *Ibid*

⁴¹² *Ibid*.

⁴¹³ *Ibid*.

⁴¹⁴ 146 U.S. 387 (1892).

Council and Anor;⁴¹⁵ as well as the Indian Supreme Court in the case *Swaraj Abhiyan vs. India and Ors*⁴¹⁶ endorsed applicability of the doctrine of public trust in CC litigations. CC litigation may either proactive or reactive.⁴¹⁷ We shall be discussing the various trends of CC litigation from a global perspective:

4.4.5.1 Cases on Constitutional law; HRs and Accountability of Governments to their statutory and policy obligations

Governments, in a bid to address the pressing surge of CC have ratified some international instruments, enacted some domestic legislation, regulations, and also promulgated some policy frameworks. All these are aimed at mitigating and adapting to the impact of CC and they create obligations/commitment on the government and its agencies charged with the enforcement/implementation of laws and regulations. The government and its agencies may be sued for the obligations of the government.

The landmark case of the constitutionality of CCM suits is the case of *Oposa v Factoran*. In this case, Philippine minors represented and joined by their parents instituted the case on their behalf and on behalf of their future generation challenging the decision of the Philippine Secretary of the Department of Environment and Natural Resources to permit timber license holders to log the remaining Philippine Forest. They contended that such approval is an infringement of the plaintiffs' right to a balanced and healthy environment guaranteed under Philippine's constitution. The Supreme Court of the Philippine acknowledged the novel nature of environmental rights litigation. The Supreme Court found for the minors and also held that they have the right to sue for their other generations and unborn generations.

In the case of *Urgenda Foundation v. Kingdom of the Netherlands*,⁴¹⁸ the plaintiffs challenged the decision of the newly elected government of the Netherlands to jettison with the CCM commitments of the Government. The plaintiffs relied on several scientific reports to establish that the decision of the new government will infringe on the fundamental rights of Dutch people and will also amount to a breach by the government of its constitutional

⁴¹⁵ 2015 UK SC 7.

⁴¹⁶ 2016 7 Supreme Court Cases 498.

⁴¹⁷ Onyeabor et al (Supra) 149.

⁴¹⁸ [2015] HAZA C/09/00456689.

duty of care to its people. The District Court of Hague in arriving at its decision considered the country's obligations under the UNFCCC and other international instruments and decided that the Dutch government owed its citizen and residents a constitutional duty of care, and such duty precludes the government from backsliding from its commitment. The court ordered the government to limit GHGs emissions to 25% from the 1990 level to 2020. On an appeal of the above decision to the Supreme Court of the Netherlands, the Supreme Court in a landmark judgment in December 2019 upheld the decision of the district court. The Supreme Court held that the Dutch government owed its people a duty to protect them from the effects of CC under the government's obligations under the European Convention for the Protection of HRs and Fundamental Freedoms (ECHR).

Also, in the case of *Leghari v. the Republic of Pakistan*,⁴¹⁹ a Pakistani farmer Ashgar Leghari challenged the failure of the Pakistani government to implement its national policies on CC. The Pakistani green bench court construed the failure of the Pakistani government to implement the country's National CC Policy of 2012 and the Framework for Implementation of CC Policy (2014-2030) as a breach of articles 9, 14, 23, and 19A of the Pakistani Constitution that provided for rights to life, human dignity, property, and information respectively. The court noted that at the center stage of the Pakistani Constitutional rights is environmental protection and conservation.⁴²⁰

Wit⁴²¹ reported a 2020 decision of the UN HRs Committee a petition filed by Loane Teitiota (a citizen of the Republic of Kiribati), which we shall refer to as *Loane Teitiota's Case*. In this case, Teitoita's petition to seek protection in New Zealand over threat to his right to life by rising sea level in his home country was refused by the committee. The reason for the decision of the committee was that the petitioner is not facing an immediate danger based on the scientific finding that the Republic of Kiribati will only be rendered uninhabitable in 10-15 years due to a rise in sea level. That the Kiribati government still has enough time to take measures to protect, and if need be, relocate its inhabitants. However, the Committee acknowledged the right to Refugee claims on the grounds of the effects of

⁴¹⁹ (2015) W.P. No. 25501/2015.

⁴²⁰ UNEP (supra). 15.

⁴²¹ Elisa de Wit et al (2020) (supra).

CC and maintained that it is unlawful for States to refuse climate refugees whose rights to life are endangered in their home countries.⁴²²

The court has also attempted to interpret the failure of a government to meet its CCM obligation as a breach of its constitution. In *Re Vienna-Schwechat Airport Expansion case*,⁴²³ some environment-spirited individuals and NGOs in this petition approached the Austrian Federal Administrative Court to quash the approval of Austria's lower government for the construction of a third runway at Vienna International airport. The petitioners stated that the said airport expansion project runs contrary to Austria's international and domestic commitments to mitigate the effects of CC. They anchored their submission on the provisions of the Climate Protection Act, (CPA) 2011 of Austria that set sectoral emission reduction targets which included the transport sector. They argued that a third runway will increase Austria's annual GHGs emissions.

The Federal Administrative Court held that the proposed airport expansion was contrary to the provisions of the CPA, 2011, Austria's Constitution, and Austria's commitments/obligations under the European Union Law and the PA. However, on appeal to the Austrian Constitutional Court, the above decision of the Federal Administrative Court was overturned on the ground that the lower court erroneously gave weight to CC considerations in its balance test consideration of public interest in the proposed third runway. The constitutional court inter alia held that the KP and the PA are the source of Austria's international obligations, 'but are not generally applicable in the domestic context.'⁴²⁴

The Administrative Court reviewed its decision and in March 2018 issued a new ruling which approved the construction of the third runway.⁴²⁵ Similarly, in the landmark Canadian case of *Friends of the Earth v The Minister of the Environment*,⁴²⁶ the plaintiffs through this

⁴²² Ibid

⁴²³ W109 2000179-1/291E. retrieved April 26, 2020, from <http://climatecasechart.com/non-us-case/in-re-vienna-schwachat-airport-expansion/?cn-reloaded=1>

⁴²⁴ Ibid

⁴²⁵ Ibid

⁴²⁶ [2008] FC 1183

suit sought for a declaratory order that the Canadian government's failure to file a CC plan was contrary to Canada's KP Implementation Act (KPIA) which seeks to implement Canada's commitment/obligation under the KP. The Plaintiffs also sought for an order of mandamus to compel the Canadian government to comply with KPIA. The trial court dismissed the suit on the ground that the Act imposes an absolute justiciable obligation of compliance on the Canadian government. The Canadian Federal Court of Appeal on the 15th of October 2009 also dismissed the plaintiffs' appeal on similar reasons with the lower court. In other words, this decision immunizes the Canadian government from domestic compliance obligations to the KP.⁴²⁷

In some jurisdictions, the courts have acknowledged the devastating effects of CC but expressed their lack of authority to compel governments to take proactive action. In *Juliana v. the USA*, the plaintiffs' (represented by Our Children's Trust) in this suit relied on their direct and indirect constitutional rights which challenged the US Government's inadequate actions in regulating CO2 pollution. US Court of Appeals for the Ninth Circuit in dismissing the suit on the 17th of January 2020, held that burning of fossil fuel if unchecked will have a devastating effect on the earth, however, the court lacked sufficient power to compel the US Government to develop and implement a national plan to phase out GHG emission that will be enforceable.

4.4.5.2 Cases on Resource Extractive Companies; and the linkage between GHGs emissions and Climate Risk

Resource extraction activities have to do with activities that contribute to GHGs emissions and also weaken the resilience of communities to cope with adverse harsh weather conditions.⁴²⁸ An appraisal of the activities of extractive industries that trade on fossil fuels such as petroleum and coal companies has shown that the consumption of their fossil fuels emits the high quantity of GHGs that cause CC.⁴²⁹ Plaintiffs in different jurisdictions of the world that have recognized the link between inadequate regulation of the activities of these

⁴²⁷ Onyeabor et al (Supra) 151.

⁴²⁸ United Nations Environment Programme (UNEP) 2017. The Status of CC Litigation: A Global Review. Retrieved online March 16, 2020, from <http://hdl.handle.net/20.500.11822/20767>. P. 18

⁴²⁹ UNEP (Supra), 18.

extractive industries and CC have used the instrumentality of litigation to challenge such activities and their implications on the environment.

In the Colombian case of *Re Páramos*, the plaintiffs challenged the constitutionality of the provisions of Law No. 1450 of 2011, which established the National Development Plan 2010–2014, which granted leases and licenses to corporate bodies to mine for oil and gas in *Páramos*, a sensitive Colombian mountain ecosystem. They also challenged Law No. 1753 of 2015, which established the National Development Plan 2014–2018 with designated some projects to be of national strategic interest, and as such, exempted such projects from some local regulations. The Colombia Constitutional Court held that both provisions were unconstitutional as they endangered the right of Colombians to clean water (most of Colombia's drinking waters are sourced from the *Páramos* mountain).⁴³⁰

In the case of *State of Connecticut, et al v American Electric Power Company Inc. et al*,⁴³¹ (Manhattan Claim), the State government initiated this public nuisance suit against 8 US companies, seeking an order to compel the defendants to limit and decrease the emission of GHGs. The plaintiffs claimed that the defendants' failure to reduce and limit their GHGs has contributed to CC. The trial court dismissed the suit on the ground that the Plaintiffs lacked the standing to initiate the action being that the fundamental issue for determination in the suit was a political matter as against the public nuisance portrayed by the plaintiffs. On appeal, the Court of Appeal decided that the plaintiff/appellant have the standing to institute the action and that the case did not present non-justiciable political questions.⁴³²

Regulatory agencies have been compelled through litigation to consider GHGs emissions of extractive projects. In *Re Australian Conservation Foundation v Latrobe City Council*,⁴³³ a coal power station in Victoria, Australia applied to develop another coalfield that will have its operating license extended to 2031. The Victorian government set up a Panel of Inquiry under the Victorian Planning and Environment Act 1987 (P & E Act) and the Environment

⁴³⁰ Ibid

⁴³¹ 406 F Supp 2d 265 (SDNY 2005)

⁴³² 528 F3d 309 (2nd Cir 2009)

⁴³³ [2004] 140 LGERA 100

Effects Act 1978 to assess the application for coal power station extension. However, the Panel was specifically instructed: "not to consider matters related to greenhouse gas emissions from the Hazelwood Power Station."⁴³⁴ The Plaintiffs⁴³⁵ instituted this action before the Victorian Civil and Administrative Tribunal contending that section 24 of the P & E Act, has been breached by the panel which requires such a panel to consider all the matters referred to it. In this regard, whether the panel ought to have considered the environmental effects of GHGs that the continuous operation of the power would generate? The Tribunal asked⁴³⁶, and directed the panel to reconsider the application.

The government has also been compelled through litigation to apply the principle to 'environmentally sustainable development' (ESD) in the environmental assessment of coal mines. In *Gray v The Minister for Planning*,⁴³⁷ (another Australian case), the ministry of planning's GHGs emission assessment of coal mines in Australia did not capture emission from third party projects. The plaintiff, an environmental activist Peter Gray contended in this case that third party GHGs emissions from coal combustion ought to have been captured in the GHGs assessment for the coal mine. The court per Justice Pain upheld the argument of the plaintiff stating that the government failed to apply the principles of "environmentally sustainable development" (ESD) in its assessment. Justice Pain further held that there exists a sufficient proximate link between coal combustion and the emission of GHGs which contribute majorly to CC. The action of the government violates the principles of precaution and inter-generational equities.⁴³⁸

In the USA case of *Comer v. Murphy Oil USA and ors*, some property owners in Coastal Mississippi as plaintiffs argued that activities of oil and coal industries emitted GHGs which resulted in global warming and its increase, birthing the condition that formed the infamous Hurricane Katrina that destroyed their property. The District Court dismissed this suit because of it a non-justiciable political question and that the plaintiffs lacked the needed standing to institute this action. On appeal, the above decision was overturned and the Court

⁴³⁴ Onyeabor et al (Supra).

⁴³⁵ Four environmental groups.

⁴³⁶ Onyeabor et al (Supra) 150.

⁴³⁷ [2006] NSWLEC 720

⁴³⁸ Onyeabor et al (Supra) 151.

of Appeal held that the plaintiffs have fulfilled the requirement for standing and the action is equally justiciable.

4.5.5 Nigeria and CC Litigation

Nigeria is vulnerable to the effects of CC due to its geographical location, economic strength, and political culture, among other factors.⁴³⁹ The southern borders of Nigeria lie along the Gulf of Guinea, within the West African coast of the Atlantic Ocean. It, therefore, connotes that Nigeria, especially her coastal states stand at great risk of flooding at any slightest oceanic rise of the Atlantic within the Gulf of Guinea which is seemingly imminent. On the other hand, the Northern borders of Nigeria fall along the Sahel region, and there exist some projections that most of Nigeria's northern border states may turn into semi-deserts or deserts in the nearest future.⁴⁴⁰ CC poses a great threat to HRs like the right to life, right to property, right to development, right to shelter, right to food, right to health among others in Nigeria.

Although there exist several environmental litigations in Nigeria, there is a dearth of direct CC litigations in Nigeria. Most environmental litigations in Nigeria are reactive in the sense that they react to an already occurred environmental pollution and seek damages, hence, not preventive in approach. The petitioners are mostly not interested in CC or its mitigation but in compensation and restoration of their environment. The plaintiffs rely mostly on the common law tort remedies to seek compensation in Nigeria. This reactive approach by Nigerian litigants can be regarded as an indirect CC litigation.

The case of *S.P.D.C v. Anaro & Ors*,⁴⁴¹ the oil pipe laid by the Defendant/Appellant across the Claimants/Respondents' land exploded and the oil spilled on the land of Respondents resulting in damages of the respondents' vegetation, crops, and fishes. The Nigerian Supreme Court held the Appellant liable for negligence. Also, in *Sam Ikpede v Shell B.P Development Company Ltd*⁴⁴² and *Umudje v Shell B.P Petroleum Development*

⁴³⁹ O.J. Oyedele & K.O.N. Onu (2022), supra.

⁴⁴⁰ NEST Forum: Building Nigeria's Capacity to Respond to CC. Issue No.19, May 2003.

⁴⁴¹ (2015) LPELR 24750 (SC)

⁴⁴² (1973) MWSJ 61

Company,⁴⁴³ that have similar facts with *Anaro's* case above, the courts also held the companies liable for negligence.

This common law tort's approach has helped victims of environmental wrongs to access remedy; however, these common remedies are only playing a gap-filling role. They are also reactive and proactive. These remedies were designed by judges of the realm to address medieval tortuous claims. The judges of the realm never envisaged complex scientific environmental challenges like CC and its effects. Like we noted above, CC litigation connotes attempts to use the instrumentalities of the court by individuals, non-governmental organizations, or groups to pressure governments and GHGs emitters to regulate or reduce GHGs emissions.⁴⁴⁴ There is a shortage of cases in this regard in Nigeria.

The first CC litigation in Nigeria is the case of *Oronto Douglas v Shell Petroleum Development Company and 5 ors*, where the plaintiff sought an order of the court to compel the Nigerian government to fully comply with the provisions of Environmental Impact Assessment Act 1992⁴⁴⁵ before embarking on the Liquefied Natural Gas project at Bonny. The suit was dismissed by the Federal High Court on the ground that the plaintiff had not disclosed his standing in the suit. On appeal, the Court of Appeal quashed the decision of the Federal High Court above on the ground that the lower court misdirected itself when it arrived at its decision before the filing of pleadings in the case.⁴⁴⁶

Is there a constitutional basis for CC litigation in Nigeria? Section 20 of the 1999 of CFRN mandates the state to safeguard and improve the Nigerian environment. The provision appears to have imposed on the Nigerian government, a duty to protect, improve, and safeguard the Nigerian environment. As lofty as this provision may appear, it is not justiciable because of the provisions of section 6(6) (c) of the same constitution which is to the effect that the entire provisions of its chapter two (fundamental principles of State

⁴⁴³ (1975) 9-11 SC. 155

⁴⁴⁴ Ibid

⁴⁴⁵ See Sections 7, 9(2), 9(3), 25 and 57 dealing with public participation in discussing and reviewing an environmental impact statement submitted by a proponent.

⁴⁴⁶ *Douglas v. SPDC & ORS* (1998) LPELR-6457(CA). p. 10 paras C-E

Policy) cannot form the basis of a litigation before any court in Nigeria.⁴⁴⁷ In the case of *Attorney General of Lagos State V. Attorney General of the Federation*,⁴⁴⁸ that bothered on environmental and town planning law making powers of the Federal and State government in Nigeria.

The Supreme Court of Nigeria held that although the provisions of section 20 of the Constitution is not enforceable, the same section empowers the National Assembly to make laws for environmental protection in Nigeria. Litigants may, however, indirectly maintain an action against emitters of GHGs and/or the government for their actions or inactions that led to the emission of GHGs by linking the effects of CC from such emissions with fundamental rights guaranteed under chapter IV of the 1999 Constitution.⁴⁴⁹ However, this indirect approach gives a CC litigant the uphill task of being extremely imaginative in pigeonholing the direct and indirect effects of CC within the extant fundamental rights in chapter IV of the 1999 constitution.

Secondly, the approach is devoid of scope and certainty, hence, its applicability in a given CC litigation is highly dependent on the liberality of the trial judge handling the case. A conservative judge may insist on a literal interpretation of chapter IV of the constitution without an extraneous expansive interpretation of same to include CC claims. Section 24 of the African Charter provides for the people's right to an environment that is satisfactory for their development. This provision can be relied upon for CC litigations in Nigerian courts.

The *locus classicus* of the application of the provisions of the African Charter in CC litigation in Nigeria is the famous *Gbemre's case*. In this case, the Plaintiff Jonah Gbemre suing for himself and on behalf of his community instituted this case against the Nigerian government and International Oil Companies (IOC) in Nigeria over the continuous flaring of gas in Nigerian Niger Delta by Oil companies since 1958. He alleged that flaring of gas into the atmosphere emits GHGs which its effects infringe on the fundamental right to life and dignity of human persons guaranteed under section 33 and 34 of 1999 Constitution respectively. He also contended that the plaintiff's right to a healthy environment guaranteed

⁴⁴⁷ See the cases of *Archbishop Anthony Okogie and others v The Attorney General of Lagos State* (1981) 2 NCLR 350.

⁴⁴⁸ 2003 FWLR (Pt.168) 909.

⁴⁴⁹ See Oyedele and Onu (supra).

under article 24 of the African Charter on Human and Peoples Right (ACHPR)⁴⁵⁰ is also violated by the continuous flaring of gases in Nigeria. He sought for an order of the Court restraining the defendants from further flaring of gases in Nigeria and compensation for the victims. The Federal High Court upheld the submissions of the plaintiffs and granted all the reliefs sought. This is a landmark decision that has altered the face of CC litigation in Nigeria.

The African Charter is a good anchor for CC litigation in Nigeria. However, there is need for awareness of its existence and enforceability in Nigeria among the Nigerian populace.

4.5.6 Factors Militating Against CC Litigation

There are some issues or factors that militate against CC litigation globally. The strands of these factors, however, vary from one jurisdiction to another. These factors include but not limited to issues of standing, the justiciability of CC claims, scientific nature of the claim, available remedies for such claims. We will briefly examine these factors in this section.

4.5.6.1 Justiciability of CC Claims

Justiciability connotes the capability of a court to hear and determine a particular issue of right or obligation. It implies the availability and access to lay down appropriate mechanisms for the protection or enforcement of a right or obligation.⁴⁵¹ For victims of CC in a given jurisdiction to secure remedy from the court against the government or GHGs emitters, CC claim must be justiciable in such jurisdiction.

Victims of the effects of CC may circumvent this hurdle by linking their environmental or CC claims to already justiciable rights in Chapter IV of the Constitution;⁴⁵² or through common law tort remedies like a nuisance, negligence, trespass, and strict liability. CC victims may also rely on the provisions of Article 24 of the African Charter of Human and

⁴⁵⁰ Adopted 27 June 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), entered into force 21 October 1986.

⁴⁵¹ UNEP (supra), 27.

⁴⁵² Such as the right to life, right to dignity of the human person, right to property.

Peoples' Act⁴⁵³ which provides that all peoples shall have the right to a general satisfactory environment favorable to their development, to secure remedy from the court.⁴⁵⁴

4.5.6.2 Locus Standi

The concept of locus standi focuses on ascertaining whether a party instituting a suit is entitled to invoke the court's jurisdiction. Locus standi is the competence to initiate a suit in court to assert a legal right or seek redress of a wrong.⁴⁵⁵ A plaintiff must show that he has a sufficient interest in the subject matter of the litigation. This concept of locus standi is of common law origin. The application of this doctrine in CC litigation varies from jurisdictions. However, this doctrine of standing poses a major barrier to CC litigation because of the scientific nature of CC. It is indeed difficult for a plaintiff to establish that the particular action or inaction of the defendant gave rise to the impacts of CC that resulted in the plaintiff's injury or damage.⁴⁵⁶

The question of standing has also taken the center stage in CC litigation in the US. The State of Massachusetts alongside other several states and NGOs sued the US federal government to challenge the above decision in court.⁴⁵⁷ The Federal government contended that the State of Massachusetts lacked the standing to institute the suit. The Supreme Court held that the State has the required standing to initiate the action.

The Supreme Court of the Netherlands has also held in *Urgenda Foundation v. Kingdom of the Netherlands*,⁴⁵⁸ that NGOs have the locus standi to initiate environmental suits as they bother on public interest.

The issue of locus standing in environmental and CC litigation has a checkered history in Nigeria as the courts initially adopted a restrictive approach to it.⁴⁵⁹ Recently, the Supreme Court of Nigeria in a landmark decision in case of *Centre for Oil Pollution Watch v. Nigerian National Petroleum Corporation (NNPC)*⁴⁶⁰ liberalized the application of the

⁴⁵³ Ibid.

⁴⁵⁴ See Olatunbosun and Onu (2020) supra.

⁴⁵⁵ *Owodunni v. Registered Trustee, Celestial Church of Christ* [2000] 10 NWLR (Pt. 675) 315.

⁴⁵⁶ UNEP (supra) 28.

⁴⁵⁷ 549 US 497, 127 S.Ct. 1438, 167 L.Ed.2d. 248 (2007)

⁴⁵⁸ [2015] HAZA C/09/00456689.

⁴⁵⁹ *ET & EC (NIG.) Ltd. v. Nevico* (2004) 3 NWLR (pt. 866) 327.

⁴⁶⁰ [2019] 5 NWLR (Pt. 1666) 518.

doctrine of locus standi in environmental litigation. This case was instituted by an NGO Centre for Oil Pollution Watch, against Nigeria's national oil company. The plaintiff alleged that the failure of the defendant to properly maintain its oil pipeline that crossed Acha community in Abia State resulted in corrosion of the oil pipe and subsequent spill of crude oil into the Ineh and Aku shrines and the adjoining farmlands.

The plaintiff sought the restoration of the environment and the compensation of the victims. The NNPC challenged the standing of the plaintiffs (being an NGO) to institute the action. The trial court and the Court of Appeal struck out the suit for lack of standing. On further appeal to the Supreme Court, the apex court empanelled a full court to hear the appeal. In determining the appeal, the Supreme Court invited five amicus curiae 'Friends of the Court' to address the court and also considered the brief of arguments of the parties.

The Supreme Court has changed the course of events in environmental litigation to the positive direction through the liberalization of the court's attitude to *locus standi* in environmental litigation in this landmark case of *Centre for Oil Pollution Watch v. Nigerian National Petroleum Corporation*.⁴⁶¹ Environmental pollution from the oil sector is one of the major causes of CC through the emission of crude oil and gas flaring, and if reasonable actions are not taken then there will be nothing left for the future generation.

Public spirited individuals and bodies can take advantage of this decision to initiate public interest environmental litigations in Nigeria. This liberalized approach to *locus standi* should be expended to other spheres that affect the interest of the public.

On the other hand, the court must be vigilant to watch against the duplicity of suits and unreasonable litigations. This is to forestall a situation where meddlesome interlopers and busybodies will take undue advantage of this liberalized approach to *locus standi* to initiate vexatious actions in hunt of monetary gain.

⁴⁶¹ [2019] 5 NWLR (Pt. 1666) 518.

4.5.6.3 Scientific Expertise

CC is a scientific issue. Judges and lawyers are trained in legal advocacy and not in atmospheric sciences.⁴⁶² Most CC litigation requires plaintiffs to explicitly establish the link between their injury, the impact of CC, and the action or inaction of the defendant. CC damages are special in that the plaintiff is required to strictly prove the link between the cause and effect. Where a plaintiff fails in this solemn duty, his case will be dismissed by the court. In *Shell BP v Usoro*⁴⁶³, the plaintiff found it difficult to link environmental damages to his fishing net between the seismic surveys of the defendant. The case was dismissed for lack of a link between cause and effect in the claim.

Recent advancements in scientific researches⁴⁶⁴ CC has solidified the link between anthropogenic activities/emissions and extreme changes in weather conditions.⁴⁶⁵ For instance, individuals have in the past instituted actions to enforce environmental laws that require GHGs emitters to mitigate such emissions⁴⁶⁶ or demanding a government under the doctrine of public trust to take action by setting a standard limit for GHGs emissions.⁴⁶⁷ These scientific discoveries now make it possible for litigants to accurately pinpoint the environmental impacts of specific policies, laws, or projects. These advancements in climate science have also proven that CC is actually preventable, and its associated extreme weather conditions also reasonably foreseeable.⁴⁶⁸

On the other hand, most victims of the effects of CC are the poor and vulnerable groups. These victims can barely afford the services of legal practitioners let alone the services of experts to establish the link between the injury suffered by the victims, the effects of CC and the action or inaction of the defendant. It is not easy for victims to engage the services of scientific experts because these experts charge highly.⁴⁶⁹ So, where a plaintiff (victim) is

⁴⁶² Onyeabor, E. Senior Lecturer, Faculty of Law University of Nigeria, Enugu Campus, *Lecture Series on Environmental Law*

⁴⁶³ (1960) SCNLR 121

⁴⁶⁴ (called climate attribution science (CAS))

⁴⁶⁵ Wit, E.D., Seneviratne, S. and Calford, H. 2020. CC Litigation Update. Retrieved online April 8, 2020, from <https://www.nortonrosefulbright.com/en/knowledge/publications/7d58ae66/climate-change-litigation-update>.

⁴⁶⁶ See, *Gray v Macquarie Generation* [2010] NSWLEC 34; *Gray v Macquarie Generation (No 3)* [2011] NSWLEC 3. See also

⁴⁶⁷ *Ibid*

⁴⁶⁸ *Ibid*

⁴⁶⁹ *Ibid*

unable to secure the services of an expert; and the defendant (the violators) who usually have enormous resources easily procures the service of an expert, the court is most likely to uphold the case of the defendant based on the expert opinion.

4.5.6.4 Access to Court

A victim of CC is a person who suffers personal or economic injury as a result of the effects of CC. Such a victim is expected to seek redress before a court of competent jurisdiction.

It is trite law that the Court must have jurisdiction to entertain matters before the machinery of the Court can be activated.⁴⁷⁰ The decision of the court becomes a nullity where a court which lacks jurisdiction in respect of a subject matter assumes jurisdiction on that subject matter.

Onyeabor⁴⁷¹ posited and we agree with him that section 251(1) gives exclusive jurisdiction to the Federal High Court in respect of matters arising from or connected with mines and minerals (including oil fields, oil mining, and geological surveys and natural gas) which happens to be the largest emitters of GHGs in Nigeria. Thus, 'where a litigant institutes an action on any matter as provided by the Constitution in a State High Court, a decision from this court is a nullity and would be overturned on appeal.'

The purport of the above decision of the Supreme Court of Nigeria is that the Federal High Court has the exclusive jurisdiction to hear cases that bother on violation of rights arising from environmental pollution. It must be stated that despite the expansive nature of the Nigerian landmass and population.⁴⁷² As noted above, most victims of the effects of CC reside in remote villages that do not have court presence. All the local governments in Nigeria have at least one division of State High court, but the highest number of Federal High Courts' Divisions in a State is two, and two court divisions are too small to cover at least 16 local governments in a State. The poor victims of environmental wrongs lack the needed resources and time to travel to the state capitals to prosecute their cases.⁴⁷³

⁴⁷⁰ Ibid

⁴⁷¹ Onyeabor, E. Senior Lecturer, Faculty of Law University of Nigeria, Enugu Campus. *Lecture Series on Environmental Law: Liabilities For Environmental Damages*, (Unpublished), 21.

⁴⁷² See Onyeabor (supra) 22

⁴⁷³ Ibid

4.5.7. Judicial Attitude to CC Litigation

Basically, the Judiciary is the arm of government saddled with the solemn responsibility of interpreting laws. This power extends to adjudication of CC related cases but civil and criminal matters. However, there exist paucity of litigation (both criminal and civil) on CC related matters. This is due to lack of expertise in CC laws by both the Bar (both the prosecutors and private practitioners) and the Bench. Also, many judicial officers have placed economic benefits far and above CC concerns. The judiciary until recently had adopted a paternalistic and passive approach to CC and environmental-related cases.⁴⁷⁴ Most remedies of CC related claims are accessed through the common tort remedies which are not specifically entrenched to address CC related claims.⁴⁷⁵

In 2019, the Supreme Court took a radical departure to from the old archaic and passive views to CC related cases in the celebrated case of *COPW v. NNPC*.⁴⁷⁶ Despite this decision, it is suggested that Nigeria is due to have special Environmental Courts. It is also expected that there should be a legislation on access to justice in environmental-related cases.

4.5.8 Conclusion

CC litigation is an area of law that is emerging globally which forms an essential aspect of the global CCM and adaptation efforts. It is not a mirage. The PA by adopting the Nationally determined Contribution Approach has put national policies and law in a global context that arms prospective domestic CC litigants a yardstick to assess the adequacy or otherwise of their government's commitments towards CCM and adaption.

The proliferation of CC litigation has helped litigants to test waters of the recondite aspects of the various trends of CC litigation discussed in this work. Many CC litigations have emerged successfully in jurisdictions like Netherlands, Australia, the United Kingdom,

⁴⁷⁴ *Irou v. SPDC*, unreported Suit No: WW/89/71. See also A.I. Olatunbuson & K.O.N. Onu (2020) Liberalization of the Concept of Locus Standi in Environmental Suits in Nigeria: An Appraisal of the Supreme court's Decision in the Case of Centre for Oil Pollution Watch v. NNPC [2019] 5 NWLR (pt. 1666) 518, *The Gravitas Review of Business & Property Law*, 1-11. Link: <https://gravitasreview.com.ng/shop/liberalisation-of-locus-standi-in-environmental-cases-in-nigeria/>

⁴⁷⁵ *Ibid.*

⁴⁷⁶ *Supra*

India, and the United States of America. It is suggested that other jurisdictions especially developing countries, should take a leaf from them.

We also noted several factors that are militating against CC litigation globally. Standing has been a big obstacle across many jurisdictions. Other countries must adopt the liberal approach that the Nigerian, Netherland, and US Supreme Courts have respectively adopted in CC litigation. NGOs should take advantage of this liberal approach to initiate public interest CC litigations in Nigeria and elsewhere.

However, the judiciary must remain vigilant to watch against the duplicity of suits and unreasonable litigations. This will block the corridors of the court against meddlesome interlopers and busybodies that may want to take undue advantage of this liberalized approach to *locus standi* to initiate vexatious actions in hunt of monetary gains.

Governments of developing countries may not need to create special courts for CC litigations due to the cost implications, however, they may have to train and retrain their judicial officers on the interface between environmental injuries, effects of CC, and the activities of GHGs emitter and their regulators.

There is need for awareness among Nigerian CC litigants about the existence and enforceability of the African Charter in Nigeria. There is also a need for an express constitutional provision on an enforceable right to sustainable environment for all. This kind of provision will mount pressure on both GHGs emitters and the government to be resilient in their actions.

CHAPTER FIVE

INTERNATIONAL CLIMATE REGIMES AND CCM IN NIGERIA: A HR BASED APPROACH

5.1 Introduction

CC is serious global problem. Nigeria ratified the United Nations Framework Convention on CC as non-Annex 1 party on the 29th of August, 1994.⁴⁷⁷ Nigeria also ratified the KP and the PA in 2004 and 2017 respectively.⁴⁷⁸ The chapter chronologically discussed international legal frameworks on CC, starting from UNFCCC to PA. The Chapter will thoroughly analyze the PA vis-à-vis HRs. This chapter also discussed efforts made so far by Nigeria to mitigate the effects of CC and will also consider a right base approach to an efficient framework on CCM and regulation in Nigeria.

This chapter adopted both empirical and doctrinal research methods. 501 Questionnaires were issued across all the geopolitical zones in Nigeria. Governmental agencies responsible for CC governance in Nigeria (the Department of CC (DCC), Federal Ministry of Environment; DPR, Federal Ministry of Petroleum Resources; NESREA; and NOSDRA were also interviewed to ascertain their efforts towards CCM and whether to adopt a right base approach. DCC was selected for interview being that it is Nigeria's Focal Point for the Implementation of the UNFCCC, KP and the PA on CC; and as so,

⁴⁷⁷ Oyedele and Onu (2021) supra 1.

⁴⁷⁸ Ibid.

coordinates all CC adaptation and mitigation actions in Nigeria.⁴⁷⁹

National Environmental Standards and Regulations Enforcement Agency (NESREA) was equally selected and interviewed because Section 7(c.) of the NESREA (Amendment) Act 2018 gives NESREA the power to enforce and ensure the compliance in Nigeria environmental related multilateral agreements. Since the Jurisdiction of NESREA does not extend to the oil and gas industry by virtue of the NESREA (Amendment) Act 2018, we then interviewed the DPR, Federal Ministry of Petroleum Resources which have the sole power to regulate the oil and gas industry in Nigeria; and also, NOSDRA which is an independent agency of the government that detects and responses to oil spills in Nigeria.

This chapter also analyses the Nigeria's NDC (NNDC) which contains Nigeria's pledged commitment to the PA. The NNDC identified five key sectors that need urgent attention in order to mitigate CC in Nigeria. The Sectorial Action Plan (SPA) for each of the sectors will be discussed in order to ascertain whether they adopted a right based approach. This chapter will use the United Nations HRs Based Approach (HRBA) as a benchmark in the assessment of the NNDC Implementation Action Plan for the various sectors. It will also use substantive rights such as rights to health, life, environment, property, religion and minority to measure the execution of these mitigation actions in Nigeria.

Pursuant to Articles 4(1) and 12(1) of UNFCCC, parties to the convention are required to periodically communicate in National Communications (NCs) their CCM and adaptation actions to the secretariat. In fulfilling its reporting obligation under the Convention, Nigeria in 2003 submitted its First National Communication, Second National Communication in February 2014, and Third National Communication (TNC) in April, 2020.⁴⁸⁰ This chapter will also consider the NNDC implementation vis-à-vis the TNC using a right-based approach.

⁴⁷⁹ Oyedele and Onu (2021) supra.

⁴⁸⁰ Ibid.

5.2 International Legal Framework for CCM

CC is a serious global concern. Scientific findings have established that effects of CC are highly catastrophic to man and the environment. Global trepidations about CC and its effect became serious in the 1980s. The United Nations General Assembly proclaimed CC ‘a common concern of mankind’ which requires urgent global response. This section shall examine, the United Nations Framework Convention on CC (UNFCCC) 1992, its KP of 1997, Doha Amendment, and the current PA.

5.2.1 The United Nations Framework Convention on CC (UNFCCC)

In a bid to mitigate or possibly averting the effects of CC, the UN in 1988 established the Intergovernmental Panel on CC (IPCC) a team of over 2000 scientist charged with the responsibility of assessing the risk factors of CC, its possible socio-economic and environmental consequences, and the way forward for mitigation and adaptation. In 1990, the IPCC published its report which called for urgent international legal and policy framework to tackle CC.⁴⁸¹ Due to growing political concerns about the increasing concentration of GHG and the need to reduce global GHG emissions, 180 countries during the Rio Conference on Environment and Development (also known as Rio Earth Summit) in 1992, adopted the United Nations Framework Convention on CC (UNFCCC) along its sister conventions.⁴⁸²

The United Nations Framework Convention on CC (UNFCCC) opened for signature on the 9th of May 1992 pursuant to its article 22 which required same convention to be ratified, accepted, approved and accessed by states and regional integration organizations. However, it came into force on the 21st of March 1994 pursuant to its article 23, after it recorded its 50th ratification, acceptance, approval and accession. Presently, 196 countries and 1 regional integration organization have ratified, accepted, approved, and accessed the UNFCCC.

UNFCCC defined CC as ‘a change of the climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in

⁴⁸¹ IPCC, (2021) supra.

⁴⁸² The United Nations Framework Convention on CC (UNFCCC), 1771 UNTS 107. See Ibid. The sister conventions are the UN Convention on Biological Diversity; and the Convention to Combat Desertification.

addition to natural climate variability observed over comparable time periods.⁴⁸³ The aim objective of UNFCCC is to attain the stabilization of atmospheric GHGs concentration ‘at a level that would prevent dangerous anthropogenic interference with the climate system.’⁴⁸⁴ It seeks to address the global concern of change in the earth’s climate which has adverse effect on the environment and humankind.⁴⁸⁵

5.2.1.1 Major Provisions of the UNFCCC

The preamble of UNFCCC reiterated on states right to harness and exploit natural resources in accordance with the states’ environmental and development laws and policies; and the overreaching responsibility of ensuring that such activities do not result into damage to the environment of other states.⁴⁸⁶ The preamble so urged parties to promulgate environmental legislations. The Preamble also places emphasis on remediation of the effects of CC on developing countries, knowing fully well that current effects of CC is rooted on industrialization. It also acknowledges the vulnerability of developing countries to the effects of CC and the need to give them special consideration in global remedial efforts.

CC was defined under article 1 of the convention. CCM denotes exertions developed to prevent or reduce the emission of GHGs, whereas CC adaptation denotes exertions focused on coping with the effects of CC that cannot be avoided. These efforts include policy adjustments and infrastructural modifications, aimed at ameliorating the anticipated effects of CC.

Article 2 of the convention sets out the primary objectives of the convention which is to stabilize the atmospheric concentration of GHGs at a level that will avert anthropogenic activities from interfering with climate system. Article 3 of UNFCCC outlined the foundational principles on which the convention was anchored on, to wit: the principles of sustainable development, precaution, common but differentiated responsibility, and prevention. The regulatory tool for compliance under the convention was commitment of the parties to reduce their levels of GHGs emissions.⁴⁸⁷ Article 4 sets out the parties’

⁴⁸³ Article 1(2) of UNFCCC

⁴⁸⁴ Article 1 of UNFCCC

⁴⁸⁵ Preamble, *ibid.*

⁴⁸⁶ *Ibid*

⁴⁸⁷ *Ibid*

commitment under the convention which is to develop and publish national inventories of cradles anthropogenic GHGs emission; develop and implement national and regional adaptation and mitigation measures; cooperation, technology, knowledge transfer and information sharing; and communication to Conference of Parties (COP) of implementation information in accordance with article 12.

The convention under its annex 1 and II listed the developed countries; these developed countries are obligated to adopt national policies and take corresponding measures on CCM by reducing their anthropogenic GHGs emissions and enhancing GHGs gas reservoirs and sinks.⁴⁸⁸ These parties may individually and collectively implement such policies as stated above. These parties listed under Annex I and II of the convention are obligated to financially assist and support developing countries in meeting up with their commitment under Article 12 of the Convention. They are also to support developing countries in meeting up with their obligation through knowledge and technology transfer.⁴⁸⁹

The convention established two institutional bodies, to wit: Conference of Parties (COP) and the Secretariat. The COP is established under article 7 of the convention and is charged with the responsibility of reviewing the implementation of the convention and other related legal instruments. It is further charged with the duty of periodically examining the obligations of parties under the convention; facilitating and supervising technological transfers; assessing the implementation of the convention by parties; creating of subsidiary bodies; and publishing periodic reports. Article 8 of the convention established the Secretariat of the convention with the responsibility of arranging for sessions of the COP and its subsidiary bodies; compiling and transmitting of information and reports to parties; preparing and transmitting reports of its activities to COP; corresponding with secretariat of other relevant international bodies amongst others. Article 9 established a subsidiary body for Scientific and Technological Advice, which is charged with the responsibility of providing the COP with timely information and advice on scientific and technological issues relating to the convention. Article 10 created another subsidiary body (Body for

⁴⁸⁸ Ibid

⁴⁸⁹ Article 5 and 6 of UNFCCC

Implementation) with the responsibility of assisting the COP with the assessment and review of the effective implementation of UNFCCC.

The dispute resolution mechanism under the convention was set out in Article 14 to the effect that parties are to settle disputes through negotiation or any other peaceful means of their choice; and where such fails, to voluntarily agree to submit the dispute to the International Court of Justice (ICJ), and/or arbitration. In the event that parties fail to resolve such dispute through the means outlined above, then, the dispute shall be submitted to conciliation at the request of the parties.

It is pertinent to note that the UNFCCC failed to set quantitative limits for GHG emission reduction for parties, this fundamental flaw was necessitated by the opposition of such limits by some global heavyweights led by the United States of America.⁴⁹⁰ Though no legally binding GHG emission target was reach under UNFCCC, it nevertheless established a commitment by the parties to work towards reducing GHG emissions globally. The convention seeks to stabilize the concentration of GHGs emanating from anthropogenic activities with the earth climate system. However, it did not define the desired level of concentration that is allowed, it only permitted a level that is not dangerous.⁴⁹¹

The convention also failed to make provisions for HRs consideration in the global efforts towards the stabilization of GHGs at a level that would prevent interference with the global climatic system. The reason may be because the world was more interested in securing the environment, then, attention was not paid to the HRs implication of both CC; and the stabilization of the GHGs concentration in the atmosphere in manner that will not interfere with climate system.

5.2.2 The Kyoto Protocol (KP)

Just as it was noted in the preceding discussion, the UNFCCC with all its lofty ambitions did not create a legally binding GHG emission reduction targets and commitments for parties. The convention only urged and encouraged parties to tackle CC, but did not create

⁴⁹⁰ Olawuyi (2013), *supra*.

⁴⁹¹ Olawuyi, D.S. 2015. (*supra*) 110.

any binding obligation for them to do so; nor any penalty for failing to do so. This fundamental lacuna sprouts a need for a protocol to address this major flaw.

The first Conference of Parties to UNFCCC was held at Berlin, Germany in the year 1995 to discuss the need for a legally binding emission reduction target for parties as a stronger response to the menace of CC.⁴⁹² However, it was in December 1997, at Kyoto, Japan that a legally binding GHG emission reduction commitment by parties was reached, which entered into force in February, 2005. The KP instituted legally binding GHGs emission reduction targets for parties in order to reduce the concentration of GHG in the atmosphere.

KP is adjudged among the most important international instruments of the late 20th century, for setting GHG emission target for industrialized countries to be achieved by 2012,⁴⁹³ and also for providing three project-based flexible mechanisms by which developed countries (annex 1 nations) can achieve their emission reduction targets.⁴⁹⁴ KP does not make provision for reservation.⁴⁹⁵ KP did not only place any emission reduction commitment on developing countries, but allowed them to engage in emission trading with developed countries (annex 1 nations).⁴⁹⁶

Under KP the annex I nations were given emission reduction target set at 5% over 1990 levels, and some developed countries like Australia, are equally permitted to increase their emissions. The justification for the variation of responsibilities from country to country emanates from the historical foundation of CC and the fact that CC is a common concern of humanity; hence, the ultimate goal of KP is to ensure that average emission decline is collectively achieved.⁴⁹⁷ The KP reduction target is based on the principle of common but differentiated responsibilities (CBDR). This approach has elicited criticisms on the basis that the concept of CBDR aimed by KP has failed being that what actually emerged is ‘not

⁴⁹² Olawuyi, D.S. 2015. (supra) 113.

⁴⁹³ KP, Article 3(1).

⁴⁹⁴ Olawuyi, D.S. 2015. (supra) 113.

⁴⁹⁵ KP, article 26.

⁴⁹⁶ Ibid, article 17.

⁴⁹⁷ Ibid.

common responsibilities but outright exclusion leading to exclusive and not common responsibilities.⁴⁹⁸

It is contended that KP seems to have gone too far with the different responsibilities,⁴⁹⁹ whilst loosing track of the first part of the principle- common responsibilities.⁵⁰⁰ This arrangement is largely believed to have affected the effectiveness of KP. The reason being that, though developing countries did not essentially cause the climate problem, or rather contributed minimally to it; but their continued unfriendly environmental developments and population growth have begun to considerably function inimically to the long-term goals of KP.

In 2001, the comprehensive rules for the implementation of KP commonly referred to as the ‘Marrakesh Accords’ was adopted in Marrakesh, Morocco. This accord was the basis for further innovations whereby developing nations were to be assisted with technology transfer through funds.⁵⁰¹

KP introduced three flexible emission reduction mechanisms which will afford developed nations opportunity to pursue their GHG emission reduction goals by investing in emission reduction projects, especially in developing nations where same can be achieved at a lower cost.⁵⁰²

It should be noted that at the Conference of Parties (COP) 16th session held between November and December, 2010 at Cancun, the Green Climate Fund (GCF) was established in section IV under paragraph 102 of the Cancun Agreement.⁵⁰³ The GCF was established pursuant to article 11 of the UNFCCC which deals on the financial mechanisms of the convention. The main objective of GCF is to support projects, policies, programmes and

⁴⁹⁸ Ibid

⁴⁹⁹ Green, B.A. 2009. Lessons from Montreal Protocol: Guidance for the next International CC Agreement. *Environmental Law*. 39, 270-271.

⁵⁰⁰ Ibid

⁵⁰¹ Ibid

⁵⁰² These mechanisms shall be discussed below

⁵⁰³ The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention I, para 1. Retrieved online June 22, 2020 from <http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=17>, p. 1

their incidental activities in developing country Parties to the convention using thematic funding windows.

5.2.2.1 The Doha Amendment to the KP

Following the expiration of the first commitment period under KP in 2012, the KP Conference of Parties (COP) meet on December 8, 2012, at Doha, Qatar, for their eighth conference (COP18) where they substantially amended the Protocol to include a second commitment period to run from 2013 to 2020.⁵⁰⁴

The Doha Amendment made some significant changes where the annex I nations made new commitments starting from January 4, 2013, to December 31, 2020. The amendment also revised the list of GHGs that parties are expected to report on under the second commitment.⁵⁰⁵ It also amended several articles of the KP which specially related to the first commitment period that needed to be updated under the second commitment period. Significantly, parties agreed to reduce GHG emissions by at least 18% below 1990 levels within the second commitment period.⁵⁰⁶ The composition of parties under the second commitment differed from the first commitment.

It should be noted that at the Durban, COP17 decided that non annex I countries should submit a Biennial Update Report (BUR) which would contain information on updates on their national GHG inventories, mitigation actions, challenges and supports received.⁵⁰⁷ Nigeria submitted her BUR1 on the 17th of March, 2018.⁵⁰⁸ Nigeria on the 2nd of October, 2020 ratified the Doha Amendment to the KP to UNFCCC becoming 144th party to do so.⁵⁰⁹

⁵⁰⁴ This amendment is commonly called the Doha Amendment, see Doha Amendment, retrieved January 4, 2020 from http://unfccc.int/kyoto_protocol/doha_amendment/items/7362.php.

⁵⁰⁵ GHGs listed under Annex A of KP include: Carbon di oxide (CO₂); Methane (CH₄); Nitrous oxide (N₂O); Hydro fluorocarbons (HFCs); Perfluorocarbons (PFCs); and Sulphur hexafluoride (SF₆). The Doha Amendment 2012 included the 7th gas- Nitrogen trifluoride (NF₃).

⁵⁰⁶ Eight years (from 2013-2020)

⁵⁰⁷ This is contained in annex III to decision 2/CP.17 'UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention' of the COP held at Durban between November 28-December 11, 2011. Retrieved online May 12, 2020 from <https://unfccc.int/documents/7109#beg>.

⁵⁰⁸ See Biennial Update Report Submissions from Non-Annex I Parties, retrieved online May 12, 2020 from <https://unfccc.int/BURs>.

⁵⁰⁹ Nigeria ratifies the Doha Amendment to KP on CC. Retrieved October 3, 2020 from <https://www.premiumtimesng.com/news/more-news/418089-nigeria-ratifies-doha-amendment-to-kyoto-protocol-on-climate-change.html>.

5.2.2.2 Emission Reduction Mechanisms under the KP

Parties under KP are expected to primarily meet their emission reduction target through national measures (domestic actions).⁵¹⁰ In addition to the national measures, KP designed three flexible green investment emission reduction targets. The mechanisms are:

- a. The Joint Implementation (JI)
- b. International Emission Trading (IET)
- c. The Clean Development Mechanism

5.2.2.2.1 The Joint Implementation (JI)

JI takes place between two industrialized countries.⁵¹¹ JI is a project-based mechanism which affords industrialized nations avenue to meet their emission reduction target by investing in joint emission reduction or removal projects in another country, and as such earn emission reduction credits (emission reduction units ERU) arising from such projects.⁵¹²

This mechanism affords developed nations a flexible approach of meeting with their obligated emission reduction targets by investing in emission reduction projects in other countries, and earning ERU from them; then the host country benefits in the area of foreign investment and technology transfer.⁵¹³

The JI is beneficial to industrial nations that are leading in GHG emission being that it is more cost effective to finance projects abroad, and continue with their domestic emissions. It is pertinent to note that JI is limited in that domestic emission reduction remains the primary source of meeting with obligations under KP, while JI only supplements such domestic actions.⁵¹⁴

⁵¹⁰ Article 17 of KP.

⁵¹¹ Article 4 and 17 of KP

⁵¹² Article 6 of KP.

⁵¹³ See Joint Implementation, United Nations Framework Convention on CC. Retrieved January 6, 2020 from http://unfccc.int/kyoto_protocol/mechanisms/joint_implementation/items/1674.php.

⁵¹⁴ Green, B.A. 2009. Lessons from Montreal Protocol: Guidance for the next International CC Agreement. *Environmental Law*. 39, 270-271. 272.

The Joint Implementation Supervisory Committee is the body charged with the supervision of JI projects from eligibility to execution.⁵¹⁵ For a project to be eligible under JI, such a project must provide emission reduction by source or improve removal of emission by sinks; in addition to having the consent of the host country and other participants first sought and had.

JI mechanism made provision for two procedures, to wit: Track 1 and Track 2 procedures.⁵¹⁶ The Track 1 procedure is a simplified one which allows the host party that has met the eligibility requirements under the JI Guidelines to verify anthropogenic GHG emission reductions by sources or enhancements of anthropogenic GHG removal through sinks from the Project. The host party issues the financing party with appropriate ERU upon verification of such projects in accordance with the relevant guidelines and provisions.⁵¹⁷

The Track 2 procedure applies to host parties that ordinarily did not meet the eligibility requirements under the JI Guidelines. In this case, the verification procedure of the anthropogenic GHG emission reductions by sources or enhancements of anthropogenic GHG removal through sinks from the Project shall be done by a Joint Implementation Supervisory Committee's accredited independent entity before the host party can issue a ERUs to the financing party.⁵¹⁸ It is germane to note that a party eligible for JI under the guidelines may opt for both the Track 1 and Track 2 procedures.

Although Nigeria is a party to KP,⁵¹⁹ she is however not among the parties involved in the Joint Implementation Mechanism Projects.⁵²⁰

5.2.2.2.2 The International Emission Trading Mechanism

The Emission Trading (ET) mechanism is premeditated to support industrial nations in meeting their emission reduction obligation under KP.⁵²¹ ET is a commodity exchange mechanism that allows industrial nations to trade (buy and sell) emission credits and

⁵¹⁵ Ibid.

⁵¹⁶ Ibid.

⁵¹⁷ Ibid.

⁵¹⁸ Joint Implementation Guidelines.

⁵¹⁹ UNFCCC, retrieved January 7, 2020 from <http://maindb.unfccc.int/public/country.pl?country=NG>.

⁵²⁰ UNFCCC, retrieved January 7, 2020 from http://ji.unfccc.int/JI_Parties/index.html.

⁵²¹ Article 17 of KP.

allowances. Under this mechanism, private and public entities that develop clean technologies to advance energy efficiency are credited with incentives, to wit: that the more efficient the technologies become, the more credits they have at their disposal to sell or the less credits they may have to buy from others.⁵²²

This is very germane to note that like the JI mechanism, the ET mechanism is limited in operation, and as such, supplemental to domestic actions for GHG emission reduction.⁵²³

ET allows countries with excess or unused emission reduction units (ERUs) to spare, to sell such excess capacity to other countries which are yet to meet their targets.⁵²⁴ Because of this, the principal GHG gas carbon di oxide is now tracked and traded in the carbon market like any other commodity.⁵²⁵

The protocol mandates parties to maintain a minimum ERU reserve in their nation registry; this is to forestall parties from going overboard by selling ERUs to a point that they will not be applied to meet with their own targets under KP. Hence, KP established a registry system⁵²⁶ for the tracking and recording of transfers and acquisitions of these units.⁵²⁷

Although Nigeria is a party to KP,⁵²⁸ she is however not among the parties directly involved in the emission trading, however, certified emission reduction units (CER) earned from clean development projects carried out in Nigeria by a developed nation can be traded by such a developed nation.

5.2.2.2.3 The Clean Development Mechanism

The Clean Development Mechanism (CDM) is the only mechanism in the Protocol that allows for participation of developing countries. The essence of this mechanism is to foster

⁵²² Green 2009 (supra) 273.

⁵²³ Adejumo 2017, (supra), 79.

⁵²⁴ Article 17 of KP.

⁵²⁵ Green, 2009. (supra) 273. Apart from actual emission units, other transferable units under the International Emission Trading

⁵²⁶ International Emission Trading, retrieved January 7, 2020 from http://unfccc.int/kyoto_protocol/mechanisms/emissions_trading/items/2731.php.

⁵²⁷ Ibid. Emission reduction units between countries is secured through an international transaction log.

⁵²⁸ UNFCCC, retrieved January 7, 2020 from <http://maindb.unfccc.int/public/country.pl?country=NG>.

sustainable development in developing countries in order to achieve the objectives of the protocol.⁵²⁹

Some scholars have referred to CDM as Kyoto Surprise, because it was introduced late into the negotiation for the Protocol.⁵³⁰ The mechanism is a trailblazing initiative that seeks to bridge the gap between developed and developing countries. This mechanism makes developed countries earn emission credit when they finance projects in developing countries that lead to emission reduction and improvement in energy efficiency; thereby promoting transfer of technology.

CDM is the first international environmental investment and credit scheme which provided for a standard emission offset instrument- Certified Emission Reductions (CERs).

The main different between CDM and JI is that whereas CDM involves a developed country carrying out an emission reduction project in a developing country; JI involves a developed country carrying out an emission reduction project in a developed country. CDM has two major goals; to help Annex I countries meet their emission reduction targets, and to achieve sustainable development in non-Annex I countries⁵³¹ where the projects are executed.

Article 12 of the Protocol sets out the objective of the CDM which is to avail the non-Annex I parties' opportunity to attain sustainable development and ultimately contribute to the achieving of the primary goal of the Protocol; and aide Annex I countries to also meet their emission reduction target under article 3 of the Protocol.

Like the JI mechanism, a CDM project must secure the approval of the host country and the sponsoring country or investor's Designated National Authorities (DNA). To ensure integrity, such projects must also be registered with the Executive Board instituted by the UNFCCC.⁵³² The CDM projects help a developing country to sustainably reduce its emission and help the financing country to meet its obligation under the Protocol through this flexible means. The Certified Emissions Reductions (CERs) that are earned by a

⁵²⁹ Green, (supra) 273.

⁵³⁰ Adejumo, 2017. (supra), 81.

⁵³¹ The Non-Annex I countries includes fast growing economies- China, Brazil, India; Least developed Countries (LDCs) and Small Island Developing States (SIDS) with weaker economies and infrastructure.

⁵³² Adejumo, 2017. (supra), 82.

developed nation through CDM projects are carbon credits that traded on developed countries' carbon markets.

The CDM kick started in 2006 and as at now, there are 7,817 registered projects.⁵³³ The CER issued through CDM projects is the source of UNFCCC AF which is derived through the 2% levy on all CERs issued under CDM.⁵³⁴ The AF is used to finance adaption projects and programmes in developing countries that are parties to the Protocol that are vulnerable to the adverse effects of CC.⁵³⁵

Being a market-based mechanism, CDM allows developed countries to choose a developing country of their choice to site their CDM project; and they usually opt for countries that will likely earn them the highest possible emission reduction even if the host country will not maximally benefit from such a project.⁵³⁶ This accounts for the reason many African countries are considered as choice venues for CDM projects,⁵³⁷ and this to a large extent defeats the second goal of the CDM.

The CDM was the most celebrated provision of the Protocol being that it provided for a cheaper channel to meet the targets of the Protocol. Researches show that it cost 50 US Dollars to mitigate one ton of CO2 eq. in a developed country, and the same can be done at 15 US Dollars in a developing country.⁵³⁸

Research has further shown that Africa only accounts for 2% of current project investments, and this could be attributed to the fact that Africa is perceived to be unattractive for CDM investment.⁵³⁹ The Rules for participation in CDM as expounded by the Marrakech Accords outlines the prescribed requirements that must be met by a country that is seeking to benefit from sustainable development visions of the CDM. The said eligibility criteria for participation in CDM projects are:

⁵³³ CDM Project Search, retrieved online February 4, 2020 from: <https://cdm.unfccc.int/Projects/projsearch.html>.

⁵³⁴ What is CDM, retrieved online February 4, 2020 from: <https://cdm.unfccc.int/about/index.html>.

⁵³⁵ Ibid. As at February 4, 2020, the share of AF raised from CDM projects is 39,716,267.

⁵³⁶ Olawuyi, (2011) supra, 273.

⁵³⁷ Adejumo, 2017, (supra), 83.

⁵³⁸ Ibid

⁵³⁹ Green, (supra) 273.

- i. The two participated countries (developed and developing country) must have ratified the KP.
- ii. Participation in the project must be voluntary.
- iii. The government of the developing country must designate a national authority for the CDM that will appraise, approve or reject the project.

Nigeria as a country could only participate in the CDM projects. Nigeria being a major gas flaring nation stood as a good platform for developed nations to invest in CDM in order to reduce tonnes of GHGs in the course of gas flaring reduction projects. Unfortunately, Nigeria seems not to attract this needed attention based on the factors stated above. As at 2018, Nigeria had 11 registered CDM projects, of which 8 projects were for the energy sector, while waste and manufacturing industries had 2 and 1 project respectively.

5.2.2.2.4 Factors that Militated Against the Implementation of CDM

Although the CDM is the only one out of the three mechanisms created by the protocol that developing countries (including Nigeria) can participate in, there exist some factors that militate against the implementation of this mechanism in such developing countries (especially Nigeria), and they are:

a. Non-Domestication of the Protocol and Lack of Domestic Legal Framework for CDM

Though Nigeria is a signatory to the KP, Nigeria has not domesticated the Protocol as required under section 12 of the 1999 Constitution of the Federal Republic of Nigeria, so that a local legislation can be enacted cover CDM.⁵⁴⁰ This is the reason why there is a dearth of local legislation on CDM in Nigeria, and there is no legally acknowledged Domestic National Authority (DNA) in Nigeria.⁵⁴¹ CDM investors are wary of investing in countries where there is no specific legislation that legally protects their investment.

⁵⁴⁰ In countries like Nigeria, Sierra Leone, Ghana, Liberia and Gambia treaties and international laws. Olawuyi 2011. *supra*, 284.

⁵⁴¹ Olawuyi, (2011) *supra*, 284.

b. Lack of Urgent Interest in Environmental Issues

Nigeria is a developing country that is bedeviled by several issues ranging from poor economy to insecurity, to political instability, to infrastructural deficits, to health system decay, to corruption among others. Hence, environmental issues seem not to be a great concern to succeeding Nigerian governments. This is buttressed in the way and manner the government carries out implementation and enforcement mechanisms for the tackling of environmental concerns. In the few cases that the government had actually been involved in addressing environmental concerns, such efforts are channeled more to the financial benefits that the government stand to gain from such measures than environmental protection. For instance, Nigeria is a leading country in gas flaring globally, however, the Nigerian government is concerned about the issue from the angle of revenue loss by the government and not the negative impact of same on the environment.⁵⁴²

c. Inadequate Power supply

Instability of power supply in Nigeria is a major factor that made Nigeria unattractive to foreign investments including CDM projects. The need to generate alternative steady sources of energy makes the running cost of a project or industry in Nigeria highly inflated. As a result, many foreign investments have closed and there is a steady decline in direct foreign investment in Nigeria.⁵⁴³

d. Lack of Regulatory Framework

Nigeria has an existing legal framework for technological transfer.⁵⁴⁴ The said regulatory framework (NOTAP) is completely silent on transfer technology through CDM. The Law has also been criticized for failing to clearly lay down the procedure

⁵⁴² Adejumo, 2017. (supra), 83.

⁵⁴³ Okafor, E.E. 2008. Development Crisis of Power Supply and Implications for Industrial Sector in Nigeria. *Study Tribes Tribals*. 6:2, 87.

⁵⁴⁴ National Office for Technology Acquisition and Promotion Act Cap. N62 LFN, 2004. (NOTAP)

for transfer and acquisition of technology in Nigeria. The mode of screening under the Act is grossly inadequate for technologies coming into Nigeria.⁵⁴⁵

5.2.2.2.5 How CDM as a CCM Project Violated HRs: A Case of the Kwale Project

This thesis shall here consider the Kwale Gas Flaring Reduction Project in Nigeria, an EB approved CDM project that its implementation has infringed on HRs. The Kwale gas flaring project (a CDM project) was approved by the Nigerian government in 2006. The core objective of the project was to address the persistent problem of gas flaring in Nigeria by recapturing and recovering associated gases that could have been flared at the Kwale Oil-Gas Processing Plant (OGPP). This project involves the capturing of a substantial quantity of flared gas at Kwale plant and transporting same through a pipeline to Okpai combined cycle power gas turbine to generate electricity.⁵⁴⁶ The project commenced in 2006, and as at 2010, the project was estimated to have reduced emission to a ton exceeding 791,325 tons of CO₂ eq.⁵⁴⁷

The project has a good prospect if properly implemented. However, several protests and petitions bothering on HRs violations has trailed the approval of this project despite the ‘clean’ benefits of the project. There were more negative reactions that trailed the approval of the kwale project.⁵⁴⁸ Firstly, the EIA of the project was not transparent. Environmental organizations raise the concern of leakage on the long term because of the low capacity of the storage formations or escape of gas through the use of low-density seals.⁵⁴⁹ Escape of gas will lead to serious health challenges for persons in Nigeria. Too much concentration of carbon dioxide in the soil will result into acidification of the soil which will affect the fertility of the soil. This is more problematic for Nigerians that depend mainly on small scale farming for their daily food. The exponents of the project failed to address this concern both on the short- and long-term basis in the environmental impact assessment of the project.

⁵⁴⁵ Adejumo, 2017. (supra), 89.

⁵⁴⁶ Ibid, 2.

⁵⁴⁷ Ibid, 3-4.

⁵⁴⁸ See O.J. Oyedele & K.O.N. Onu (2022), supra. n. 348.

⁵⁴⁹ Olawuyi, (2013) supra 66.

Secondly, the proponents of the plan failed to avail the concerned dwellers and of Kwale with detailed information about the project. The organizers also failed to seek and secure the informed consent of the indigenes in the planning, approval, and implementation of the Kwale project.⁵⁵⁰ The lack of information and involvement of stakeholders in the preparation, approval, and execution of the project is the main reason for large opposition to the venture by the Kwale people.⁵⁵¹

Despite the protests and campaigns by environmental groups in Nigeria, the project was approved as a sustainable CDM project by the Nigerian Government. The EB has also listed the venture.⁵⁵² It accentuates the requirement for an increasingly straightforward, responsible and rights-based procedure for endorsing and enrolling CDM projects.

5.2.3 Paris Agreement

The PA⁵⁵³ (PA) entered into force on the 4th of November 2016 after several past diplomatic failures. It has been described as a ‘phoenix from the ashes’ of such failed diplomatic endeavors, and a colossal victory for mankind and our planet. Nigeria signed the agreement on the 30th of March, 2017, and 186 other countries have also ratified the agreement, out of the 197 signatories to the UNFCCC, which represent over 90 percent of global anthropogenic GHG emissions. The PA remains in force despite the fact that the United States of America have initiated formal moves to withdraw from the agreement.⁵⁵⁴

The central mitigation theme of the PA is to hold ‘the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of CC.’⁵⁵⁵ The idea of 1.5 °C temperature objective in the agreement was championed by island nations and under developed countries

⁵⁵⁰Ibid.

⁵⁵¹ Ibid

⁵⁵² Ibid.

⁵⁵³ PA. Retrieved January 9, 2020 from https://unfccc.int/sites/default/files/english_paris_agreement.pdf

⁵⁵⁴ On July 1, 2017, U.S. President hinted that the USA will be withdrawing from the PA; on November 4, 2019, the USA formally notified the UN of her intention to withdraw the Agreement which will be effective exactly a year from the date of the notification, which is November 04, 2020 based on article 28 of the PA. See US Begins Formal Withdrawal from PA, retrieved January 8, 2020 from <https://sdg.iisd.org/news/us-begins-formal-withdrawal-from-paris-agreement/>.

⁵⁵⁵ Article 2(1)(a) of PA

who are obviously the most vulnerable people to the effects of CC.⁵⁵⁶ The world therefore faces a mitigation challenge of abiding to an emission budget that will enable her achieve or meet the set goal. The emission budget (also referred to carbon budget)⁵⁵⁷ is more useful when compared with emissions in a single year, being that it is a cumulative emission of GHGs in the atmosphere which results into CC. It is therefore apposite to state that the achievement of the global emission reduction goal of the PA is largely dependent on urgent, sustained, and substantial mitigation of GHG emissions. Article 4 of the PA is to the effect that the parties agree to work assiduously in achieving the global temperature goal of the agreement set out in article 2 within the first half of this century. Bennett posited that a careful reading of article 4(1) of the agreement suggests a net-zero emission goal, and same is more actionable than the temperature goal set by the agreement generally pursuant to article 2.⁵⁵⁸ He further noted that this net-zero goal is a global collective one, which does not place obligation on individual parties, however, such goals easily transpose to national levels.⁵⁵⁹

It is important to note that the PA does not cover emissions from aircraft and marine craft.⁵⁶⁰ We submit that this is a big concern being that aircrafts and marine crafts are among the biggest emitters of GHGs.

5.2.3.1 Parties' Commitments and Review Mechanisms under the PA

The PA did not set emission reduction targets for parties as was done by the KP. It rather made parties to make pledges, which it called the Nationally Determined Contribution (NDC). PA is based on pledge and review system whereby parties pledge their post 2020 climate action known as NDC which shall be revised every 5-years and be communicated to the secretariat.

⁵⁵⁶ See Bennett, M. 2018. The Role of National Framework Legislation in Implementing Australia's Emission Reduction Commitments under the PA. *University of West Australia Law Review*. 43, 19.

⁵⁵⁷ See Ibid

⁵⁵⁸ Bennett, 2018. (supra) 22.

⁵⁵⁹ Ibid

⁵⁶⁰ United Nations Environment Programme (UNEP) 2017. The Status of CC Litigation- A Global Review. Retrieved online March 16, 2020 from <http://hdl.handle.net/20.500.11822/20767>. P. 5

All parties are to prepare their NDCs and submit same to the secretariat.⁵⁶¹ However, the content of the NDC differs from party to party. PA's NDC mechanism addressed the criticism of KP of not being truly based on the principles of common but differentiated responsibilities (CBDR); on the ground that same lost track with the first part of the principle- common responsibilities, while going too far with different responsibilities. This was because of the fact that no binding obligation (responsibility) was placed on developing countries under KP. Under PA, all the parties are expected to prepare their NDC, though with differentiated commitments. Article 4(4) of the PA expects developed nations to continue to maintain the lead in GHG emission reduction by engaging in economy-wide total emission reduction targets; on the other hand, developing countries are exhilarated to gradually move towards economic-wide GHGs emission reduction or limitation in accordance with their different national circumstances. Article 4(3) suggests a glimpse into the how the agreement intends to achieve its long-term collective temperature goals through the instrumentality of parties' NDCs anchored on the common but differentiated principle.

As at January 9, 2020, 184 parties to the PA have submitted their first NDCs; and 2 parties have submitted their second NDCs and they are all recorded in NDC registry situate at the secretariat pursuant to Article 4(12) of PA.⁵⁶² It is pertinent to note that current registered NDCs are not adequate enough to meet the collective temperature goals of the PA. It is however hoped that successive NDCs will gradually reinforce the desired mitigation efforts.

Parties are permitted under PA to adjust their registered NDCs at any time in order to enhance its ambition level.⁵⁶³ The NDCs are to be reviewed and communicated to the secretariat every five years. The subsequent communications must content the parties' progress report on the implementation of her previous NDCs,⁵⁶⁴ and reviews of those reports by technical experts.⁵⁶⁵ The agreement also provided that NDCs should be informed by

⁵⁶¹ Ibid

⁵⁶² See NDC Registry, Retrieved January 9, 2020 from <https://www4.unfccc.int/sites/ndcstaging/Pages/Home.aspx>.

⁵⁶³ Article 4(11) of PA

⁵⁶⁴ Article 13(7) of PA

⁵⁶⁵ Article 13 (11) of PA

global ‘stock take’ of collective progress towards achieving the collective targets.⁵⁶⁶ The PA seeks to enflame the emission level of successive NDCs pursuant to the progression requirement in its Article 4(3).

The strength of this enflame mechanism particularly regarding the debate of whether a party can downgrade the level of ambition in her NDC took the center stage in the wake of President Trump’s election, to wit: whether the USA could downgrade her NDC instead of opting out of the agreement. The first view is that it is possible for parties to downgrade being that article 4(11) allows parties to adjust their NDCs.⁵⁶⁷ The other view which is more acceptable is that the purport of article 4(11) is to the effect that NDCs can only be adjusted with a view of enhancing its level of ambition.⁵⁶⁸ Downgrading of NDC will undermine the enflaming mechanism of PA and its requirement that successive NDCs should be a progression beyond the preceding NDCs.⁵⁶⁹

As noted above, NDCs for developed nations should contain, ‘economy-wide absolute emission reduction targets.’ How can emission reductions outside a developed country by the said developed country (international offsets) be counted towards the targets of such a country? The PA laid foundation mechanisms for international offsets. The mechanisms involve a voluntary engagement in a cooperative manner which requires the use of globally transmitted mitigation results for NDCs.⁵⁷⁰ Aside for the requirement of detailed accounting in line with the guideline to be published by Conference of Parties (COP), parties are at liberty to decide the modalities of these arrangements. These arrangements may as be suggested by Stavins extend to emission reduction units trading linked to national or sub national emission trading schemes. More reach is needed on this aspect of the agreement to clearly define this recondite innovation.

⁵⁶⁶ Article 4(9) and (14) of PA.

⁵⁶⁷ Bimiar, S. and Bondamsky, D. 2017. *Legal Issues Related to the PA*, Center for Climate and Energy Solution, 1. Retrieved January 10, 2020 from <https://www.c2es.org/site/assets/uploads/2017/05/legal-issues-related-paris-agreement.pdf>

⁵⁶⁸ Bennett. 2018. (supra), 24.

⁵⁶⁹ Ibid

⁵⁷⁰ Article 6(2) of PA.

Although NDC remains the principal mitigation framework under the PA, the agreement however encouraged its parties to develop and adopt a long term GHG emission mitigation strategy.⁵⁷¹ Parties must be mindful of article 2 of the PA in developing this long term strategy.⁵⁷² Germany is the first country to develop and communicate their long term strategy plan called Climate Protection Plan which is composed of emission reduction commitment by 80-90% by the year 2050 compared to 1990 levels. These long-term plans/strategies have the possibility of guiding the setting of short term plans adopted under the NDCs (otherwise called the pledge-and-review mechanism).⁵⁷³

5.2.3.2 Potential Risks with the NDC Mechanism (Pledge and Review Mechanism)

Garrett Hardin's theory of the 'tragedy of the commons' offers a fantastic conceptual lens for the consideration of the dynamics of PA and its pledge and review mechanism. The metaphor deployed by Hardin is that of a common pasture field open to all. Each herder deems it wise to add other animals to his herd which will benefit from the open pasture field and suffer both a fraction of the total cost of over-grazing. Hardin noted that the tragedy lies in the fact that all the herders are stocked in a system that makes them increase their herds without limit in a limited world.⁵⁷⁴ The resultant effect is that each of the herders' individual decision capsule into depletion or even destruction of the pasture. This theory can validly be applied to any open access resources which can be depleted by overuse. Some examples are water resources⁵⁷⁵ and shared fisheries.⁵⁷⁶ CC can also be viewed through this lens.

This tragedy of the commons may rare its head in the implementation of the NDCs under the PA through the misalignment of collective interests and individual incentives. The global temperature goal of the agreement represents the collective interest of all the parties; however, individual parties have the incentive of designing their NDCs as they deem fit. In other words, parties enjoy the individual incentive in their contribution to the collective goal of the agreement to 'shirk, to free-ride on the efforts of others.'

⁵⁷¹ Ibid.

⁵⁷² Article 4(19) of PA.

⁵⁷³ Bennett. 2008. (supra) 27.

⁵⁷⁴ Ibid

⁵⁷⁵ Bennett. (supra) 28

⁵⁷⁶ Ibid

The very first risk is that current NDCs even if fully implemented will not be enough to actualize the temperature goals of the agreement. Although parties have agreed on a global temperature goal of the agreement, there still exist the incentive of free riding on the efforts of others by making inadequate pledges and/or contributions towards achieving it.⁵⁷⁷ This could potentially influence the architectural framework of NDCs in uncountable ways, such as: the adopting of a suitable assumption about BAU (BAU) emissions;⁵⁷⁸ adoption of an economic modelling that inflates the achieving cost of the mitigation targets; the justification of modest targets through the identification of supposed ‘special’ national circumstances.⁵⁷⁹

If PA is contrasted with KP, it will reveal that PA offers parties with emission targets under KP with a more flexible mechanism which a ‘bottom-top’ archetypal for the determination of national mitigation objectives/goals.⁵⁸⁰ It is hoped that successive NDCs which are expected to be progressions from their predecessors fill the gap between the current commitment of parties and what is actually required to attain the global temperature goal; but can this be achieved in the face of strong individual free-riding incentives?

Another risk is that parties may not adopt adequate domestic measures to achieve their NDCs. Unlike the KP (KP) that instituted legally binding GHGs emission reduction targets for parties in order to reduce the concentration of GHG in the atmosphere; the PA pledge and review mechanism is not legally binding, being that same is not backed up with sanction for failure to meet the pledged contribution in NDCs. Being that NDC implementation may take up a decade, a decision like the one above may not be made by the government that designed the NDC. A new administration may be elected with a different perspective towards the implementation of the NDC. Although it is inconsistent with the spirit and

⁵⁷⁷ Ibid, 143.

⁵⁷⁸ This is very important for countries that has as part of their baseline the business-as-usual projections like Nigeria and Republic of Korea. See NDC Registry, Retrieved January 9, 2020 from <https://www4.unfccc.int/sites/ndcstaging/Pages/Home.aspx>.

⁵⁷⁹ For example, reference to Nigeria’s abundant fossil fuel (such as petroleum and coal) as a factor relevant to her level of emission reduction targets.

⁵⁸⁰ Bennett, 2018. (supra) 29.

letters of the PA for a party to submit a revised NDC with lesser ambition,⁵⁸¹ the same objective of a downgraded NDC can still be achieved through inadequate national implementation efforts.

The individual free-ride incentive suggests that a close attention need to be paid to the not only NDCs commitment headlines, but also the feature of domestic legal framework and polices that will be deplored towards achieving them. This is because, failure of a particular party to achieve her NDC will definitely affect other parties, including those that achieved theirs.

Against the aforementioned, the PA did not prescribe punishment or sanctions for non-compliance by parties. To achieve compliance, the PA designed a mechanism that is ‘non-punitive’ which takes the form of ‘facilitative’ expert committee which annually report to the Conference of Parties.⁵⁸² As at present, it is not clear whether the facilitative committee will make findings or pronouncements of non-compliance.⁵⁸³ In any event, parties found to have breached their commitments under the PA by the facilitative expert committee would definitely face hostile reputational consequences. This non-punitive approach will allay the fears of parties (both developed and developing countries) that PA may recreate a KP kind of compliance committee with its attendant enforcement branch and austere compliance consequences.

PA retained the dispute resolution mechanism under article 14 of the enabling convention UNFCCC.⁵⁸⁴ The dispute resolution mechanism under the convention was set out in Article 14 to the effect that parties are to settle disputes through negotiation or any other peaceful means of their choice; and where such fails, to voluntarily agree to submit the dispute to the International Court of Justice (ICJ), and/or arbitration. In the event that parties fail to resolve such dispute through the means outlined above, then, the dispute shall be submitted to conciliation at the request of the parties. By the above dispute resolution mechanism, it

⁵⁸¹ Bennett, 2018. (supra), 24.

⁵⁸² Article 15 of PA.

⁵⁸³ Bennett, 2018. (supra), 30.

⁵⁸⁴ Article 24 of PA.

means that independent judicial resolution of disputes arising from application or interpretation of the PA is limited in scope.

5.2.3.3 PA and HRs

PA is the first environmental treaty to explicitly make reference to HRs, however, the said reference was made in the preamble. It is pertinent to note that predecessors to the PA (UNFCCC and Kyoto) did not explicitly refer to HRs in their preambles or operative articles. The preamble the PA provides that:

Acknowledging that CC is a common concern of humankind, Parties should, when taking action to address CC, respect, promote and consider their respective obligations on HRs, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development as well as gender equality, empowerment of women and intergenerational equity.

The inclusion of HRs to the preamble of the PA is a welcomed development, however, HRs would have been more guaranteed if they were included in the operative provisions of the agreement. The teething question now is, what is the normative value of the preambles of statutes? A school of thought hold the view that preambles that create obligations are expressly allowed under international law.⁵⁸⁵ On the other hand, another school of thought holds the view that a preamble only shows the purpose of a treaty, and only supplements the operative provisions, without by any means creating a substantive obligation.⁵⁸⁶ The second view is in tandem with the position of Nigerian courts on the use of preambles of statutes. In *Babalola vs. Attorney of the Federation and Another*⁵⁸⁷ the court held that:

"A preamble to an enactment, though not part of the body of the enactment, can be resorted to as an aid in interpreting the enactment, especially where there is some difficulty in arriving at the meaning

⁵⁸⁵ Hulme, M.H. 2016. Preambles in Treaty Interpretation. 164 U Pa L Rev 1282 at 1296.

⁵⁸⁶ Ferreira, 2016. (supra), 4.

⁵⁸⁷ (2018) LPELR- 43808 (CA) Per Ikyegh, J.C.A (Pp. 14-15, paras. B-A).

of word used in the enactment vide *Osawe and Ors. v. Registrar of Trade Unions* (1985) 1 NWLR (pt. 4) 755. It is all the more so in light of the fact that a preamble to an enactment is its preface or introduction. Its purpose is to portray or show-case the interest of the framer(s) of the enactment and the mischief the enactment is set out to remedy. Although it may sometimes serve as a key to understanding of the enactment, a preamble is not strictly part of the enactment and so, as a general rule, it may not be resorted to as an aid to interpretation except in special circumstances vide *Chief Ogonna v. The Attorney-General of Imo State and Ors.* (1992) 1 NWLR (pt.220) 647 at 671-672,677,686 and 694 - 905."

However, it all depends on the interpretation of the treaty or the *travaux préparatoires*.⁵⁸⁸ The legal status of the HRs clause provided in the preamble of the PA has generated legal debate.

Annalisa Savaresi and Jacques Hartman, commenting on the referencing of HRs in the preamble of the PA before the agreement was adopted posited that same draws the attention of the Parties to the agreement to HRs obligation that they have ratified in other treaties, customary international law and municipal laws in the implementation of the agreement.⁵⁸⁹ On the other hand, they noted that reference to HRs in the operative articles will for parties that have ratified HRs instruments, link climate actions negotiated under the agreement with existing HRs obligations. Depending on the couching of the reference to HRs in the operative provision, it could as well create HRs obligations for parties to the agreement that have not ratified international HRs instrument.⁵⁹⁰

⁵⁸⁸ Hulme, 2016 (supra), 1300. *travaux préparatoires* a French legal maxim that means preparatory works. It includes materials used in preparing the ultimate form of an agreement or statute, especially of an international treaty. Retrieved January 17, 2020 from <https://definitions.uslegal.com/t/travaux-preparatoires/>

⁵⁸⁹ Savaresi, A. & Hartman, J. 2015. HRs in the 2015 Agreement. *online: Legal Response Initiative Briefing Paper*. retrieved January 17, 2020 from <legalresponseinitiative.org/legaladvice/human-rights-in-the-2015-agreement/> [Legal Response]

⁵⁹⁰ Ibid

The *travaux préparatoires* of the PA does not explain why parties in the course of political negotiation for the PA opted to include HRs only in the preamble and outside of operative provisions.⁵⁹¹

It is important to know that parties have long divergent views as to how HRs should feature in the PA. This divergence has deterred parties to agreeing on including specific HRs features on non-legally binding decisions taken during COPs preceding Paris. Nevertheless, the Cancun agreement as well as the PA are not legally binding. More so, the clause ‘to respect’ is less strong than the UNHRC’s recommended procedure for PA, which was not followed.

The push for explicit inclusion of HRs provisions in the operative articles of the PA was championed by the countries that are greatly vulnerable to the effects of CC.⁵⁹² These include the Island nations, Pacific countries, African, and Latin American nations.⁵⁹³ It is important to note that civil society’s narrative of the negotiation of the PA shows that, two developed nations, USA, and Norway, joined by Saudi Arabia vehemently opposed the inclusion of HRs obligation in both the preamble and the operative provisions of the Agreement.

It appeared that USA and Norway advocated the position of many other developed nations that remained in the background in order not to derail the negotiation. Many of them are particularly interested in a purely environmental treaty, in order to avoid a diversion from the goal of climate adaptation and mitigation.⁵⁹⁴ The concern of others was that the HRs provision may tacitly be interpreted to connote the existence of legal liability for HRs violations arising from lack or in the course of climate action under the agreement.⁵⁹⁵

After several diplomatic alignments and realignments, parties to the PA settled for HRs reference in the preamble of the agreement. The PA is a principal international of post 2020

⁵⁹¹ Doelle, M. 2016. The PA: Breakthrough or High Stakes Experiment? 6:1-2 Climate L 1 at 7.

⁵⁹² Ferreira (supra) 5

⁵⁹³ Ibid

⁵⁹⁴ Ferreira (supra) 6.

⁵⁹⁵ Rowling, M. “Keep HRs in UN Deal to Secure Climate Justice: Robinson”, *Reuters*, Retrieved online January 20, 2020 from: <www.reuters.com/article/us-climatechange-summit-rights-idUSKBN0TR29J20151208>

successive CCM actions. However, it doesn't seem like the Agreement may be amended in foreseeable future to include HRs reference in the operative provisions of the Agreement.⁵⁹⁶

5.2.3.3.1 PA, HRs and Sustainable Development Goals

References to the principles sustainable development is common in recent multilateral treaties that have to do with socio-economic and environmental issues. The universally accepted definition of Sustainable Development (SD) is that of the World Commission on Environment and Development (commonly called the Bruntland's Report) which defined it as 'development that meets the needs of the present generation without compromising the ability of future generations to meet theirs.'⁵⁹⁷ Omaka noted that "the concept of integrated environment safety and development otherwise called sustainable development is now universally recognized. Since it is now imperative to strike a balance between development and sustaining the environment from which the development emanates."⁵⁹⁸

Against the wide believe that this concept is new, we are of the firm view that this concept is as old as the earth. This concept was instituted by God himself at the point of creation when He gave man the mandate to *subdue* and *replenish* the earth.⁵⁹⁹ Mankind over the ages, especially after the Second World War, had religiously obeyed the earlier mandate and paid little or no attention to the latter, thereby putting the earth at the brick of collapse. "The need for integrating the two indispensable tools of human existence is expressed through the notion of sustainable development".⁶⁰⁰

The UN launched the Sustainable Development Goals (SDG) in 2015 which took over from the Millennium Development Goals which elapsed in 2015. The SDGs are aimed at poverty eradication through sustainable development.⁶⁰¹

⁵⁹⁶ Ferreira (supra) 6.

⁵⁹⁷ World Commission on Environment and Development Report, *Our Common Future*. Oxford, UK: Oxford University Press, 1987 pp. 1–8, p. 8.

⁵⁹⁸ Omaka C.A. (2013): *Municipal and International Environmental Law*. Abakaliki, Respoint Ltd. p.107.

⁵⁹⁹ Genesis 1:28, The Holy Bible, King James Version 2003. Texas: Worldwide Printing. P.2.

⁶⁰⁰ Omaka C.A. Op. cit.

⁶⁰¹ Wild, L. and Bergh, G. 2013. Are we making progress with building governance into the post 2015 framework? Available at <http://www.odi.org.uk/publications/7295-progress-governance-post-2015-millennium-development-goals-mdgs> (Last visited on 26th of January, 2015).

Attainment of the SDGs entails the harmonization of three core elements, to wit: economic growth, social inclusion and environmental protection. Sustainable development has as part of its social dimension the respect for HRs recognized internationally. It is important to note that the Millennium Declaration in 2000 by 147 nations of the world set an eight-point global agenda for development (commonly called the Millennium Development Goals or MDGs) and also committed to respect and promote internationally accepted HRs. However, none of the eight-point goals of the MDGs made direct reference and integration of HRs; and pundits have posited that the failure to articulately integrate HRs into the MDGs largely accounted for their bizarre performance.

The MDGs were meant to reduce extreme poverty, forecast gender equality, fight HIV/AIDS, and sustainable environmental development. However, failure to incorporate a right based approach to this global initiative led to a lot of its criticism.⁶⁰² This lacuna of none integration of HRs to MDGs was evidently showcased in the national reports.⁶⁰³ A scholar once posited that MDGs and HRs are like two ships that only pass themselves at night with little or no awareness of the presence or existence of the other.⁶⁰⁴

In September 2015,⁶⁰⁵ leaders of more than 150 countries of the world adopted Sustainable Development Agenda that comprised of 17 goals and 169 agendas. One of the outstanding innovations of the SDGs is the Goal 13 which is on Climate Action,⁶⁰⁶ and the targets of this goal includes some of the UNFCCC commitments. CCM is pivotal to the achievement of SDG 13 and the other SDGs. The Nationally Determined Contributions (NDC) of parties to the PA serve as a bridge between the PA and the Agenda 2030. The 2015 SDGs explicitly made reference to achieving HRs, especially gender equality.⁶⁰⁷ Parties also agreed to integrate and balance the three developmental dimensions mentioned above. Poverty

⁶⁰² Alston, P. 2005. Ships Passing in the Night: The Current State of the HRs and Development Debate Seen Through the Lens of the Millennium Development Goals. *Hum Rts Q.* 27:3. 755 at 757.

⁶⁰³ *Ibid*

⁶⁰⁴ *Ibid* 829.

⁶⁰⁵ Two months before the PA.

⁶⁰⁶ *Ibid*, 14.

⁶⁰⁷ *Ibid*.

alleviation has been identified as a crucial part of that will lead to attainment of the sustainable development goals.⁶⁰⁸

The SDGs did not only integrate HRs into its permeable, but the SDGs goals also themselves had HRs integrated into them. HRs were integrated into the goals themselves through goals targeted at enhancing access to health care,⁶⁰⁹ promoting education,⁶¹⁰ and enhancing access to water and sanitation.⁶¹¹ We concede that most of these goals are not new comers in the field of objectives for global development, however, the SDGs conceptualized more holistically and in more alignment with international HRs than under the MDGs.

A little comparative analysis of the MDG and the SDG will buttress the above position. Goal 1 of the MDG and the SDG seek to tackle poverty. Whereas MDG 1 sought to “eradicate extreme poverty & hunger”⁶¹² by chasing three targets: reducing the proportion of persons earning less than \$1.25 a day to a half between 1990 and 2015; attaining decent employment and full work for all, and reducing the proportion of people suffering from hunger by half between 1990 and 2015.⁶¹³ SDG 1 seeks to “end poverty in all its forms everywhere.”⁶¹⁴ In order to achieve this goal, Parties are expected to meet seven targets that are more ambitious and significant than the targets under the MDG 1.⁶¹⁵

Target 4 of SDG 1 seeks to “ensure [by 2030] that all men and women, in particular the poor and vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.”⁶¹⁶ The SDG used a stronger right language. Parties agreed to attain poverty reduction using a

⁶⁰⁸ Ibid.

⁶⁰⁹ Goal 3.

⁶¹⁰ Goal 4.

⁶¹¹ Goal 6.

⁶¹² UN Millennium Development Goals, Goal 1, retrieved online January 29, 2020 from: <www.un.org/millenniumgoals/poverty.shtml>

⁶¹³ Ferreira (supra) 8.

⁶¹⁴ *Transforming Our World*, (supra) 15.

⁶¹⁵ Ibid

⁶¹⁶ Ibid

right-based approach by instituting that all persons (both men and women) should attain basic services and minimum economic resources.⁶¹⁷

In contrast to the MDGs, the SDGs included an explicit goal concerning accountable and inclusive institutions and access to justice for all.⁶¹⁸ This goal traces on fundamental HRs principles and standards, and the targets include ATI, access to justice, and fundamental freedoms.⁶¹⁹ Lastly, SDG 10 focuses on reducing inequality in incomes and all kinds of discriminations.

Ferreira posited that the substantial integration of HRs principles in the SDGs sets the stage for understanding whether or not the operative clauses of the PA has integrated in HRs norms.⁶²⁰ She further contended that since several references were made in the texts of numerous operative clauses of the agreement, being that HRs are considered to be an integral part of the SDG, it is safe to posit that HRs are considered as fully integrated into the operative parts of the PA where sustainable development shows up.⁶²¹

Specific global legal instruments (whether hard or soft laws),⁶²² can't be comprehended in detachment from one another and from the general body of international laws. Pursuant to article 31(3)(c) of the Vienna Convention on the Law of Treaties, interpretation of a treaty must take into consideration “any relevant rules of international law applicable in the relations between the parties.” The International Court of Justice has also held that treaties should be interpreted and applied in agreement with extant legal systems at the time of the interpretation. Since nations of the world had in 2015 adopted the Sustainable Development Goals encompasses HRs norms and principles, it is right to argue that references to sustainable development in the PA ought to be understood as having HRs dimensions integrated into them.⁶²³ To buttress this argument, it should be noted that sustainable development is not novel to CC agreements as same was integrated in both the UNFCCC

⁶¹⁷ Ferreira (supra) 8.

⁶¹⁸ Goal 16

⁶¹⁹ Ferreira (supra) 8.

⁶²⁰ Ibid

⁶²¹ Ibid

⁶²² Such as the PA, the SDG, trade agreements or HRs treaties.

⁶²³ Ferreira (supra) 9

and the KP. The point is that the SDGs being right based, has permitted HRs to find a place in the operative clauses of the PA that will control climate action from 2020 forward.

Not less than 15 references to Sustainable development were explicitly made in the PA, including its operative clauses. This thesis shall proceed to highlight a few of the most relevant. The operative provision of the PA that is: article 2(1) provides that “this Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of CC, in the context of *sustainable development* and efforts to eradicate poverty.”⁶²⁴

On this operative clause above, Ferreira submitted and we agree with her that “in the context of sustainable development”⁶²⁵ ought to be read to contain components of SDG 16, precisely ATI, involvement in decision making, safeguard of fundamental freedoms, access to justice and equality polices and laws; in addition to other HRs components incorporated in other SDGs.⁶²⁶ PA in its article 4 which deals on the Nationally Determined Contributions (NDC) of the Parties also explicitly made reference to sustainable development when it provided that: “4(1) In order to achieve the long-term temperature goal set out in Article 2, Parties aim ...to undertake rapid [GHG] reductions...on the basis of equity, and in the context of *sustainable development* & efforts to eradicate poverty.”⁶²⁷ We submit that the NDCs remain the major mitigation mechanism under the Agreement and must be given serious consideration.

Hence, we further submit that “in the context of sustainable development”⁶²⁸ ought to be read to contain components of SDG 16, precisely ATI, involvement in decision making, safeguard of fundamental freedoms, access to justice and equality polices and laws; in addition to other HRs components incorporated in other SDGs. We further submit that article 4 of the PA should be read to include SDG 1 on poverty eradication, SDG 2 on improving access to food, SDG 3 on improving access to good healthcare, and SDG 5 on

⁶²⁴ PA, (*supra*) art 2(1) [emphasis supplied].

⁶²⁵ Ibid

⁶²⁶ Ferreira (*supra*) 9

⁶²⁷ art 4(1) of the PA [emphasis supplied].

⁶²⁸ Ibid

achieving gender equality. Hence, the implementation of an NDC must be done in a manner that same does not expose people, especially the vulnerable group to poverty, hunger, disease and discrimination.

Article 6 of the Parties Agreement sets the stage for cooperative mechanisms that will engineer voluntary cooperation for attainment of the objectives of the agreement. The said article 6 provides that “parties shall, where engaging on a voluntary basis in cooperative approaches...promote *sustainable development* and ensure environmental integrity and transparency, including in governance.”⁶²⁹ Sustainable development was also referred to in article 8 that deals on loss and damage, and article 10 that focuses on transfer of technology.

The pressing question now is, what is the implication of the inclusion of sustainable development in the binding and operative provisions of the PA? Ferreira in answering this poser contended that it means that HRs have been incorporated into the binding provisions of the PA; hence, it is safe to conclude that HRs are referenced to both in the permeable and in the operative clauses of the PA.⁶³⁰

Should the implementation of the operative provisions of the PA place a legal demand on parties to adhere to HRs referenced in the principles of sustainable development? Ferreira answered in the affirmative, however, she focused more on parties that are both signatories to the international HRs instruments and the PA.⁶³¹ These kinds of parties are obligated to develop national right based policies and laws for the attainment of their NDCs; which in itself must have HRs flavor. Her reason for not including parties that have not subscribed to HRs instrument(s) was that parties to the PA who are not signatories to international HRs instruments may oppose the interpretation of HRs into the agreement: stating that it is an indirect move of getting them bound to instruments that they have not acceded to. This may frustrate the implementation of the Agreement.

It is our humble view that although HRs flavor may be inferred in the operative provisions of PA because of the several references to sustainable development; but it does not create

⁶²⁹ Emphasis supplied.

⁶³⁰ Ferreira (supra) 9.

⁶³¹ Ibid

any binding legal obligation on the parties to incorporate HRs in the implementation of their NDCs or other mechanisms created under the PA. At most, what it creates is a moral obligation on such parties. The reason for our above submission is that the 2030 Agenda for Sustainable Development is a soft law, hence not legally binding on its parties. If the SDGs on their own right cannot command a legally binding obligation, their incorporation or reference in the PA cannot cloth them with such power.

It is trite principle of law that you cannot give out what you don't have; and you cannot place something on nothing and expect it to stand. Assuming but not conceding that inferred HRs obligation in the PA are legally binding, we humbly disagree with Ferreira on her submission that the HRs obligation in the agreement should be binding on only parties to the agreement that are also parties to international HRs instrument(s). This approach may promote the theory of the tragedy of the common. The temperature goal of the PA is a collective goal, a lopsided demand on HRs will frustrate the efforts of rights compliant parties. Any demand in the Agreement must be collective but at the same time, take note of the common but differentiated principle on which the agreement is anchored.

On this note, we join John Knox to urge the Parties of the PA to amend it to include explicit HRs requirements for the NDCs in article 4, and the market-based mechanism under article 6 of the agreement.⁶³² However, parties seem not to be open to amendment at the moment. Unfortunately, parties are not presently disposed to any form of amendment to the Agreement.⁶³³

5.3 Nigeria's Nationally Determined Contribution

Nigeria ratified the PA in 2017,⁶³⁴ and this has revolutionized Nigeria's response to the effects of CC. The Department of CC (DCC) within the Nigeria's Federal Ministry of Environment is designated as the country's focal point for PA, KP and UNFCCC related matters.⁶³⁵ In accordance with article 4(9) and (12) of the PA, the DCC designed and

⁶³² Knox, J.H. HRs and Safeguards in the New Climate Mechanism Established in Article 6, paragraph 4 of the PA. *Letter to the PA Subsidiary Body for Scientific and Technological Advice*, retrieved online February 1, 2020: <www.ohchr.org/Documents/Issues/Environment/Letter_to_SBSTA_UNFCCC_May2016.pdf>.

⁶³³ Ferreira (supra) 10.

⁶³⁴ Oyedele & Onu (2021), supra, 1.

⁶³⁵ Department of CC Federal Ministry of Environment. 2017. retrieved May 27, 2020 from: <http://climatechange.gov.ng/about-us/departments-of-climate-change/>

submitted Nigeria's first Nationally Determined Contribution (NDC) (which shall henceforth be referred to as NNDC to the NDC Registry on the 16th of May, 2017.⁶³⁶ The NNDC adopted a Reduction from BAU (BAU) approach to achieve its objective of Economic and Social Development,⁶³⁷ and targets to achieve the said objective by the year 2030.

It is important to note that Nigeria submitted an Amended NDC in July 2021 to the PA's headquarters.⁶³⁸ She has also pledged to become a net zero economy by 2050 through her Long Term Vision (LTV), lodged shortly before COP26, in Glasgow.⁶³⁹

If Nigeria's economic growth is maintained at 5% per year under a BAU growth scenario, by 2030, Nigeria's emissions per year should be around 900 million tonnes of GHGs which will amount to around 3.4 tons per individual. Nigeria pledges (through the mitigation measures under NNDC) to unconditionally contribution 20 per cent below her BAU-scenario which will amount to the emission of 700 million tomes of GHGs by the year 2030. These mitigation measures includes *inter alia* ending gas flaring, 13 GW off-grid renewable electricity and 20% improvement on energy efficiency.⁶⁴⁰

Nigeria further pledges (through the mitigation measures under NNDC) a conditional contribution of 45% reduction wherein the key measures under the NNDC beneath could conceivably decrease emission around 45% contrasted with the BAU,⁶⁴¹ which will amount to the emission of 400 million tomes of GHGs by the year 2030. Below is a table of the potential emission reduction target of Nigeria which the NNDC project to be zero net cost, that is to say that it will benefit Nigeria generally before even taking into cognizance of the

⁶³⁶ NDC Registry. Retrieved February 13, 2020 from <https://www4.unfccc.int/sites/NDCStaging/Pages/All.aspx>.

⁶³⁷ This objective consists of 5% economic growth per year period, improved standard of living, and electricity access for all.

⁶³⁸ See FRN, *Nigeria's Updated (Amended) First NDC*. (Jul. 31, 2021), Department of Climate Change https://climatechange.gov.ng/wp-content/uploads/2021/08/NDC_File-Amended-_11222.pdf. (accessed Mar. 10, 2023).

⁶³⁹ These developments came into being after the thesis have been submitted for viva, hence, are not analyzed here.

⁶⁴⁰ Ibid, 10

⁶⁴¹ Ibid, 3.

climate benefits. The implementation of the key measures below will make way for a climate smart development in Nigeria.

Table 5.1: Key Measures under NNDC⁶⁴²

Measure	Potential GHG Reduction (million tonnes per in 2030)
Economy-wide Energy efficiency	179
Efficient gas power stations	102
Work toward ending of gas flaring	64
Climate Smart Agriculture	74
Reduce transmission losses	26
Renewable Energy	31

5.3.1 Mitigation Potentials of NNDC

NNDC relying on expert assessment and extant policy frameworks used a bottom up approach to assess Nigeria’s CCM actions (measures) above. These measures expected to yield substantial developmental benefits for Nigeria. NNDC projects that air pollution reduction will be the mitigation measure that will fetch the major development benefit for Nigeria with huge instant social and health benefits.⁶⁴³ Second, clean technological innovations introduce resource efficiency and creates more jobs and knowledge than dirty technologies. Third, fiscal reforms are central to all the above mitigation measures.⁶⁴⁴

⁶⁴² See O.J. Oyedele & K.O.N. Onu (2022), supra..

⁶⁴³Ibid.

⁶⁴⁴ Ibid

5.3.2 Nigeria's Mitigation Contributions (Sector Actions)

Nigeria's mitigation contribution under the NNDC adopted a Reduction from BAU (BAU) approach to achieve its objective of Economic and Social Development,⁶⁴⁵ and targets to achieve the said objective by the year 2030. The NNDC set out two contributions approaches, to wit: unconditional and conditional contributions. Under the unconditional contribution, Nigeria pledges to reduce emission to 20% below her BAU which will amount to the emission of 700 million tonnes of GHGs by the year 2030. These mitigation measures include *inter alia* ending gas flaring, 13 GW off-grid renewable electricity and 20% improvement on energy efficiency. On the other hand, the conditional contributions connote a 45% emission reduction contrasted with the BAU,⁶⁴⁶ which will amount to the emission of 400 million tonnes of GHGs by the year 2030.⁶⁴⁷

The NNDC identified five high GHGs emitting sectors in Nigeria and designed mitigation actions for the reduction of emissions that emanate from these sectors. The five sectors are energy (power); oil and gas; agriculture and land use; transportation and industry.⁶⁴⁸

In order to properly implement these sector actions, the Nigerian government with the help of international partners came up with NDC Sector Action Plans in February, 2017. The NDC Sector Action Plans recognized that CCM is pivotal to the achievement of SDG 13 and the other SDGs. Hence, NNDC serves as a bridge between the PA and the Agenda 2030 in Nigeria.

We shall appraise these sector actions both under the NNDC and the NDC Sector Action Plans for each of the sectors for CCM in Nigeria. We shall further appraise these plans in order to decipher whether the said plans are right based.

⁶⁴⁵ This objective consists of 5% economic growth per year period, improved standard of living, and electricity access for all.

⁶⁴⁶ Ibid, 3.

⁶⁴⁷ Conditional contribution means what Nigeria can contribute international supports in the areas of financial assistance, capacity building and transfer of technology.

⁶⁴⁸ Ibid, 11.

5.3.2.1 Agriculture and Land Use

Agriculture is a very important sector for national development in Nigeria. The agricultural sector accounts for 25% of Nigeria's Gross Domestic Product (GDP) and 70% of Nigeria's labour force.⁶⁴⁹ Nigeria has a growing population that is estimated to be 205,416,152 as at 14th of May 2020.⁶⁵⁰ This population growth has both positive and negative effect for the agricultural sector in Nigeria. The negative effect is that the demand for food has skyrocketed; while the positive effect is that the high demand for food will give rise to high demand for Nigeria produce both locally and internationally.

Nigeria is a major food importer. She the global highest importer rice, substantial importer of horticultural products, diary, and wheat. In spite of high importance of agriculture to national development, the sector has failed to develop for over the last 34 years which, accounts for lack of food security owing to the rising population.⁶⁵¹ Increase in productivity in the Nigerian agricultural sector require a lot of funding and access to such funds for fertilizer, crop protection, and seeds.

It also pertinent to note that increase in agricultural productivity in Nigeria comes with a challenge of balancing GHGs emission from production. Agricultural production contributes to the emission of two major GHGs, to wit: methane and nitro dioxide. Direct emission of methane comes from the production of ruminant livestock, while nitro dioxide arises from the management of manure and use of fertilizers.⁶⁵²

Agriculture sector in Nigeria emit 60.69 MtCO₂e of GHGs will amount to 27.52% of the total emissions of all the sectors combined.⁶⁵³ The total GHGs emission from Agriculture, Forestry and Other Land Use (AFOLU) stood at 371,022 Gg CO₂-eq in 2016.⁶⁵⁴

⁶⁴⁹ APP; Federal Ministry of Agriculture and Rural Development (FMARD)

⁶⁵⁰ Nigeria Population (live). Retrieved online May 14, 2020 from worldometers.info/world-population/Nigeria-population/

⁶⁵¹ Ibid.

⁶⁵² Ibid.

⁶⁵³ O.J. Oyedele & K.O.N. Onu (2022), supra.

⁶⁵⁴ Ibid

The BAU scenario under the NNDC suggests that emission from the Agricultural sector will increase to 40% by 2030.⁶⁵⁵

Although the agricultural sector contributes a large chunk of GHGs that cause CC, the sector is not immune from the harsh effects of CC. The sector is every sensitive to the effects of CC as such droughts, flooding, water depletions, desertification and pestilences. The NNDC projects that under a BAU scenario the agriculture sector in Nigeria may decline to 15-25% by 2080.⁶⁵⁶ The decline may be up to 50% decline in yield for rain fed agriculture in northern Nigeria.⁶⁵⁷ In the absence of mitigation, rice importation is expected to increase by 40% and importation of yam and vegetable will also increase on a long run.⁶⁵⁸ This turn in events is also expected to cause Nigeria's GDP to decree.

In order to reduce the emission of GHGs from the agriculture sector, the NNDC proposed a shift from BAU to Climate Smart Agriculture (CSA). One of such agro-ecological measures promoted by the NNDC is agroforestry, which entails the mixture of trees, animals and crops on the same land, which will result in carbon fixing and production of mulch materials.⁶⁵⁹ Agroforestry is expected to reduce Nigeria's agricultural GHGs emissions from 158 million tonnes to about 712 million tonnes.⁶⁶⁰ The NNDC also proposed improved feeding and breeding of livestock in order to reduce methane emissions from animals.⁶⁶¹

The NNDC further proposed the conservation of natural forests and halting of deforestation. It identified that the use of wood fuel contributes to forest degradation in Nigeria. However, many homes in Nigeria still depends on charcoal as essential source of domestic fuel. The NNDC suggested efficient cook stoves and Liquefied Petroleum Gas (LPG) as alternatives to wood fuel.⁶⁶²

⁶⁵⁵ Ibid.

⁶⁵⁶ Ibid.

⁶⁵⁷ Ibid.

⁶⁵⁸ Ibid.

⁶⁵⁹ Ibid, 13.

⁶⁶⁰ Ibid.

⁶⁶¹ Ibid.

⁶⁶² Ibid.

The NNDC agriculture sector mitigation contribution is laudable. However, the NNDC agriculture sector contribution answered the question of what Nigeria should do to reduce GHGs emissions from the agriculture sector by proposing CSA and ending the use of wood fuel as mitigating measures. It failed to clearly answer the question of how Nigeria can implement the measures in order to attain the desired outcome.

5.3.2.1.1 NNDC Implementation Action Plan for Agriculture

The UNDP partnered with the Nigerian government to design NDC Sector Action Plan for Agriculture in February, 2016. This section will discuss the NNDC Implementation Action Plan for the Agriculture Sector and ascertain whether HRs was mainstreamed in the implementation plan.

The NNDC Implementation Action Plan for the Agriculture Sector was designed to fit into Nigeria's APP for 2016-2020 (APP) (2016) which builds on the achievements made by the Agricultural Transformation Agenda for 2011 – 2016.⁶⁶³ The major objective of APP 2016 is to increase the sector growth from 3% and 6% recorded between the periods of 2011 - 2015 to 6% - 12% between the period of 2016-2020.⁶⁶⁴ The three thematic interventions of the policy are: productivity enhancement, investment, and institutional realignment. These interventions aim to address the challenges facing agriculture and achieve the vision for a prosperous and sustainable agribusiness sector.

The NNDC Agriculture sector Implementation Plan is anchored on APP and CSA which is meant to reduce emission and, enhance removal and sequestration.⁶⁶⁵ The priority implementation measures are as follows:

- a. **Improved Soils and Nutrient Management:** This is a short-term measure that involves appropriate management of soils and nutrients. This measure is relevant to both grassland and tillage systems and it will positively impact nitro oxide and methane efficiency.⁶⁶⁶

⁶⁶³ Ibid, 3.

⁶⁶⁴ Ibid.

⁶⁶⁵ Ibid.

⁶⁶⁶ Ibid, 6.

Lack of adequate and available extension services may be a huge challenge to this measure. Second, availability and awareness of appropriate fertilizers was also captured by the Plan as a challenge. The Implementation Plan also identified the existing gap of extension services and well documented best practice advice.

We note that funding is also a major challenge to this measure. Nigeria's livestock sector is estimated to have over 19 million head of cattle which is obviously the largest in Africa. The cattle farmers in Nigeria are predominantly nomadic herders. It will be difficult to track them for the purposes of creating such awareness. Secondly, nomadic herding is relatively cheaper, so, a demand for improvement nutrients will definite require funding and expert knowledge which may not be at the disposal of such nomadic herders.

- b. **Agro-forestry:** this involves the mixture of trees, animals and crops on the same land. This measure will yield tremendous benefits for agricultural development and methane emission reduction in Nigeria.⁶⁶⁷ It will increase crop production, water retention, carbon stocking and provide shade for livestock.

The major challenge of this medium-long term measure is that it requires funding and knowledge transfers. Nigeria will rely on foreign support (unconditional contribution) to achieve this measure.

- c. **Improved management of burning of savannah and crop residue:** bush burning is very common in Nigeria. Bush burning contributes to GHGs emission, air pollution, soil degradation and reduction of soil organic matter.⁶⁶⁸ This measure is meant to improve the management of burning of savannah and crop residue. This is a short- and medium-term measure.

⁶⁶⁷ Ibid

⁶⁶⁸ Ibid

The measure is faced with the challenges of cultural barriers and lack of legislative backing for such control implementation. There also exist the gap of advice and administrative control.

- d. **Use of alternative domestic fuel in rural areas:** traditional use of wood fuel and charcoal result into change in land cover and indoor air pollution which is detrimental to human health. This measure seeks gradually reduce the use of wood fuel and charcoals which will in turn lead to maintenance of carbon stock and increase Nigeria's carbon sink. The NNDC suggested efficient cooking stoves and Liquefied Petroleum Gas (LPG) as alternatives to wood fuel.⁶⁶⁹ This is a medium-long term measure.

The challenge with this measure is that the alternatives are limited and also costly. There also exists the gap of availability of these alternatives.

- e. **Measures to reduce post-harvest losses in key crops:** many crop produce spoil and waste due to adequate storage and preservative facilities. This measure seeks to design adequate infrastructure and investment for post-harvest storage of crop produces in order to enhance productivity and sustainable food supply.⁶⁷⁰ This is a short-medium-long term measure.

The challenge with this measure is that it is capital intensive for both farm storage facilities and transportation infrastructures. There exist the gap of finance and advice.

- f. **Creating fixed grazing systems or dedicated pastures:** Nomadic herding is the most common means of cattle rearing in Nigeria. This measure of creating fixed grazing systems or dedicated pastures will improve animal health, nutrition and control methane emission. This is a short-medium-long term measure.

This measure will face the challenge of culture and land tenure system. There also exists the gap of land availability, extension services and advice.

⁶⁶⁹ Ibid.

⁶⁷⁰ Ibid.

- g. **Improved genetics in the dairy herd:** There exist low productivity in the current dairy herd in Nigeria. This measure of improved genetics in the dairy herd will significantly reduce GHG emission and also improve livelihood of farmers. This is a medium-long term measure. This measure will face the challenge of finance and technological transfer. There exist the gap of extension services and advice; knowledge transfer; research; and finance.

So far, Nigeria has implemented one of these Agriculture sector mitigation projects.⁶⁷¹

5.3.2.1.2 The NNDC implementation action plan for the Agriculture Sector Governance and Institutions

The FMARD, the Federal Ministry of Water Resources (FMWR), and the FMEnv are the key institutions for Agriculture sector plan implementation in Nigeria. The FMARD is vested with the obligation of delivering this sector plan with support from the FMWR and FMEnv.

The administrative implementation of agricultural plans and policies rests with the Federal Ministry of Agriculture; State Ministries of Agriculture; their departments and local government departments of agriculture. The National Council on Agriculture (NCA) composed of all State Commissioners of Agriculture as members and the Federal Minister of Agriculture and Rural Development as the chairman coordinates the policy actions of these ministries and departments.

The legislative arm of government at both federal and state levels also involved in agricultural development in Nigeria through enactment of agricultural legislations pursuant to their concurrent legislative list;⁶⁷² budgetary appropriation to agriculture sector;⁶⁷³ and oversight functions of policy process in the agriculture sector.⁶⁷⁴

⁶⁷¹ See O.J. Oyedele & K.O.N. Onu (2022), *supra*.

⁶⁷² See section 4(4) of the 1999 Constitution and first column of Part II of the Schedule to the Constitution; and section 4(6)(7)(b) of the 1999 Constitution.

⁶⁷³ See section 59 of the 1999 Constitution.

⁶⁷⁴ See section 88 of the 1999 Constitution.

Agriculture extension and advisory services are pivotal for the development of CSA in Nigeria. The three tiers of government in Nigeria (that is, federal, state and local governments) jointly share the responsibility for extension system and researches through Research Institutes funded by various tiers of governments.

The NNDC implementation action plan for the Agriculture sector shows that the linkage between research-extension services is weak, and the extension services do not have a wide coverage. The Private sector and NGOs are also significant actors in food supply chain and they also bring in much needed finance.⁶⁷⁵

5.3.2.1.3 The NNDC implementation action plan for the Agriculture Sector Finance

The NNDC implementation action plan for the Agriculture Sector identified the contributions and the vulnerability of the agriculture sector to CC and its effects. Finance is greatly needed to achieve the NNDC Agriculture Sector Implementation Plan of shifting to Climate Smart Agriculture (CSA). Most farmers in Nigeria are subsistent farmers, and they are also fragmented, hence they lack the sufficient clout to effectively attract the needed finance. These farmers also lack storage facilities hence, they sell their produce before harvest at prices ten times lesser than the price that they would have sold after harvest.⁶⁷⁶ These poor farmers most time rely on cooperative societies which do not also have the needed bulk funds.

The NNDC Implementation Action Plan for the Agriculture Sector identified local and international sources of finance for its implementation.

The potential local sources of finance are:

- a. Recapitalizing
- b. the Bank of Agriculture Limited
- c. Innovative Approaches towards demonstrating the benefits of CSA approaches to encourage uptake
- d. Weather-based insurance for crop production

⁶⁷⁵ Ibid

⁶⁷⁶ Ibid.

- e. Potential introduction of a country Climate Fund
- f. Multilateral development banks active in Nigeria.⁶⁷⁷ These banks have funded programmes in the region that could provide lessons to Nigeria.

The potential international sources of climate finance fund⁶⁷⁸ for the Agriculture Sector Implementation Plan are:

- a. Green Climate Fund.⁶⁷⁹
- b. AF for Smallholder Agriculture programme
- c. AF (AF)
- d. Global Environment Facility (GEF). This is financial mechanism under the UNFCCC.
- e. International Climate Fund (IKI)
- f. Special CC Fund (SCCF).

5.3.2.2 Oil and Gas Sector

In 1956, Oil was discovered for the first in Nigeria in commercial quantities was first discovered in Oloibiri, and two years later the first commercial exploration took place.⁶⁸⁰ Oil was not considered as a major source of earnings for Nigeria at this moment. Oil became a major source income in Nigeria after the global oil boom induced by the Yom Kippur was of 1973 that led to a speedy rise in global oil price. The boom made Nigeria to depend largely on oil revenue without any feasible savings mechanism, this led to reduction in earnings from other sectors of the economy like Agriculture and industry. This unfortunate phenomenon is popularly referred to as a ‘natural resource curse’.⁶⁸¹

The national gross domestic product (GDP) real contributions from the oil and gas sector is at 9.05 percent within the first quarter of 2020.⁶⁸² It is important to note that the 95% of the foreign exchange earnings and about 65% of the federal budget of Nigeria comes from the

⁶⁷⁷ Ibid, 11.

⁶⁷⁸ See O.J. Oyedele & K.O.N. Onu (2022), supra.

⁶⁷⁹ Retrieved online May 24, 2020 from: <http://www.greenclimate.fund>

⁶⁸⁰ Oil and Gas in Nigeria: Industry History. Retrieved June 12, 2020 from <http://www.nnpcgroup.com/NNPCBusiness/Businessinformation/OilGasinNigeria/IndustryHistory.aspx>.

⁶⁸¹ Ibid

⁶⁸² National Bureau of Statistics, 2020, Nigerian Gross Domestic Product Report (Q1 2020). Retrieved June 14, 2020 from [https://nigerianstat.gov.ng/elibrary?queries\[search\]=gdp](https://nigerianstat.gov.ng/elibrary?queries[search]=gdp)

oil sector.⁶⁸³ Although the sector has greatly contributed to Nigeria's economy over the years, it has not transcended to improved life for the people. Nigeria's population is estimated to be 203 million; and her GDP per capita stands at 2056 US Dollars.⁶⁸⁴ The sector employs over 21,000 Nigerians directly and over 200,000 Nigerians indirectly which is less than 0.01% of the entire Nigerian's workforce.⁶⁸⁵

The outbreak of corona virus in December, 2019, has significantly the oil sector negatively and by extension, the Nigerian economy within the first half of 2020, and may continue to bite hard even for the next half of the year, and the coming years.⁶⁸⁶ The coronavirus containment measures like global lockdown and stoppage of businesses have greatly affected community pricing of commodities such as crude oil in the international market.⁶⁸⁷ Oil prices slumped to 25 US dollar per barrel (probably the lowest price in history) in the second week of April, 2020; as against 56 US Dollar in February, 2020.⁶⁸⁸

There is a poor demand for oil globally, Nigeria that depend heavily on oil revenue to fund its annual budget has been plunged into deep financial crisis and economic recession. Nigeria in the short term has reviewed her planned expenditure for the year by significantly cutting down of the 2020 national budget; and massively withdrawing from her sovereign wealth fund in order to cushion the effect of the low oil price and meet her public health needs occasioned by the coronavirus pandemic.⁶⁸⁹

It is important to note that the oil sector has negatively impacted on the Nigerian environment. The high cost of converting associated gas from oil to industrial and domestic

⁶⁸³ Ibid.

⁶⁸⁴ Organization of Petroleum Exporting Countries (OPEC), 2019, 'Nigeria's Facts and Figures'. Retrieved online June 15, 2020 from https://www.opec.org/opec_web/en/about_us/167.htm.

⁶⁸⁵ Nigerian Bureau of Statistics, JCS Report. Retrieved online June 15, 2020 from http://www.nigerianstat.gov.ng/pdfuploads/JCS_Report_Q4_2012_Q1_2013.pdf. See also Unemployment: Oil sector employs 0.01% of Nigerian workforce. Vanguard Newspaper of 1 June, 2014. Retrieved online June 15, 2020 from <http://www.vanguardngr.com/2014/06/unemployment-oil-sector-employs-0-01-nigerian-workforce/>

⁶⁸⁶ Ukiwo, U. 2020. The Covid-19: Challenges and Opportunities in Nigeria's Oil and Gas Industry. *Business Day of May 14, 2020*. Retrieved online from: <https://businessday.ng/opinion/article/the-covid-19-challenges-and-opportunities-in-nigerias-oil-and-gas-industry/>

⁶⁸⁷ Ibid.

⁶⁸⁸ Ibid

⁶⁸⁹ Ibid.

uses, in addition to paltry penalties, makes the oil companies to flare. Nigeria has the 9th largest proven natural gas reserves in the world; and the large in Africa as at 2018, with 5,675 billion cubic meters (200.41 trillion cubic feet) of natural gas.⁶⁹⁰ Nigeria alone accounts for 2.7 percent of proven global gas reserves.⁶⁹¹ In 2018, Nigeria's production of natural gas stood at 1.7 trillion cubic feet (49.2 billion cubic meters).⁶⁹²

On the other hand, Nigeria is adjudged the 5th highest gas flaring nation in the world.⁶⁹³ It was estimated that Nigeria lost #233 billion to gas flaring in 2018 alone.⁶⁹⁴ Within six months of lockdown induced by the coronavirus pandemic in Nigeria, Nigeria and oil companies lost NGN90.9 Billion to gas flaring as at August, 2020.⁶⁹⁵ Since 2002, the percentage of gas flared in Nigeria has been on decreasing trajectory which stood at 10% in 2018, however, Nigeria still remain among the 10 highest gas flaring countries in terms of volume of gas flared.⁶⁹⁶ The reason for the decline is as result of liberalization of power sector which to additional of gas for generation of power; demand for LPG for domestic and industrial uses following the Nigerian Gas Flare Commercialization Program (NGFCP) approved by the Federal Executive Council in 2016;⁶⁹⁷ and the National Gas Policy 2017 approved by Federal Executive Council on the 26th of June, 2017. Other reasons include decline in production due to shortage of demand due to the coronavirus pandemic and new regulatory framework with new penalties: that is, Flare Gas (Prevention of Waste and Pollution) Regulation 2018.⁶⁹⁸

⁶⁹⁰ K.O.N. Onu (2021) Human Rights Impacts of Nigeria's Oil and Gas Sector NDC implementation Projects: Lessons from the Kwale CDM Project. *Journal of Environmental Law, Policy and Development (JELPD)* VIII (2021) Access Online at: <https://vidhilegalpolicy>. The proven oil reserve of Nigeria is 36.972 million barrels (207.6 billion cubic feet) in natural gas equivalent. It therefore connotes that Nigeria's natural gas reserves are 900 times over her oil reserves. See *ibid*.

⁶⁹¹ *Ibid*

⁶⁹² This is in exclusion of gas flared and recycled. *Ibid*.

⁶⁹³ *Ibid*.

⁶⁹⁴ *Ibid*.

⁶⁹⁵ TVC News of August 31, 2020, at 7:31am.

⁶⁹⁶ *Ibid*

⁶⁹⁷ Onu (2021) *supra*.

⁶⁹⁸ No. 88, Vol. 105 of the Federal Republic of Nigeria Gazette of July 9th, 2018. Retrieved June 15, 2020 from: <https://ngfcp.dpr.gov.ng/media/1120/flare-gas-prevention-of-waste-and-pollution-regulations-2018-gazette-cleaner-copy-1.pdf> . This regulation is made pursuant to section 44 of the 1999 Constitution of the Federal Republic of Nigeria, as amended in 2018 and the PIA, 2022.

International Oil Companies (IOCs) extract approximately 87% of crude oil in Nigeria and they are also responsible for 75% of flared gas in Nigeria. Associated gases are flared mostly because of inefficiency in cost and operations.⁶⁹⁹ They seem not to be deterred by the new regulation since it is still cheaper for them to pay the penalties than to spend more in conversion. It is to be noted that vandalism of oil facilities and pipelines also contribute to gas flaring in Nigeria with over 15,000 recorded incidents between 2005-2015.⁷⁰⁰ Vandalism cost the Nigerian government and the oil companies more 14 Billion US Dollars per annum and has devastated over 52,000 hectares of land in the Niger Delta in 2014 alone.⁷⁰¹ For instance, people, livestock and crops suffer the effect of acid rain in the small Niger Delta community called Uzere, where gas has been flared for over 45 years. The community is bereaved of dusk because of constant flames from the flares, and the two lakes that supplies water to the community remain polluted. Gas flaring is responsible for certain adverse health conditions in the Niger Delta region of Nigeria, it is equally responsible for loss of biodiversity as some plant species have gone into extinction in the Niger Delta region. Nigerian court have held that gas flaring infringes on the fundamental right to life of the Niger Delta region.⁷⁰² Gas evacuation requires pipelines and other supporting infrastructure. The hostilities in the Niger Delta also disrupt supply of gases to power plants thereby contributing to the power sector problems.⁷⁰³ Gas flaring in Nigeria alone accounted for 48 million tonnes of GHGs emission in 2010.⁷⁰⁴

Flaring and venting of gas account for 80% of gases flared in oil and gas sector in Nigeria.⁷⁰⁵ The remaining 20% comes from the three functional indigenous refineries; pipeline leakages and vandalism.⁷⁰⁶ The proposed Dangote refinery (a private refinery) is billed to

⁶⁹⁹ Onu (2021) supra.

⁷⁰⁰ Ibid.

⁷⁰¹ Ibid.

⁷⁰² *Gbemre v SPDCN* [2005] AHRLR 151.

⁷⁰³ Ibid.

⁷⁰⁴ Ibid, 5.

⁷⁰⁵ The major sources of gas flaring include a. Oil Production: venting of casinghead gas and flash emissions from crude oil storage tanks; b. Natural Gas Production and Processing: well completions, blowdowns and workovers, reciprocating compressor rod packing, venting from glycol reboilers on dehydrators, processing plant leaks, gas-driven pneumatic devices; c. Gas Transmission: venting of gas from maintenance of repair of pipelines or compressors, leaks from pipelines, compressor stations and centrifugal compressor oil de-gassing; d. Gas Distribution: leaks from unprotected steel mains and service lines, leaks at metering and regulating stations, and pipeline blowdowns. See Ibid.

⁷⁰⁶ Ibid, 5.

commence operation this year is being projected to be the biggest potential gas flaring contributor from refining, although there are no findings to back up this projections as to the emission level of the refinery upon completion. Information of the company suggests that the company plans to diversify further into power generation in full scale; which may in turn bring more emission challenges.⁷⁰⁷

In the NNDC, it is estimated that under a BAU scenario (BAU), that the CO₂ emission contribution from the oil and gas sector by 2030 will be around 90 million tonnes. To mitigation and reduction in emissions, the NNDC proposed unconditional measure of better executions of restrictions placed on gas flaring aimed at reducing gas flaring to less than 10% by 2020, and ultimately ending gas flaring by 2030.⁷⁰⁸ Ending gas flaring by 2030 will reduce Nigeria's GHGs emission by 64 million tonnes of CO₂e.⁷⁰⁹

5.3.2.2.1 NNDC Implementation Action Plan for Oil and Gas Sector

The United Nations Development Programme (UNDP) partnered with the Nigerian government to design NDC Sector Action Plan for Oil and Gas Sector on 21st February, 2017. She is also a signatory to the Global Gas Flaring Partnership (GGFP) which principal objective is global flare-out by 2030.⁷¹⁰ This section will discuss the NNDC Implementation Action Plan for the Oil and Gas sector; and ascertain whether HRs was mainstreamed in the implementation plan.

The NNDC proposed to reduce GHGs emissions through:

a. Improved Enforcement of Gas Flaring Restrictions

In August, 2016, the Nigerian government drafted the Petroleum Industry Roadmap which outlined the short and long term priorities for the Nigeria's petroleum sector which closes seven key indicators.⁷¹¹ The NNDC Implementation Action Plan for the Oil and Gas sector

⁷⁰⁷ Dangote Moves to end Nigeria's Power Crisis. Retrieved online June 16, 2020 from <http://energynews-ng.com/dangote-moves-end-nigerias-power-crisis/>

⁷⁰⁸ Ibid, 3.

⁷⁰⁹ Onu (2021) supra.

⁷¹⁰ Ibid

⁷¹¹ Ibid.

focused on Gas Revolution. The Gas Revolution aims to fashion a stout framework for gas utilization in Nigeria. It will drastically reduce flaring of gas and lead to gas utilization. The Nigeria Gas Masterplan 2008 is the major driver of the Gas revolution.⁷¹²

Pursuant to the approval of the Federal Executive Council (FEC), the then Minister of State for Petroleum, Dr. Ibe Kachukwu on the 13th of December, 2016 launched the Nigerian Gas Flare Commercialization Programme (NGFCP), for the utilization of gas in Nigeria.⁷¹³ The NGFCP is designed to eliminate gas flaring (thereby minimizing the environmental and social impacts of gas flaring); protect the environment; reduce waste of natural resources; and foster socio-economic development in Nigeria.⁷¹⁴ This objective is to be achieved sustainable gas utilization commercially and technically.⁷¹⁵

b. Gas to Power

The sector action plan seeks to deploy natural gas as a major fuel for power generation in Nigeria. Its immediate target is to attain a minimum of five-fold increase in its power generation capacity from about 3GW to 15GW by 2018.⁷¹⁶ This measure is quite promising and will be examined in details under the NNDC sector action plan for the power sector.

c. Gas-based Industrialization

This measure targets to position Nigeria as the regional hub for gas-based industries in Africa. The primary industries targeted for natural gas utilization include feedstock, petrochemicals, compressed natural gas (CNG) and methanol.⁷¹⁷ The Sector Plan projects that if these primary industries are properly supplied with natural gas, it will

‘stimulate a wide range of small and medium scale secondary industries that will be geographically dispersed and drive GDP growth. Fertilizer

⁷¹² The objective of the Nigeria Gas Masterplan is to end gas flaring by 2008; reposition Nigeria for competitive export economy; and to stimulate the multiplier effect of gas in the Nigerian economy. See Onu (2021) *supra*.

⁷¹³ *Ibid*.

⁷¹⁴ Onu, (*supra*), 8.

⁷¹⁵ *Ibid*.

⁷¹⁶ *Ibid*.

⁷¹⁷ *Ibid*, 16.

production will boost agricultural yield, causing the growth of agro-processing and related industries. The petrochemicals industry will produce polyethylene and polypropylene which are the basic ingredients for a wide range of secondary industries, such as packaging, plastics, and carpets. CNG for transportation, in addition to providing environmental benefits, will displace petrol as the preferred fuel for transportation. The combined impact of the gas industrialization is widespread job creation and in-country value addition.⁷¹⁸

The Federal Government announced its plans to revive the Ogidigben Gas Revolution Industrial Park (GRIP) also called the Ogidigben Export Processing Zone (EPZ).⁷¹⁹ Ogidigben Export Processing Zone (EPZ) is a joint venture between the Federal government of Nigeria and the Delta State government, sited on 2,560 hectares of land between Ajudaibo and Ogidigben and Ajudaibo communities in Warri South West Local Government Area of Delta State of Nigeria. Ogidigben EPZ was established by former President Jonathan's administration in January 2015 to house a gas hub in West Africa which will accommodate a fertilizer plant, petro-chemical plant, gas plant, methanol plant etc.⁷²⁰

d. High Value Export

The sector implementation plan targets that Nigeria through regional pipelines and Liquefied Natural Gas (LNG) will invest in high value export within the African Region. Nigeria will leverage on her natural gas expand her regional economic influence by selectively investing in cross-country pipelines with the West African sub-region. This will stimulate economic growth in such countries and also create a market for Nigerian gas producers. This will make Nigeria to consolidate and 'protect about 10% of its global market share of traded LNG.'⁷²¹ It will also leverage its natural gas for regional economic influence by selective investment in cross-country pipelines within the sub-region, stimulating the

⁷¹⁸ Ibid

⁷¹⁹ FG to restart the \$16 Billion Gas Project in Ogidigben. Retrieved August 27, 2020 from <https://theoilbloc.com/fg-to-restart-the-16-billion-gas-project-in-ogidigben/>

⁷²⁰ Ibid.

⁷²¹ Ibid.

economic growth of those impacted nations, and creating investment and sales outlet opportunities for Nigerian entrepreneurs and for Nigerian gas producers.

5.3.2.2.2 Challenges and Gaps with the Action Plans (mitigation measures) under NNDC Implementation Action Plan for Oil and Gas Sector

Challenges and gaps with the action plans under the NNDC Implementation Action Plan for Oil and Gas sector dual faceted being that there exist challenges and gaps for producers (oil companies) and regulator (DPR) alike. The oil companies have enumerated four key challenges that inhibit them from ending gas flaring; to wit:

- a. **Lack of a market for flared gas.** The sector Implementation Plan states that this will be addressed by creation of hubs and industrial zones;
- b. **Lack of infrastructure for gas evacuation.** this may be addressed by pipeline projects, floating LNG platforms and gas-based industries;
- c. **Lack of financing** – this may be addressed by financing plans; and finally,
- d. **Pipeline vandalism** – this may be addressed by improved enforcement, and community engagement strategies, among other actions.⁷²²

On the part of the regulator, the sector implementation action plan observed that the following challenges will affect the implementation of the mitigation measures (targets) highlighted above, to wit:

- a. Lack of political will from all relevant institutions and companies to deliver on the zero-gas flaring commitment or to implement other policies listed.
- b. Reduced government revenue limits available funds for projects. This could, however, open up diversification opportunities.
- c. Limited legal framework for meaningful gas sector transformation to take place. This submissions are steps in the right direction for the transformation of Nigeria's gas sector.
- d. Lack of investment due to wider macro-economic constraints.

⁷²² Ibid, 17.

In order to surmount the above gaps and challenges, the sector implementation suggested the following as necessary steps to be taken by the Nigerian government, to wit:

- a. Passage of the Petroleum Industry Reform Bill and implementation of supporting regulations – the ineffective legal and institutional gas framework reduces the potential for the large-scale investment required to transform the sector
- b. Stakeholder engagement between government agencies, communities, and gas flaring oil companies on the impact of CC
- c. Capacity building for oil and gas sector companies on the NDC and the National CC Strategy.
- d. Adequate sector funding to deliver on identified projects, and further development of concept notes and project proposals as part of a pipeline of projects and programmes to put forward to international climate funds.
- e. Security and stability in the Niger Delta to reduce pipeline vandalism.

5.3.2.2.3 Governance and Institutions for the NNDC Implementation Action Plan for Oil and Gas Sector

The formulation of policies for the sector rests squarely on FMPR, while DPR mainly plays the regulatory role for the sector. The Federal Ministry of Petroleum Resources was established in 1985.⁷²³ The ministry is responsible for policy development; coordination of the sector; and provide oversight to all oil and gas sector operators in Nigeria.⁷²⁴ The Ministry is equally responsible for the constitution of the board of NNPC. The DPR was initially known as Petroleum Inspectorate agency under the defunct National Oil Corporation until 1985 when it was moved to the ministry of the Federal Ministry of Petroleum Resource as a full-fledged department. The department carries out most of the regulatory functions of FMPR.

The NNPC is the national corporation of Nigeria established in April, 1977 to engage in oil venture on behalf of the FGN. The Corporation has 12 subsidiary companies which cut across exploration, production, refining and retailing of petroleum products. The 49% shares

⁷²³ Ministry of Petroleum Resources. Retrieved online June 30, 2020 from <http://petroleumresources.gov.ng/index.php/about-us/about-mpr>

⁷²⁴ Ibid.

of Nigeria in the Nigerian Liquefied Natural Gas Company (NLNG) is held by NNPC on her behalf.

The PIA repealed the previous Petroleum Act 2004.⁷²⁵ This new law contains a number of provisions and innovations that will have an impact on the oil and gas industry's private, public, and stakeholder sectors.

The PIA was passed to establish the upstream, midstream, and downstream petroleum industry's regulatory, fiscal, legal, and administrative frameworks as well as to construct and develop host communities and address other associated issues.

The Act created new regulatory institutions for the petroleum sector: the Nigerian Upstream Petroleum Regulatory Commission (the "Commission"), which saddled with the sole responsibility of regulating the upstream petroleum activities,⁷²⁶ and the Nigerian Midstream and Downstream Petroleum Authority (the "Authority") that is in charge of the downstream and midstream petroleum operations.⁷²⁷

The Act made provision for environmental management in the petroleum sector according to Section 102 for operators of the both streams. When a plan conforms with applicable environmental laws and the applicant can control and remediate negative environmental effects, the plan will be authorised.⁷²⁸ Operators must also contribute to environmental remediation fund.⁷²⁹ The sum payable by a licensee or lessee is to be determined by the relevant institution on case to case basis.⁷³⁰ Sections 104 and 105 provides for penalties for gas flaring. It retained the penalty provided for under the Flare Gas Regulation 2018 for gas flaring by licensee. In order to ensure that gas is adequately supplied to the local market of Nigeria, the Act created a national gas supply commitment for oil licensees.⁷³¹

⁷²⁵ Ibid

⁷²⁶ Section 4 of PIA, 2021.

⁷²⁷ Section 29 of PIA, 2021.

⁷²⁸ Mondaq, op. cit. See also section 103 of PIA, 2021.

⁷²⁹ Section 103(1), PIA, 2021.

⁷³⁰ Section 103(2), PIA, 2021.

⁷³¹ Section 110, PIA, 2021.

The Act fully commercialized the Nigerian National Petroleum Corporation (NNPC) into the NNPC Ltd.⁷³²

The Petroleum Host Community Development (PHCD) programme is described in Chapter 3 of the Act and is covered in Section 234. The PHCD's goals comprise promoting long-term development within host-communities, giving those communities immediate communal and economic benefits from petroleum activities, developing a framework to aid in those communities' development, among other things.⁷³³

By virtue of Section 235, the Host Communities Development Trusts is established. The settler is required to do so for the advantage of the host-communities for which they are accountable, and the Act specifies the timeframe for incorporation.⁷³⁴

The Act establishes the Hydrocarbon Tax under Section 260 of the Act, which shall be applicable and imposed against the earnings of companies offshore upstream petroleum operations, due during each accounting period.

Similarly, the CCA is uniquely fashioned to apply to public and private entities and it mandates them to strictly comply with all CC regulations in Nigeria. The Act sets the time frame for the attainment of net-zero carbon emissions to between the year 2050-2070. This broad objective is to be achieved through financial support, resilience and policies outlined in the Act. CCA established a regulatory institution called the National Council on Climate Change (NCCC) which is headed by the Nigerian President that is saddled with the responsibility of policy formulation and implementation on CC-related matters in Nigeria.⁷³⁵ The functions of NCCC enumerated under section 3 of the Act.

CCA also establishes a Secretariat and the office of a Director-General.⁷³⁶ The secretariat is responsible for the daily duties of the NCCC and also gives technical and administrative support to the NCCC to enable it effectively perform its functions.⁷³⁷

⁷³² Section 53

⁷³³ Mondaq, op. cit.

⁷³⁴ Ibid.

⁷³⁵ Section 3(1), CCA.

⁷³⁶ Section 8, CCA.

⁷³⁷ Ibid.

The CCA saddled the Federal Ministry of Environment with the duty of fixing Nigeria's carbon budget⁷³⁸ every five years subject to the approval of the Federal Executive Council.⁷³⁹ The carbon budget is to be revised periodically in line with Nigeria's NDC.

CCA also established the climate change fund (CCF) which is to be administered by the NCCC.⁷⁴⁰ The fund is to be financed from national fiscal allocation, fines and penalties from public and private entity violators of Act and Nigeria's obligation under the Paris Agreement. The funds will be used in funding CC mitigation and adaptation measures in Nigeria and other related activities.⁷⁴¹

The Act empowers the secretariat in collaboration with ministries to frame the National Climate Change Action Plan within a circle of 5 years.⁷⁴² The Action Plan shall be approved by the Federal Executive Council after public consultation.⁷⁴³

The CCA created tripartite obligations on climate change. The obligations are on Ministries, Departments and Agencies of government (MDAs)⁷⁴⁴, public entities⁷⁴⁵ and private entities,⁷⁴⁶ to ensure that their establishments set and attain emission reduction targets which must be submitted to the secretariat. Private establishments are only qualified for this commitment if they have 50 or more employees.⁷⁴⁷ Where any of the above entities fail to comply with the obligations, it shall be liable to fine/penalty to be determined by the NCCC.⁷⁴⁸ The CCA also empowers court before who a suit related to CC or environmental related matters is filed to give verdicts that will ameliorate the damage, compel the wrongful party (including the government) to stop, and order for restitution or compensation in

⁷³⁸ Carbon budget simply means the permissible volume of carbons that can be emitted in a country over a given period. See Templars (supra).

⁷³⁹ Section 35, CCA.

⁷⁴⁰ Section 15, CCA.

⁷⁴¹ Oyedele & Onu (2022) supra, n. 15.

⁷⁴² Section 20(1-2), CCA.

⁷⁴³ Section 20 (3), CCA.

⁷⁴⁴ Section 22, CCA

⁷⁴⁵ Section 35, CCA.

⁷⁴⁶ Section 24, CCA.

⁷⁴⁷ Section 25, CCA.

⁷⁴⁸ Section 34(1), CCA.

deserving cases.⁷⁴⁹ The Act also made provisions for incentives for establishments that comply with their emission reduction targets.⁷⁵⁰

The CCA made provision for climate education under section 26. It charges the secretariat subject to the endorsement of the council to collaborate with the relevant Ministries, Departments and Agencies (MDAs) responsible for education to develop curricula that will integrate climate change education across all levels of education in Nigeria.

Another innovation of the CCA is the provision of Public Engagement Strategy (PES).⁷⁵¹ The secretariat is required by the CCA to prepare and publish the council's PES no later than 6 months before the end of each year, for the following year.⁷⁵² The PES is meant to include the strategies to be used to carry out the Act's objectives, including educating the public about the Action Plans, recognizing actions, cum enlisting their support in achieving those goals.⁷⁵³ The council is required to review the PES as the need arise and to publish the reviewed PES in the Federal Government Gazette one month after the review.⁷⁵⁴

5.3.2.2.4 The NNDC implementation action plan for the Oil and Gas Sector Finance

The NGFCP projected that it will cost Nigeria between USB2-3billion to finance and achieve Zone Gas Flare by 2020.⁷⁵⁵ The following are the projected sources of the needed finance

- a. **Concessional Financing:** it is concessional funds⁷⁵⁶ from Development Finance Institutions (DFI). Some examples of climate financing instruments from DFIs include: AFC (AFC) which is in partnership with Green Climate Fund; International Finance Corporation; AFD (AfD) etc.⁷⁵⁷

⁷⁴⁹ Section 34(2), CCA.

⁷⁵⁰ Section 20(5)(f) of the CCA. The incentives will be sourced from the Climate Change Fund, as provided in section 15(2)(j) of the CC Act.

⁷⁵¹ Section 30, CCA.

⁷⁵² Section 30(1), CCA.

⁷⁵³ Section 30(2), CCA.

⁷⁵⁴ Section 30(3), CCA.

⁷⁵⁵ Ibid.

⁷⁵⁶ Basically debt funding.

⁷⁵⁷ Ibid, 25.

- b. **Risk Sharing Guarantees:** this has to do with reducing the total default risk on the lender thereby sharing risk guarantees to improve affordability of funds. Examples of this form of guarantee include Africa Development Bank (AfDB) Risk Guarantees and the World Bank Multilateral Investment Guarantee Agency (MIGA) guarantee.⁷⁵⁸
- c. **Forex (FX) Instruments:** these are instruments that provide protections against adverse foreign exchange movements. An example is the Central Bank of Nigeria Forex Future markets.⁷⁵⁹
- d. **Vendor Financing:** this is a form of financing (which may include a leasing arrangement) offered by Original Equipment Manufacturers (OEMs) in order to reduce the upfront capex requirements for projects. An example is General Electric (GE) Equipment financing and leasing.⁷⁶⁰
- e. **Grants and Technical Assistance (TA):** this involves grants and technical assistance funds granted to assist in project preparation. Examples include the Private Infrastructure Development Group (PIDG) Technical Assistance Facility (TAF),⁷⁶¹ AfDB Private Sector Assistance Facility,⁷⁶² and Global innovation Lab for Climate Finance.

5.3.2.3 Power (Energy)

Power (energy) is fulcrum of national development and no nation can strive economically without adequate power supply. 80% of Nigeria's energy demand is carried by biomass; while Natural gas, petroleum products, hydropower, and others carry 8%, 5%, 0.4% and (< 1%) respectively carries the rest of the energy demand. Biomass is mostly used for cooking,

⁷⁵⁸ World Bank Multilateral Investment Guarantee Agency (MIGA). Retrieved June 30, 2020 from <https://www.miga.org>.

⁷⁵⁹ Foreign Exchange Market in Nigeria. Retrieved June 30, 2020 from: <https://www.cbn.gov.ng/IntOps/FXMarket.asp>.

⁷⁶⁰ General Electric. Retrieved June 30, 2020 from <https://www.ge.com>

⁷⁶¹ Private Infrastructure Development Group (PIDG) Technical Assistance Facility (TAF). Retrieved June 30, 2020 from <https://www.pidg.org/ar2017/company/taf/>

⁷⁶² Fund for African Private Sector Assistance. Retrieved June 30, 2020 from <https://www.afdb.org/en/topics-and-sectors/initiatives-partnerships/fund-for-african-private-sector-assistance>

petroleum products used for off-grid power generation and transportation, while natural gas and hydropower are used for on-grid power generation.⁷⁶³

The on-grid power generation in Nigeria stands at approximately 5,7 GigaWatts (GW), 86% of this capacity comes natural gas power stations while the three large hydropower plants contributes the remaining 14%.⁷⁶⁴ The average power generation from the natural gas stations and hydropower plants is approximately 3GW, with even a shortfall of more than 2MegaWatts (MW) due to lack or insufficient supply of gas to power stations.

On the other hand, the current power demand in Nigeria (including suppressed and latent demand) is estimated to be approximately 17.5GW, and this is expected to skyrocket in the near future due to economic growth and rise in population.⁷⁶⁵ It therefore connotes that Nigeria lack adequate electricity infrastructure to satisfy both immediate and future electricity demands.

Currently, over 60% of Nigerians do not have access to grid electricity, and in the alternative rely on generators which are expensive and air polluting. It is estimated that there are over 60 million petrol and diesel generators in Nigeria.⁷⁶⁶ For those that have access to the national grid, the average daily power supply is 4 hours, with daily cuts, and some days, weeks or months without any supply at all.⁷⁶⁷ The major reasons for these shortages are sabotage to gas supply pipelines and unreliable infrastructure.

There is incessant conflict between the consumers and power distribution companies over unreliable power supply and struggles to collect fees.⁷⁶⁸ There is therefore a pressing demand to the government to deliver a clean, affordable and sustainable electricity supply in Nigeria. In a swift response to the above demands, the Nigerian government in 2001

⁷⁶³ Ibid.

⁷⁶⁴ Ibid.

⁷⁶⁵ Ibid.

⁷⁶⁶ Ibid.

⁷⁶⁷ Kaseke, N. and Hosking, S. Sub-Saharan Africa Electricity Supply Inadequacy: Implications. Retrieved July 2, 2020 from <[https://www.researchgate.net/publication/265962993 Sub-Saharan Africa Electricity Supply Inadequacy Implications.](https://www.researchgate.net/publication/265962993_Sub-Saharan_Africa_Electricity_Supply_Inadequacy_Implications.)>

⁷⁶⁸ Ibid

introduced power reform policies that cumulated into the enactment of the Electricity Reform Act of 2005 which unbundled the power sector.

However, the energy demand problems in Nigeria still persist due to economic and population growth. Vast of the population still rely on generators and wood fuel for their energy demands. Generators emit GHGs which contribute to CC, while wood fuel also comes from deforestation which equally contributes to CC. It is projected that this high demand for energy may lead to the introduction of carbon intensive power generation technologies like single-cycle gas turbine systems and coal fired power stations.⁷⁶⁹ Over 60% of GHGs emissions in Nigeria comes from the use of power and energy.⁷⁷⁰ On a BAU (BAU) scenario, it is estimated that power generation will increase from about 200 Terawatt-Hours (TWh) as at today to over 800 TWh by 2030, ‘with off-grid generation by diesel or petrol generators increasing threefold from about 100 TWh to 300 TWh over this period.

5.3.2.3.1 NNDC Implementation Action Plan for the Power Sector

In order to actualize the mitigation objectives, the NNDC Implementation Action created by UNDP and the Nigerian government. Plan for the Power sector proposed the following measures:

- a. Renewable energy
- b. More efficient gas fired generation
- c. Energy efficiency
- d. Cook Stoves

These measures are expected to reduce Nigeria’s GHG emission from the power under BAU by 230 million tonnes by 2030.⁷⁷¹ It is pertinent to note that this is conditional on international (foreign) investment.⁷⁷² The Nigerian government in 2016 approved and rolled out six policies/plans to help it end its energy challenges, they are: the Sustainable Energy for All Action Agenda (SE4ALL) July 2016, the National Renewable Energy Action Plan

⁷⁶⁹ Ibid.

⁷⁷⁰ Nigeria’s i-NDC (supra), 12.

⁷⁷¹ Ibid, 8.

⁷⁷² Ibid.

(NREAP) June, 2016, the Rural Electrification Strategy and Implementation Plan July, 2016, and the National Energy Efficiency Action Plan (NEEAP) July 2016.⁷⁷³ The Sector Implementation Action Plan posits that ‘SE4All Action Agenda and NREAP put forward Vision 30-30-30 whereby on-grid power capacity increases from the current level of about 5 GW to 30 GW by 2030, with at least 30% of this capacity coming from renewable energy technologies.’⁷⁷⁴ The Implementation plan is tailored around this Vision 30-30-30.

In the course of our discussion of the mitigation measures, we shall be making references to these plans where necessary. The electricity regulatory agency in Nigeria, the National Electricity Regulatory Commission (NERC), has produced a new mini-grid regulation with the objective of reducing barriers to market entry and promoting renewable energy investments. The Transmission Company of Nigeria (TCN) has also ‘developed a 5-year transmission system expansion plan that aims to increase the wheeling capacity of the grid from 5,300MW today to 20,000MW by 2022.’⁷⁷⁵

a. Renewable Energy (RE)

Currently, Nigeria generates about 2 GW of her power from renewable sources, which are mainly from grid-connected large-scale hydro plants.⁷⁷⁶ According to the draft Nigerian Power Sector Investment Opportunities and Guidelines published in June 2016, Nigeria’s total hydro power potential is about 14 GW. The Implementation Plan also targets to harvest other RE forms like biomass, wind, and solar to produce electricity either on-grid or off-grid.⁷⁷⁷

There exists the potential to use biomass to produce electricity and heat, from animal and municipal waste; and forest residues. This will be achieved through the introduction of waste-to-energy incineration.⁷⁷⁸

⁷⁷³ Ibid 2.

⁷⁷⁴ Ibid, 7.

⁷⁷⁵ Ibid, 4.

⁷⁷⁶ Ibid, 9.

⁷⁷⁷ Ibid, 9.

⁷⁷⁸ Ibid. However, it should be noted this measure may have some dare air pollution consequences, hence, not totally sustainable.

Furthermore, solar energy can be utilized in heating water for businesses and households.⁷⁷⁹ The mini-grid regulation has reduced the barrier to RE development in Nigeria, however, there still exist of project developers as to whether there exist sufficient incentive for them with the existence of the decommissioning clause in favour of distribution companies (DisCos) in the regulation after 5 years.⁷⁸⁰

It is expected that NREAP's measure of feed-in-tariffs and a competitive procurement programme, cushion the financial barriers to RE investment and development in Nigeria. The Rural Electrification Strategy and Implementation Plan July, 2016 made provision for off-grid RE promotion, including subsidies and loans 'through the Rural Electrification Fund (REF), managed by the REA.'⁷⁸¹ Many major barriers to off-grid power investment in Nigeria is the lack of trust between DisCos and the end-users (especially, households). The DisCos do not trust that the consumers will pay for the services, while on the other hand, the consumers fear that the DisCos will not supply power.⁷⁸²

Renewable Energy offers a fast, reliable and cheap way of improving rural electrification thereby reducing the reliance on costly and polluting fossil fuel and charcoal.⁷⁸³ Solar photovoltaic (PV) system is suited for Northern Nigeria and most urban cities. Nigeria is also a beneficiary of the Green Climate Fund's Green Climate Fund's Universal Green Energy Access Programme (UGEAP) which was instituted in October, 2016 to scale up renewable energy investment in sub-Saharan Africa from local financial markets and international private sector.⁷⁸⁴ This programme is expected to reduce GHGs emission to the tonne of 50.6 million.⁷⁸⁵ Nigeria is a beneficiary of this programme with 6 registered GCF projects totaling USD164.4 million.⁷⁸⁶ GCF Board on the 28th of February, 2019 approved the Nigeria Solar Independent Power Producers Program at its 22nd Board meeting which

⁷⁷⁹ Ibid.

⁷⁸⁰ Ibid.

⁷⁸¹ Ibid.

⁷⁸² Ibid.

⁷⁸³ Ibid.

⁷⁸⁴ Ibid.

⁷⁸⁵ Ibid.

⁷⁸⁶ Ibid.

will generate approximately 400MW renewable energy, which will reduce GHGs emission to a ton of 9.5million.⁷⁸⁷

b. More efficient gas-fired generation

The Sector Implementation Plan noted that current gas-fired powered capacity in Nigeria is obsolete, inefficient and unreliable.⁷⁸⁸ Nigeria single cycle technology whereas efficiency demands for a metamorphosis from the extant technology to combined cycle technology. The Sector Implementation Plan seeks to introduce a new and efficient technology of combined cycle gas turbine (CCGT) power stations in place of coal-fired power stations or single cycle gas plant, which will lead to reduction in GHG emissions, improve air quality and prevent future emission lock-in.⁷⁸⁹ The Plan also identified that associated gas powered small modular power stations as a good off-grid option for communities close to oil and gas fields as proposed by NNPC.⁷⁹⁰

The Plan also pointed involving the community in such schemes has the repining effect assuaging the feelings of the people hereby alleviating social unrests and potential attacks on such plants by youths and militants. The Plan also projects the siting of ‘industrial estates close to thermal power plants would allow the use of waste heat in the form of steam and hot water, which significantly increases the overall efficiency of fuel use.’⁷⁹¹

Furthermore, gas fired combined heat and power (CHP) plants have the potential of being used to supply electricity to both grid and mini-grids, and at the same time, produce heat for industrial purposes.⁷⁹²

c. Efficient Energy

The NEEAP proposed certain measures such as ‘improved building codes, import standards and labelling schemes to drive the efficiency of appliances and lighting up towards the

⁷⁸⁷ Ibid.

⁷⁸⁸ Ibid.

⁷⁸⁹ Ibid.

⁷⁹⁰ Ibid.

⁷⁹¹ Ibid.

⁷⁹² Ibid.

standards of developed countries.⁷⁹³ Also, the Implementation Plan proposes to introduce Minimum Energy Performance Standards (MEPS) ‘for lighting and air conditioners, and energy performance certificates, energy audits and energy management systems are to be introduced in public buildings.’⁷⁹⁴

The Implementation Plan also ‘plans to reduce losses in the power distribution system by 10% by 2030, by adopting improved management practices and technical measures. Industrial energy efficiency is primarily the responsibility of the Ministry of Industry, and is addressed in the industry sector plan.’⁷⁹⁵

d. Cook Stoves

Local charcoal and wood fuel is the main working and cooking fuel for many small businesses and households in rural Nigeria.⁷⁹⁶ These charcoal and wood fuel are basically inefficient, hence, the Implementation Plan seeks to replace them with efficient charcoal cook stoves and wood fuel, or liquefied petroleum gas (LPG) stoves so as reduce GHGs emissions and air pollution.⁷⁹⁷ This will also reduce deforestation and lessen the burden on rural girls and women that fetch food.

So far, Nigeria has implemented two of these energy sector mitigation projects and has also been able to reduce her emission from the energy sector to the tune of 800,845 tonnes of CO₂e.⁷⁹⁸

5.3.2.3.2 Governance and Institutions for the NNDC Implementation Action Plan for Power Sector

The responsibility of the power sector rests squarely on the Federal Ministry of Power. Guided by ‘the provisions of the National Electric Power Policy (NEPP) of 2001, the Electric Power Sector Reform (EPSR) Act of 2005, and the Roadmap for Power Sector

⁷⁹³ Ibid.

⁷⁹⁴ Ibid.

⁷⁹⁵ Ibid.

⁷⁹⁶ Ibid.

⁷⁹⁷ Ibid.

⁷⁹⁸ See Nigeria NDC Registry. Retrieved August 3, 2021 from <https://ndcregistry.climatechange.gov.ng/>.

Reform of August 2010',⁷⁹⁹ the ministry of power initiates and implement policies for sustainable and efficient power generation and utilization in Nigeria.

The new (reformed) governance and institutional framework for the power sector in Nigeria is encapsulated in the National Electric Power Policy (2001) and the Electric Power Sector Reform Act, 2005 (the 2005 Reform Act).⁸⁰⁰ These reforms dissolved the defunct monopolistic power institution in Nigeria- the National Electric Power Authority (NEPA), which was formerly the sole agency responsible for the generation, maintenance, coordination and supply of electricity. The reforms created the Power Holding Company of Nigeria (PHCN) in the stead of NEPA, and later unbundled the PHCN into 18 companies.⁸⁰¹ The regulatory and institutional architecture of the power sector in Nigeria is composed of components, to wit: the regulation, the generation, transmission, and distribution.

5.3.2.3.3 The NNDC implementation Action Plan for the Power Sector Finance

Nigeria intends to fund her Power Sector NDC Implementation Action through:

- a. **Green Bonds:** these are bond instruments wherein the proceeds to plunged wholly or partly in financing or refinancing new or existing eligible green projects which are in accordance the Green Bond Principles (GBP).⁸⁰²

- b. **Rural Electrification Fund:** this fund was established under section 88 of ESRP Act to be administered by the Rural Electrification Fund (REF)⁸⁰³ for the promotion and provision of standard, affordable and quality rural electricity supply. Contributions for this fund comes from fines paid to NERC and funds received from government bodies, international and local donors, and the appropriation from national budget.

⁷⁹⁹ Ibid.

⁸⁰⁰ No. 77, Vol. 92 of the Official Gazette of the Federal Republic of Nigeria, 2005.

⁸⁰¹ Ibid.

⁸⁰² Green Bonds. Retrieved July 12, 2020 from <http://www.nse.com.ng/products/debt-instruments/green-bonds>.

⁸⁰³ Section 88(13) of EPSR Act.

- c. **Green Climate Fund’s Universal Green Energy Access Programme (UGEAP):** GCF set up this programme worth USD301.6 million in October, 2016 to scale up renewable energy investment in sub-Saharan Africa from local financial markets and international private sector. This programme is expected to reduce GHGs emission to the tonne of 50.6 million.⁸⁰⁴ Nigeria is a beneficiary of this programme with 6 registered GCF projects totaling USD164.4 million.⁸⁰⁵ GCF Board on the 28th of February, 2019 approved the Nigeria Solar Independent Power Producers Program at its 22nd Board meeting which will generate approximately 400MW renewable energy, , which will reduce GHGs emission to a tonne of 9.5million.⁸⁰⁶ This programme is to be funded by GCF in partnership with AFC (AFC)⁸⁰⁷ and the African Development Bank (AfDB)⁸⁰⁸ by aiding qualified Independent Power Producers (IPPs) to get fund to finance renewable energy projects.⁸⁰⁹
- d. **The Clean Technology Fund (CTF):** this is one of the two Clean Investment Fund’s (CIF) multi-donor trust funds⁸¹⁰ which promotes scale up of deployment and transfer of low carbon technologies which have a long term saving capacity for greenhouse gases (GHGs).⁸¹¹ CTF ‘has approved a concessional loan for the design, construction and operation of a 100 MW solar PV power plant in Bauchi state.’⁸¹²
- e. **Multilateral Development Bank (MDB):** this is an international financial institution chartered by donor developed countries and borrower developing countries for the purpose of financing economic development in poorer countries. The MDBs avails developing countries with grants and loans to engineer social and economic developments. In 2018, the Climate finance by major MDBs hit a record

⁸⁰⁴ Ibid.

⁸⁰⁵ Nigeria. Retrieved July 12, 2020 from <https://www.greenclimate.fund/countries/nigeria>.

⁸⁰⁶ Nigeria Solar IPP Project Program. Retrieved July 13, 2020 from <https://www.greenclimate.fund/project/fp104>.

⁸⁰⁷ (As the accredited entity).

⁸⁰⁸ As a co-lender.

⁸⁰⁹ Nigeria Solar IPP Project Program. Retrieved July 13, 2020 from <https://www.greenclimate.fund/project/fp104>.

⁸¹⁰ Clean Investment Fund. Retrieved July 21, 2020 from <http://www.climateinvestmentfunds.org/>.

⁸¹¹ Clean Technology Fund. Retrieved July 21, 2020 from <https://climatefundupdate.org/the-funds/clean-technology-fund/>.

⁸¹² See Vivid Economics (2016). Climate finance: Priority funds for Nigeria and project selection, NIAF

USD43.1 billion. These MDBs have funded power projects within the Africa Region, and such projects can be replicated in Nigeria.

- f. **Private Sector led Projects:** The private sector has successfully developed and applied a pay-as-you-go solar PV sector in some African countries, this can also be considered in Nigeria.

- g. **International Climate Finance Funds:** some international Climate Finance funds that are relevant to power sector and potentially available to Nigeria are:
 - a. Nationally Appropriate Mitigation Action (NAMA) facility: NAMA came up during the UN Climate Conference in Bali, 2007.⁸¹³ It is designed to assist countries to reach their mitigation goals as set out in their Nationally Determined Contributions (NDC) through NAMA funded projects called NAMA Support Projects (NSP).⁸¹⁴

 - b. Green Climate Fund (GCF): at the Conference of Parties (COP) 16th session held between November and December, 2010 at Cancun, the Green Climate Fund (GCF) was established in section IV under paragraph 102 of the Cancun Agreement. The GCF was established pursuant to article 11 of the UNFCCC which deals on the financial mechanisms of the convention. The main aim is to promote programs that will improve climate conditions by monitoring set thematic funding windows. Nigeria can explore this funding avenue for her power projects.

 - c. International Climate Fund (IKI): the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) set up the IKI for international financing of biodiversity and climate.⁸¹⁵ IKI helps in financing

⁸¹³ NAMA Facility. Retrieved July 22, 2020 from <http://stories.nama-facility.org/portfolio-workshop/Workshop/>

⁸¹⁴ Ibid.

⁸¹⁵ IKI Funding Instrument. Retrieved July 22, 2020 from <https://www.international-climate-initiative.com/en/about-the-iki/iki-funding-instrument>.

biodiversity conservation and CCM in developing countries.⁸¹⁶ Between the periods of 2008 to 2019, IKI approved and funded more than 730 biodiversity and climate projects in more than 60 countries with a total funding volume of EUR 3.9 billion.⁸¹⁷ The IKI funding help developing countries to design and implement ambitious nationally determined contributions based on the PA.⁸¹⁸ Nigeria can explore the IKI funding opportunity to fund power projects in Nigeria.

- d. Special CC Fund (SCCF): The SCCF was established based on the resolution of the Conference of Parties (COP7) that held at Marrakech in 2001.⁸¹⁹ According to the NNDC Implementation Action Plan for the Power Sector, SCCF caters for intervention cost which are used for capacity building.

5.3.2.4 Transport

Transportation is very pivotal for development as both human and goods depend on it for long distance journeys. An efficient transportation sector will transcend to social and economic development for a given society. Nigeria's population is estimated to be 203 million,⁸²⁰ and her landmass area estimated to be over 900,000 km². This vast but growing population and economy depend transportation to thrive. Transportation in Nigeria comprises of six approaches, namely: air, water, rail, road, post and pipelines.⁸²¹ Transportation fundamentally affects international and municipal trade and movement. Transport sector contributes about 3% to Nigeria's GDP and it is projected to increase to 5% by 2025.

Nigeria has not been able to meet her transport needs. The Nigeria's transport has been strained enormously over the years due to insufficient investment in the sector and lack of

⁸¹⁶ Ibid.

⁸¹⁷ Ibid.

⁸¹⁸ Ibid.

⁸¹⁹ Special CC Fund. Retrieved July 22, 2020 from <https://www.thegef.org/topics/special-climate-change-fund-sccf>.

⁸²⁰ Organization of Petroleum Exporting Countries (OPEC), 2019. Nigeria's Facts and Figures. Retrieved online June 15, 2020 from https://www.opec.org/opec_web/en/about_us/167.htm.

⁸²¹ Oyedele & Onu (2021), supra. 31

maintenance of existing facilities. Nonetheless, the increase in socio-economic activities has necessitated for an exponential demand for transport services. 90% of transportation services (freight and passenger) in Nigeria occur on road. Unabated GHGs emissions from transportation due to inefficient transport system add to CC. This is necessitated by the ever-growing population and demand for movement of goods and persons.

In accordance with this, it has been predicted that there will be an increase in the demand of transport services will increase in the coming years. It is indeed a taunting task to reduce emissions from the transport sector given inescapable growth in demand. It is pertinent to note that ‘transport sector contributes to CC just like CC also affects the transport sector.’⁸²²

Road transportation is impacted by CC. Pavements expands and softens due to rise in the degree of temperature which has led to the burden placed on bridge joints and creation of potholes in traffic dense areas. The above impacts have the ability to make road construction and maintenance to be very costly. On the other hand, floods can delay construction activities, wash out or weaken soil that support roads/bridges, and interrupt traffic. Due to poor investment in rail transportation in Nigeria, the roads and high ways are overburdened by freight movement which greatly contribute to high traffic and depletion of roads. CC also impacts rail transport. Rail tracks get expanded by high temperatures. Heavy rainfall and flood can disrupt and delay train movement. CC also has impacts on air and marine transport. Air quality has depleted in many urban cities in Nigeria.

5.3.2.4.1 NNDC Implementation Action Plan for the Transport Sector

The NNDC Implementation Action Plan for the Transportation sector seeks to introduce transformative projects that will deliver an efficient, low carbon, and resilient transport systems. The Sector incorporates the Transportation Sector Mid Term Sector Strategy (MTSS) for 2017-2019 and the National Transport Policy (2016) in developing its mitigation measures.

⁸²² Eke, M. Transportation and CC. *The Guardian Newspaper*. 23, January 2017.

The sector implementation Action Plan acknowledges the fact that the traditional supply-side oriented approach of providing additional infrastructure in meeting an increasing demand in passenger and freight transport in several countries has not been delivering outcomes that are sustainable. The Sector Implementation Action Plan is also built on the concept of Avoid-Shift-Improve (ASI) which is acclaimed to be sustainability.⁸²³

The Sector Implementation Plan also took note of the four transport schemes adopted by the UN Secretary-General's Climate Summit to help combat CC in 2014 that will strike a balance between affordability, reliability and efficiency of transport systems.

The NNDC Implementation Action Plan for the Transportation Sector set out the following measures to mitigate GHGs emissions from the transport sector, to wit:

- a. Fuel Subsidy Reform: Nigeria's government has been bearing burden of subsidizing the cost of fossil fuel for Nigerian especially the Premium Motor Spirit (PMS). Subsidy in this regard means the capping of the pump price of gasoline. President Buhari's administration capped the price of PMS at NGN145/liter. However, in July 2020, the President Buhari approved the removal of subsidy on PMS (petrol or fuel)⁸²⁴ The implication of the removal of fuel subsidy is that independent markets can now land gasoline and sell to the public on the basis of demand and supply.
- b. Promote transport of cargo by rail from seaports to inland inter-modal freight hubs, from which freight can be efficiently transported to towns. To this end, replacing existing narrow-gauge freight lines with high-speed lines, including the Lagos - Kano and Port-Harcourt - Maiduguri routes.
- c. Effect a modal shift in passenger travel from air and road to high-speed rail, focusing on the busiest routes where immediate uptake and substantial savings in travel time can be achieved.

⁸²³ 'The ASI approach involves viewing transport not as a single sector but also consider how it interacts with the wider development agenda and growth of Nigeria. The principle is outlined below:

⁸²⁴ Federal Government Confirms the Removal of Fuel Subsidy. Retrieved August 26, 2020 from <https://www.naijabusiness.com.ng/news/2020/federal-government-confirms-removal-of-petrol-subsidy/>

- d. Improve overall vehicle efficiency through higher fuel efficiency standards, labelling and testing
- e. Upgrading roads in city centres to reduce congestion and increase fuel efficiency and incentivize the use of public transport.
- f. Improve public transport connections from satellite towns to city centres.
- g. Implement a road-tolling policy that incentivizes the use of public transport and co-finance improvements in public transport systems on roads that have already been rehabilitated and are operated by the private sector under BOI (BO(O)T) agreements.
- h. Rise in the demand of Liquefied Petroleum Gas (LPG) and Compressed Natural Gas due to speculations to introduce subsidy.⁸²⁵

The NNDC Implementation Action Plan for transportation sector also identified some ‘Lighthouse Projects’ which are consistent with the measures above. These lighthouse projects include:

- a. Rehabilitation of Three Major Railway lines; and Construction of Lagos-Abuja Speed Rail line: The Federal Ministry of Transport has prioritized the rehabilitation of Zaria-Kaura Namoda, Port Harcourt-Maiduguri, and Kano-Nguru rail links. The rehabilitation of these pivotal lines has the capacity ‘to induce a modal shift in the movement of freight and passengers between these hubs.’⁸²⁶

The Ministry is also speeding up the construction of Lagos-Abuja speed rail line which when completed will induce a modal shift of passenger and freight from the traditional road and air means.

In all, the rehabilitation of the existing railway lines and the introduction of the speed rail line will reduce the emission of GHGs because many passenger and freight movements will be transferred to rail, hence reducing the consumption of fusel fuels by cars and airplanes.

- b. Procurement of more locomotives, wagons, and coaches.

⁸²⁵ Ricardo Energy and Environment, 2017. NDC Implementation Action Plan for the Transport Sector. *Report for the Government of Nigeria and United Nations Development Programme (UNDP)*. Ref: ED62516- Issue Number 2, p. 7.

⁸²⁶ Ibid.

- c. Bus Rapid Transit (BRT) Abuja: It is projected that Nigeria will introduce BRT in Abuja after the Lagos model to make urban transportation faster and lower GHG emissions.⁸²⁷

5.3.2.4.2 Governance and Institutions for the NNDC Implementation Action Plan for Transportation Sector

The responsibility for road transportation infrastructure in Nigeria's federation is divided between local (67%), state (16%), and federal (17%) governments.⁸²⁸ The Federal Ministry of Transportation is responsible for: public transport, railway transportation, maritime transport, road transportation and aviation.⁸²⁹ The Federal Ministry of Transportation has the mandate to ensure an efficient, safe, convenient, affordable, inter-modal and integrated transport system that improves the quality of life Nigerian populace and stimulate socio-economic development.⁸³⁰

Three separate agencies of the Federal government have the responsibility to maintain vehicular efficiency in Nigeria, to wit: Federal Road Safety Commission, Automotive Council, and Vehicle Inspection Office.⁸³¹ It is submitted that this multiplicity of functions is problematic as there is usually overlapping of responsibilities. The parastatals under the Federal Ministry of Transportation are Accident Investigation Bureau (AIB), Council for the Regulation of Forwarding in Nigeria (CRFFN),⁸³² Federal Airport Authority of Nigeria (FAAN), Maritime Academy of Nigeria, Oron (MAN), University of Transportation.⁸³³ and a host of others.⁸³⁴ It is expected that the University of Transportation will help in transferring and domesticating railway technology in Nigeria.⁸³⁵

⁸²⁷ Ibid.

⁸²⁸ National Transportation Policy 2016 cited in Ibid.

⁸²⁹ Ibid.

⁸³⁰ Federal Ministry of Transportation. Retrieved online August 27, 2020 from <https://www.transportation.gov.ng/index.php/78-featured/73-welcome-home>

⁸³¹ Oyedele & Onu (2021) supra.

⁸³² Council for the Regulation of Forwarding in Nigeria. Retrieved August 27, 2020 from <https://crffn.gov.ng/>

⁸³³ Federal Ministry of Transportation. Retrieved online August 27, 2020 from <https://www.transportation.gov.ng/index.php/78-featured/73-welcome-home>

⁸³⁴ Maritime Academy of Nigeria. Retrieved August 27, 2020 from <https://man.gov.ng/>

⁸³⁵ Transportation University Pivotal for Domestication of Railway Technology. Retrieved online August 27, 2020 from <https://www.transportation.gov.ng/index.php/component/content/article/9-uncategorised/308-transportation-university-pivotal-to-domestication-of-railway-technology>.

5.3.2.4.3 The NNDC implementation Action Plan for the Transportation Sector Finance

Nigeria intends to fund her Transportation Sector NDC Implementation Action through:

- a. **Private Sector Participation (PSP) in Sustainable Transport:** the private sector can be involved through Public-Private Partnerships (PPPs) in the areas of BRT systems, metro links and specific rail, shared-used car and bicycle systems.⁸³⁶ PSP can also be in form of land value capture tools.⁸³⁷
- b. **Green Bonds:** these are bond instruments wherein the proceeds to be plunged wholly or partly in financing or refinancing new or existing eligible green projects which are in accordance the Green Bond Principles (GBP).⁸³⁸ Green bonds can be used to finance rail projects.
- c. **The Clean Technology Fund (CTF):** this is one of the two Clean Investment Fund's (CIF) multi-donor trust funds⁸³⁹ which promotes scale up of deployment and transfer of low carbon technologies which have a long-term saving capacity for greenhouse gases (GHGs).⁸⁴⁰
- d. **Multilateral Development Bank (MDB):** this is an international financial institution chartered by donor developed countries and borrower developing countries for the purpose of financing economic development in poorer countries. The MDBs avails developing countries with grants and loans to engineer social and economic developments. In 2018, the Climate finance by major MDBs hit a record USD43.1 billion.⁸⁴¹ The following MDBs are active in Nigeria, to wit: the African Development Bank (AfDB), the European Investment Bank (EIB) and the World

⁸³⁶ Oyedele & Onu, (2021) supra, p. 13.

⁸³⁷ Ibid.

⁸³⁸ Ibid.

⁸³⁹ Ibid

⁸⁴⁰ Ibid.

⁸⁴¹ Ibid.

Bank (WB).⁸⁴² These MDBs have funded power projects within the Africa Region, and such projects can be replicated in Nigeria.⁸⁴³

- e. **International Climate Finance Funds:** some international Climate Finance funds that are relevant to power sector and potentially available to Nigeria are:
- a. Nationally Appropriate Mitigation Action (NAMA) facility: NAMA came up during the UN Climate Conference in Bali, 2007.⁸⁴⁴ It is designed to assist countries to reach their mitigation goals as set out in their Nationally Determined Contributions (NDC) through NAMA funded projects called NAMA Support Projects (NSP).⁸⁴⁵ Nigeria can respond to NAMA facility calls for funding with ambitious and promising NAMA compliant project proposals.
 - b. Green Climate Fund (GCF): at the Conference of Parties (COP) 16th session held between November and December, 2010 at Cancun, the Green Climate Fund (GCF) was established in section IV under paragraph 102 of the Cancun Agreement.⁸⁴⁶ The GCF was established pursuant to article 11 of the UNFCCC which deals on the financial mechanisms of the convention. The main aim of GCF is to promote climate conditions in developing countries through the use of thematic funding windows. Nigeria can explore this funding avenue for her power projects.
 - c. International Climate Fund (IKI): the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) set up the IKI for international financing of biodiversity and climate.⁸⁴⁷ Between the periods of 2008 to 2019, IKI approved and funded more than 730 biodiversity and climate projects in more than 60 countries with a total funding volume of EUR 3.9 billion.⁸⁴⁸ The IKI funding help developing countries to design and implement

⁸⁴² Ole et al, p. 13.

⁸⁴³ For example, AfDB/EIB funded the Lake Turkana Wind Power Project in Kenya which is the largest wind farm project in Africa. See Ibid. See also AfDB Projects and Operations. Retrieved July 21, 2020 from: <https://www.afdb.org/en/projects-and-operations/selected-projects/lake-turkana-wind-power-project-the-largest-windfarm-project-in-africa/>.

⁸⁴⁴ Ibid.

⁸⁴⁵ Ibid.

⁸⁴⁶ Ibid, p. 1

⁸⁴⁷ Ibid.

⁸⁴⁸ Ibid.

ambitious nationally determined contributions based on the PA.⁸⁴⁹ Nigeria can explore the IKI funding opportunity to fund power projects in Nigeria.

- d. Special CC Fund (SCCF): The SCCF was established based on the resolution of the Conference of Parties (COP7) that held at Marrakech in 2001.⁸⁵⁰ According to the NNDC Implementation Action Plan for the Transportation Sector, SCCF caters for technology transfer and its associated capacity building activities.⁸⁵¹

5.3.2.5 Industry Sector

The industry sector is made up of the manufacturing entities. The principal focus of the action plan for industry sector is industrial energy efficiency and mitigation of fugitive and industrial processes' emissions. Over 35 million Small and Medium Enterprises (SMEs) exist in Nigeria, they account for 70% of employment in Nigeria.⁸⁵² Currently, 10% of Nigeria's GDP comes from her manufacturing sector. However, this share is constantly decreasing as well as the sector's contribution to employment and foreign exchange earnings due to economic recession. Nigeria's economy is a victim of inadequate diversification due to oil boom of the 1970s, which led to over reliance on oil revenue at the detriment of the manufacturing sector. Many textile and beverage industries that were flourishing in the early days of Nigeria's independence gradually went into oblivion.

Nigeria's government main target is to resuscitate her manufacturing sector being a major force for her social economic renaissance in the face of drop in global oil price. However, there exist five major factors that are inhibiting Nigeria's quest for industrialization, to wit: high 'cost of energy, inadequate infrastructure, quality issues, limited access to finance'⁸⁵³ Lack of adequate power/energy supply in Nigeria has compelled companies to resort to use of Low Pour Fuel Oil (LPFO), diesel and natural gas to self-generate heat and power. A

⁸⁴⁹ Ibid.

⁸⁵⁰ Special CC Fund. Retrieved July 22, 2020 from <https://www.thegef.org/topics/special-climate-change-fund-sccf>.

⁸⁵¹ Ricardo Energy and Environment, 2017. NDC Implementation Action Plan for the Power Sector. *Report for the Government of Nigeria and United Nations Development Programme (UNDP)*. Ref: ED62516- Issue Number 2, p. 13.

⁸⁵² Ibid.

⁸⁵³ Ibid.

study shows that 70% of energy used by manufacturers use in Nigeria is self-generated.⁸⁵⁴ This in turn cause operating cost of production to increase by estimated 40% thereby making local Nigeria manufacturing to be three times more expensive when compared with international prices of average products.⁸⁵⁵

It is projected that size of Nigeria’s industry will triple by 2030, and it will substitute the basic and intermediate goods that are imported currently.⁸⁵⁶ The NNDC projected that under a BAU scenario the industry sector is expected to grow by 7% per annum, which will turn increase GHG emissions from industry sector from 4.2MtCO₂e in 2010 to 14.8 MtCO₂e in 2030.⁸⁵⁷

5.3.2.5.1 NNDC Implementation Action Plan for the Industry Sector

The principal focus of the NNDC Implementation Action Plan for the Industry sector is industrial energy efficiency and mitigation of fugitive and industrial processes’ emissions. The NNDC Implementation Action Plan for the Industry Sector adopted the energy efficiency programmes and initiatives designed under the National Energy Efficiency Action Plan (NEEAP) as the GHG emission mitigating measures for the industry sector, to wit:

a. Development of an industrial energy database and energy consumption benchmarks:

The Sector Action Plan seeks to create a programme that promotes effective assessment of energy efficiency in the industrial sector.⁸⁵⁸ The programme is also ongoing. With the support of Deutsche Gesellschaft für International Zusammenarbeit (GIZ) and Nigerian Energy Support Programme (NESP), this measure is being implemented by the Federal Ministry of Industry, Trade & Investment (FMITI), Manufacturers’ Association of Nigeria (MAN), Nigerian Association of Chambers of Commerce, Industry, Mines and Agriculture

⁸⁵⁴ *Ibid.*

⁸⁵⁵ *Ibid.*

⁸⁵⁶ *Ibid.*

⁸⁵⁷ *Ibid.*

⁸⁵⁸ *Ibid.*

(NACCIMA), and Small and Medium Enterprises Development Agency of Nigeria (SMEDAN).⁸⁵⁹

b. Development of National programme to implement the adopted Energy Management System (EnMS) for industry based on ISO 50001.

The actions expected under this measure include:

- Develop a national EnMS standard compatible with ISO-50001 in Nigeria.
- Develop energy management benchmarking and award programmes.
- Launch EnMS programme.

These actions are ongoing, and they implemented by the Standard Organization of Nigeria (SON), FMITI, and GIZ (NESP).⁸⁶⁰

c. Development of two case studies on 50001 based EnMS implementation and certification.

Under this measure, the following actions are expected to be carried out, to wit:

- Identify sites to carry out EnMs implementation case study
- Support energy managers of the sites throughout implementation
- Develop case study materials
- Disseminate case study as part of capacity building and Energy Efficiency Network (EEN) measures.

These actions are ongoing, and they implemented by the FMITI with support of GIZ through NESP.⁸⁶¹

d. Capacity Building on EnMS, and development and provision of tools to assist industry and energy managers in developing and implementing EnMS.

Actions carried out under this measure include:

- Expert training to Industry (Energy Managers) on the EnMSA and system optimization

⁸⁵⁹ *Ibid*, 10.

⁸⁶⁰ *Ibid*.

⁸⁶¹ *Ibid*.

- Development of brochures on EnMS and ISO 50001 certification.
- Provide information on international benchmarks.

This measure is expected to be a short-term measure being implemented by SON, NESP, FMP (Federal Ministry of Power), FMITI, NACCIMA and SMEDAN with the support of GIZ through the NESP.⁸⁶²

e. Implement an Energy Efficient Motors Programme to promote and incentivize the replacement of inefficient motors

Under this measure, the following actions are being taken to wit:

- Develop and implement a motors replacement programme.
- Adopt an international standard for identifying an energy efficient motor
- Creation of a subsidy scheme that encourages the swap of inefficient with new efficient motors.
- Effective disposal and issuance of disposal certificates after the successful swap of inefficient with new efficient motors.
- Monitoring and evaluation of the state and management of energy efficient motors.⁸⁶³

The time frame for the execution of this measure is a period of 5-10 years. This measure is being implemented by FMITI and SON with support from GIZ through NESP. It is pertinent to point out that this strategy has been successfully implemented in Chile. Chile, designed a similar programme in 2009 for the replacement of traditional motors with high efficiency motors. The Chilean government subsidized the cost of such replacement. By 2010, over 5,000 motors have been replaced.⁸⁶⁴

f. Implementation of an energy efficiency network (EEN) for industrial enterprises in Nigeria

This measure has the following actions:

- Review existing schemes in other countries to learn best practice.
- Identify, organizations, administrative processes, costs of EEN.

⁸⁶² *Ibid*, 11.

⁸⁶³ *Ibid*, 13.

⁸⁶⁴ Chile Booklet. Retrieved September 2, 2020 from http://ccap.org/assets/CCAP-Booklet_Chile.pdf.

- Awareness-building to familiarize organizations on EnMS.
- Advisory services to NESP, MAN, NACCIMA, SMEDAN on the implementation of EEN.

The time frame for the execution of this measure is a period of 5-10 years. This measure is being implemented by FMITI, MAN, NACCIMA and SMEDAN with support from GIZ through NESP.

g. Measure Developing appropriate financing approaches for encouraging the emergence of investment projects

Under this measure, the following actions are being undertaken, to wit:

- Making provisions for credit accessibility of banks.
- Provision of fiscal policies that promote energy saving mechanisms.
- Creating a financial platform that is accessible to fund fewer complex projects.
- Creating programs that allow banks fund complex projects.
- Organizing a financial platform that promotes access to credit facilities.

The time frame for the execution of this measure is a period of 5-10 years. This measure is being implemented by Federal Ministry of Finance and BON with support from GIZ through NESP.⁸⁶⁵

Challenges and Barriers to Actualization of Measures under NEEAP

The challenges are in different categories:

a. Regulatory and Policy challenges:

The first regulatory and policy challenge for the actualization of the above NEEAP measures is the lack of reliable data on energy consumption other related industrial activity. Second, there is low awareness of the value of energy efficiency. There is therefore an urgent need for strong integration of energy efficiency into infrastructure investments and energy planning policies. Third, there is lack of harmonized and operational policies. The above measures are not integrated with each other, hence the existence of interlinking gaps and weakness. It is therefore

⁸⁶⁵ *Ibid*, 14.

imperative to strengthen operational capacity and enforcement.⁸⁶⁶ Four, there is lack of governmental incentive to support businesses to carry out audits. Five, no governmental agency has majored in energy efficiency for industries hence there exist capacity gaps. Finally, the lack of deregulation of the energy market makes the market less competitive.⁸⁶⁷

b. Firm-level barriers

The first firm-level barrier to actualization of NEEAP is 'lack of adequate technical skills for identifying, developing and implementing energy saving measures and projects is the top hindrance to energy efficiency in industry, along with lack of information and awareness. Second, there exist the lack of the needed capitals (funds) for investments in energy efficiency. Finally, under-developed local chain for companies.⁸⁶⁸

Additional Measures required to achieve mitigation potentials for the Industry Sector

Aside the NEEAP measures, the NNDC Implementation Action Plan for the Industry Sector also designed some additional measures to compliment the NEEAP in order to achieve full the mitigation potentials of the sector. These measures include:

a. Establish mandatory audit programme connected with the EnMS and train and certify auditors to carry out programme

Under this measure, the following actions are to be taken, to wit:

- Establish audit programme to review performance from EnMS
- Develop certification programme for EnMS auditors
- Conduct training and certification of EnMS auditors

The time frame for the execution of this measure is a period of 5-10 years. This measure is being implemented by FMITI.⁸⁶⁹

⁸⁶⁶ Ibid, 16.

⁸⁶⁷ Ibid, 17.

⁸⁶⁸ Ibid, 18.

⁸⁶⁹ Ibid, 14.

b. Incentive mechanism for audits and implementation of EnMS

Under this measure, the following actions are to be taken, to wit:

- Co-finance mechanism and tax incentives to support companies with the cost of conducting audits and implementing EnMS standard. Incentives to be tailored to firm size (large facilities vs. MSMEs). Priority to EnMS-complying companies in public procurement.

The time frame for the execution of this measure is a period of 5-10 years. This measure is being implemented by FMITI, governmental financial bodies, and donor organizations.⁸⁷⁰

c. Mandatory energy performance reporting by industries reaching a certain energy usage threshold (e.g. 100MWh/ month) as part of complying with the EnMS standard.

Under this measure, the following actions are to be taken, to wit:

- Set a threshold for the mandatory reporting of performance standards as part of the EnMS.
- Roll out mandatory reporting

The time frame for the execution of this measure is a period of 5-10 years. This measure is being implemented by FMITI and SON.⁸⁷¹

d. Adopting international Minimum Energy Performance Standards (MEPS) and labels for industrial energy efficient equipment.

Under this measure, the following actions are to be taken, to wit:

- Review the effectiveness of MEPs from other emerging economy countries and best practice in adopting MEPs.
- Prioritize industrial equipment that that are likely to result in largest benefits- lighting, air compressors, electric motors, heating, cooling systems and refrigerators.
- Adopt minimum efficiency standard and link to financial incentivization scheme.

⁸⁷⁰ *Ibid*, 14.

⁸⁷¹ *Ibid*, 14.

The time frame for the execution of this measure is a period of 5-10 years. This measure is being implemented by FMITI and SON.⁸⁷²

5.3.2.5.2 Governance and Institutions for the NNDC Implementation Action Plan for Industry Sector

The implementation of the NNDC action plans for the industry sector which is to attain energy efficiency is a shared responsibility of the Federal Ministry of Industry, Trade & Investment (FMITI), the Standards Organization of Nigeria (SON), the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), the Federal Ministry of Power, Works and Housing (FMPWH), and the BOI (BoI).⁸⁷³

The direct responsibility for industrial sector is borne by the FMITI. The ministry formulates and implements policies and implements policies and programmes for the development of the industrial sector. is the key Ministry with direct responsibility for the industrial sector. It executes its responsibility of ensuring energy efficiency through its agencies such as SON and SMEDAN.

Other institutions include Federal Ministry of Power, Nigerian Electricity Regulatory Commission (NERC), Standards Organization of Nigeria (SON), Electricity Management Services (EMS), BOI (BoI), Manufacturers' Association of Nigeria (MAN), Small and Medium Enterprise Development Agency of Nigeria (SMEDAN), Nigerian Association of Small & Medium Enterprises (NASME), Nigerian Association of Chambers of Commerce, Industry, Mines and Agriculture (NACCIMA), Nigerian Energy Support Programme NESP (GIZ), United States Agency for International Development (USAID), ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), and United Nations Industrial Development Organization (UNIDO).⁸⁷⁴

⁸⁷² *Ibid*, 14.

⁸⁷³ *Ibid*, 4.

⁸⁷⁴ *Ibid*, 6.

5.3.2.5.3 The NNDC implementation Action Plan for the Industry Sector Finance

Investment is being carried out through NESP and the following organizations support energy efficiency in industry in developing countries, to wit:

- a. The World Bank, including Green Energy Funds (GEF) programmes (e.g. small grants programme) finance EE in Nigeria's industries.
- b. United Nations Industrial Development Organization (UNIDO): which works in 25 countries to support and promote energy management by offering training and implementation support in EnMS and best available technology in energy system optimization.⁸⁷⁵ UNIDO also works on mechanisms to enhance financing for investment in energy. As of August 2015, the IEE Unit's project portfolio totaled \$105 million in grant funding and more than \$700 million in co-financing spread across 20 countries.⁸⁷⁶
- c. The European Union and the German Federal Ministry of Economic Cooperation and Development are already very active in Nigeria through their support to the Nigerian Energy Support Programme which is implemented by GIZ together with the FMP, FMLHUD and the FMTI. In the next phase of the NESP programme starting in 2018, concrete policy and regulation for industry will be, paired with the development of financial mechanisms for the upscaling of energy efficiency in the sector.
- d. Green Bonds: these are bond instruments wherein the proceeds to be plunged wholly or partly in financing or refinancing new or existing eligible green projects which are in accordance the Green Bond Principles (GBP).⁸⁷⁷ Green bonds can be used to finance energy efficiency projects. The Nigerian Government aims to launch the first issue of its Sovereign Green Bond in 2017.

⁸⁷⁵ Ole et al, 2023 (supra).

⁸⁷⁶ Ibid.

⁸⁷⁷ Ibid..

- e. The Clean Technology Fund (CTF): this is one of the two Clean Investment Fund's (CIF) multi-donor trust funds⁸⁷⁸ which promotes scale up of deployment and transfer of low carbon technologies which have a long-term saving capacity for greenhouse gases (GHGs).⁸⁷⁹

- f. Multilateral Development Bank (MDB): this is an international financial institution chartered by donor developed countries and borrower developing countries for the purpose of financing economic development in poorer countries. The MDBs avails developing countries with grants and loans to engineer social and economic developments. In 2018, the Climate finance by major MDBs hit a record USD43.1 billion.⁸⁸⁰ The following MDBs are active in Nigeria, to wit: the African Development Bank (AfDB), the European Investment Bank (EIB) and the World Bank (WB).⁸⁸¹ These MDBs have funded power projects within the Africa Region, and such projects can be replicated in Nigeria.⁸⁸²

- g. International Climate Finance Funds: some international Climate Finance funds that are relevant to power sector and potentially available to Nigeria are:
 - a. Nationally Appropriate Mitigation Action (NAMA) facility: NAMA came up during the UN Climate Conference in Bali, 2007.⁸⁸³ It is designed to assist countries to reach their mitigation goals as set out in their Nationally Determined Contributions (NDC) through NAMA funded projects called NAMA Support Projects (NSP).⁸⁸⁴
 - b. Green Climate Fund (GCF): at the Conference of Parties (COP) 16th session held between November and December, 2010 at Cancun, the Green Climate Fund

⁸⁷⁸ Ibid.

⁸⁷⁹ Ibid.

⁸⁸⁰ Ibid,

⁸⁸¹ Oyedele and Onu (2022) supra.

⁸⁸² For example, AfDB/EIB funded the Lake Turkana Wind Power Project in Kenya which is the largest wind farm project in Africa. See Ibid. See also AfDB Projects and Operations. Retrieved July 21, 2020 from: <https://www.afdb.org/en/projects-and-operations/selected-projects/lake-turkana-wind-power-project-the-largest-windfarm-project-in-africa/>.

⁸⁸³ NAMA Facility. Retrieved July 22, 2020 from <http://stories.nama-facility.org/portfolio-workshop/Workshop/>

⁸⁸⁴ Ibid.

(GCF) was established in section IV under paragraph 102 of the Cancun Agreement.⁸⁸⁵ The GCF was established pursuant to article 11 of the UNFCCC which deals on the financial mechanisms of the convention. The main objective of GCF is to support projects, policies, programmes and their incidental activities in developing country Parties to the convention using thematic funding windows. Nigeria can explore this funding avenue for her power projects.

- c. International Climate Fund (IKI): the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) set up the IKI for international financing of biodiversity and climate.⁸⁸⁶ IKI operates within the structure of the Convention on Biological Diversity (CBD) and the United Nations Framework Convention on CC (UNFCCC), financing biodiversity conservation and CCM in developing countries.⁸⁸⁷ Between the periods of 2008 to 2019, IKI approved and funded more than 730 biodiversity and climate projects in more than 60 countries with a total funding volume of EUR 3.9 billion.⁸⁸⁸ The IKI funding help developing countries to design and implement ambitious nationally determined contributions based on the PA.⁸⁸⁹ Nigeria can explore the IKI funding opportunity to fund power projects in Nigeria.
- d. Special CC Fund (SCCF): The SCCF was established based on the resolution of the Conference of Parties (COP7) that held at Marrakech in 2001.⁸⁹⁰ According to the NNDC Implementation Action Plan for the Industry Sector, SCCF caters for technology transfer and capacity building activities.⁸⁹¹

5.3.5 Are the NNDC implementation action plans Right-Based?

The NNDC implementation action plans are very ambitious and if properly implemented will not only reduce GHGs emission from Nigeria but will also stimulate improved productivity. The Implementation action plan for the Agriculture sector will increase

⁸⁸⁵ Ibid.

⁸⁸⁶ Ibid..

⁸⁸⁷ Ibid.

⁸⁸⁸ Ibid.

⁸⁸⁹ Ibid.

⁸⁹⁰ Special CC Fund. Retrieved July 22, 2020 from <https://www.thegef.org/topics/special-climate-change-fund-sccf>.

⁸⁹¹ Oyedele and Onu (2022), supra. 13.

Nigeria's food security through climate smart agriculture. The sectoral implementation action plan for the oil and gas sector will end gas flaring in Nigeria and stimulate improved productivity through gas commercialization.

This will in the long run lift many farmers out of poverty, create more job opportunities, improve environmental health of Nigerians. The NNDC implementation action plan for the power sector will end overreliance on fossil fuel energy and epileptic power issues in Nigeria; and stimulate improved productivity through energy efficiency. The action plan for the transport sector will drastically reduce road logjams, road accidents, make the roads more durable; and stimulate improved productivity and economic development through efficiency person and freight transportation system. The action plan for the industry sector will stimulate efficient industrial revolution.

It can be said that the proposed outcome of the NNDC implementation action plans are pro-HRs. However, are the NNDC implementation action plans right-based? Put in another way, can the NNDC implementation action plans which are supposed to improve human lives infringe on substantive and procedural rights of the people?

The part of the NNDC that was close to a human right clause is Paragraph 4.2.8 of the NNDC that deals with gender impacts and social inclusion.⁸⁹² It observed that the degree of the impact of CC is influenced by social status, political power, wealth, access or control of natural resources.⁸⁹³ NNDC stated that its mitigation measures can empower these vulnerable groups that are socio-economically underprivileged in a differentiated manner.⁸⁹⁴ The NNDC noted for example that households pay poverty penalty in their search for fuel wood and potable waters. However, women will benefit most from clean efficient cook stoves where these are introduced as the women will gain good health and productive time.

⁸⁹² Nigeria's i-NDC (supra) 16.

⁸⁹³ Ibid.

⁸⁹⁴ Ibid.

It is also important to note that current agricultural extension services get to men than woman. However, the NNDC proposed a gender-neutral social inclusion framework. No doubt, if the mitigation measures are properly implemented, they will sure protect and promote social economic rights like health, employment, healthy environment, water, and food. However, it is important to note that the NNDC focused more on the final HRs impact on the people, with no focus on the possible HR impacts in the process of implementing the CCM measures in Nigeria. Transparency and fairness provided for in paragraphs 5 and 6 of the NNDC were made in respect to Nigeria's obligation under Article 13 of the PA which deals more with national inventory report and global GHG stock take under article 14 of the PA. In a nutshell, it failed to mainstream HRs in the implementation action plans.

It is also worthy to note that the implementation of the sector action plans will require international funding, investment, technology and capacity building;⁸⁹⁵ but the Sector Implementation plans are silent on the modalities for these foreign intervention in order to safeguard the HRs of Nigerians that may be threatened by such interventions. Many Nigerians have in the recent past been subjected to gruesome HRs abuses in the hands of so-called expatriates that they work for.⁸⁹⁶ It is also on record that some of these expatriates are more focused on the economic benefits of such projects (such as carbon emission trading and profits) than on the HRs consideration. A typical example is the gas flaring activities that occurred in Kwale in the year 2006 which was approved by the government. The proponent of project failed despite outcries from Environmental rights NGOs. The proponent of the project did not also secure the informed consent of the host communities; nor did they oblige the communities and stakeholder access to details of the project. This led to loss of human lives and properties, and further desecration of the environment.

Coming to the Sector Action Plans, the NNDC implementation action plans are silent on substantive rights and procedural rights such ATI, participation and engaging in making crucial decisions, accountability, non-discrimination and equality of all before the law. In the agricultural sector, the creation of fixed grazing systems or dedicated pastures will face

⁸⁹⁵Ibid, 18.

⁸⁹⁶ Oyedele and Onu (2022) supra.

cultural and land tenure system challenges. This measure of creating fixed grazing systems or dedicated pastures will not only improve animal health, nutrition, control methane emission; it will also reduce or even end farmer-herdsmen clashes in Nigeria. Drought has pushed Fulani nomads down central and southern parts of Nigeria in search of pasture leading to competition of arable land between herdsmen and crop producers. This in most cases degenerate in bloody conflicts.⁸⁹⁷ 100s of this herder-farmer clashes occur in Nigeria annually with lives and properties lost in the process.⁸⁹⁸

The major reason for violence and war generates from disputes centered on land use; destruction of farmlands, crops and livestock; cattle rustling; grazing rights disputes; and reprisal attacks.⁸⁹⁹ The effects of these conflicts *inter alia* are loss of human lives;⁹⁰⁰ internal displacement;⁹⁰¹ destruction of farmlands and properties;⁹⁰² distrust;⁹⁰³ threat to national and food security.⁹⁰⁴

Ten days to the expiration of the first tenure of the administration of President Muhammadu Buhari, he introduced the RUGA Policy (Human Settlement Policy) to which proposed to create cattle colonies in all the states of the Federation, starting with 13 pilot states.⁹⁰⁵ Central and Southern States of the Federation vehemently opposed the policy, hence, the government was forced to suspend the policy.⁹⁰⁶

⁸⁹⁷ Okoro, J.P. 2018. Herdsmen/Farmers Conflict and Its Effects on Socio-Economic Development in Nigeria. *Journal of Peace, Security, and Development*. Vol. 4, No. 1, Pp.143-158, 145.

⁸⁹⁸ Ibid.

⁸⁹⁹ Ibid.

⁹⁰⁰ Oli, N.P, Ibekwe, C.C. N. and Ignatius, U. 2017. Prevalence of Herdsmen and Farmers Conflict in Nigeria. *International Journal of Innovative Studies in Sociology and Humanities (IJISSH)*. Volume: 3 Issue: 1, 1-15, 1.

⁹⁰¹ Ofem, O.O. & Inyang, B. 2014. Livelihood and conflict dimension among crop farmers and Fulani herdsmen in Yakurr Region of Cross River State. *Mediterranean Journal of Social Sciences*. 5(8), 512-519, 512.

⁹⁰² Ibid.

⁹⁰³ Ibid.

⁹⁰⁴ Chukwuma, O. A. 2016. The Trajectories and Dynamics of Herdsmen Militancy in Central Nigeria. *Journal of Humanities and Social Policy*. vol. 2, No. 1 pp. 22 – 30, 22.

⁹⁰⁵ See Guardian Newspaper of May, 20, 2019, retrieved June 5, 2020 from <https://guardian.ng/features/agro-care/national-livestock-plan-is-ruga-in-disguise-nigerians-warn/>

⁹⁰⁶ Ibid.

No doubt, ranching will go a long way in ending the crisis. NNDC implementation action plan for the Agriculture Sector like RUGA and other governmental land policies are not likely to succeed. For example, the Land Use Act of 1978⁹⁰⁷ was promulgated to make land accessible to all Nigeria and eliminate land speculation; over 40 years down the line of administration of this law.⁹⁰⁸ The reason can largely be attributed to exclusion of people in the process of making decisions; lack of access of information regarding such policies. The people are detached from such laws/policies and views them as affronts to their cultural antiquity.

Land is fundamental in African society. Any decision that will affect land and land tenure system must adopt a bottom-top approach if it must be effective. The above discussion is also applicable to other measures under the Agriculture Implementation Action Plan.

In the Oil and Gas sector, although paragraph 3.3.7 line 3 of the Implementation Action Plan made reference to stakeholder engagement, it did not elucidate on this engagement, hence, one cannot capitalize on it to allude to the fact that procedural HRs have been included in the action plan to be implemented. The mitigation measures adopted include strict regulation (gas commercialization); gas to power, gas-based industrialization; and high export values will directly affect the host communities of the flare gas sites; the proposed gas power plants; gas pipelines; and gas-powered industries.

In a similar vein, the power sector implementation action plan proposed for renewable energy; more efficient gas fired generation; Energy efficiency and Cook Stoves will directly affect the host communities of the renewable energy sites; the proposed gas-fired power plants; and gas pipelines. The cook stoves will place economic burden on the already poor Nigerian population. These measures may likely fail as was the case with the Kwale CDM project under the KP.

⁹⁰⁷ Land Use Act 1978, The Complete 2004 Laws of Nigeria <<http://lawsfnigeria.placng.org/view2.php?sn=228>> accessed 19 June 2020. (Land Use Act 1978).

⁹⁰⁸ Otubu. A. 2018. The Land Use Act and Land Administration in 21st Century Nigeria: Need for Reforms. *Afe Babalola University: J. of SUST. DEV. LAW & POLICY*. VOL. 9: 1: 80-108, 82.

The Ogidigben EPZ project is major point of concern. The project is expected to house the biggest gas hub in Africa with enormous economic and developmental implications for Nigeria. EPZ projects has environmental, health and HRs implications for people living around its locality. In most developing countries, there exists lack of political will to implement and enforce environmental policies and laws.⁹⁰⁹ For example, the Dakar EPZ that commenced operation as far back in 1993, and as at the year 2011 it still discharges untreated effluent into natural water body as against setting up a Central Effluent Treatment Plant (ETP).⁹¹⁰

The Ogidigben EPZ is expected to be a gas hub in West Africa which will house a seaport, Petro-chemical plant,⁹¹¹ fertilizer plant, methanol plant etc. will in no some measure generate health and environmental concerns in the absence of adequate regulatory framework and its enforcement. A medical examination of Nicaragua EPZ workers showed that many workers had serious symptoms of musculoskeletal. Many also showed symptoms of airways problems; and there exist serious psycho-social disorders especially among women which has resulted into repression.⁹¹² Also, in China, many people living around Soungha area were left with no running water for days due to the explosion of a chemical plant that contaminated the Soungha waterways.⁹¹³

It has been posited that contact with unsafe bathing, cooking or drinking water can inflict severe risks to human health.⁹¹⁴ Coastal and marine waters are contaminated with microbes by sewage outfalls and nutrient concentration in the marine waters due agricultural runoffs, this equally possesses a great threat to the coastal life and coastal dealers.⁹¹⁵ Recent statistics from the European Commission's (EC) shows that 20% of all EU surface waters

⁹⁰⁹ Umukoro, B.E. 2018. The Ogidigben Epz Gas Project and The Environment: Health and HRs Implications. *Ajayi Crowther University Law Journal*. 1: 1, 1-38, 12.

⁹¹⁰ *Ibid.* See also Khan, M.K.A. *et. al.* 2011. Environmental Pollution Around Dhaka EPZ and its Impact on Surface and Groundwater. 46 (2) *Bangladesh J. Sci. Ind. Res.* 153.

⁹¹¹ *Ibid.*

⁹¹² Umukoro, *supra*.

⁹¹³ *Ibid.*

⁹¹⁴ Umukoro, (*supra*).

⁹¹⁵ *Ibid.* See also Remoundou, K. & Koundouri, P. Environmental Effects on Public Health: An Economic Perspective. Retrieved August 28, 2020 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2738880/>.

are polluted. Surface water obviously will be more prominent in Africa that is deficient in basic infrastructures.⁹¹⁶

There exists scarcity of potable drinking water for many Nigerians, the city dwellers inclusive.⁹¹⁷ In the rural areas in Nigeria, many depend on rivers and streams for their drinking waters. This is a common occurrence in riverine communities like Ogidigben. Various forms of waste are likely to be indiscriminately disposed into waterways without any recourse to their human and animal health implications.⁹¹⁸

If adequate measures are not put in place, Ogidigben EPZ has the capacity to generate more waste and pollution due to the nature of businesses it proposes to host. These will in turn pose dire public health concerns for both workers at the EPZ and members of its host community.

The fact that the Ogidigben EPZ is intended to host a Petro-chemical plant, fertilizer and methanol plants, is enough to arouse reasonable anxiety about the EPZ's immediate environment. Petrochemicals can lead to some serious health conditions such as infant mortality, perinatal disorders, cardiovascular disorders, mental disorders, respiratory disorders, malignancies, allergy, and other harmful effects.⁹¹⁹ Petrochemical can also induce some serious environmental hazards such as CC, flooding, landslides, loss of vegetation, economic disruptions, loss of employment for agricultural employees, among others.⁹²⁰

Ogidigben community was chosen over Koko community because of the deep nature of the Ogidigben waters for the siting of a seaport. The EPZ upon completion will involve a lot of shipment and ship movements around the port which will require the release of ballast water within Ogidigben waterways. Ballast water is essential for modern shipping as it stabilizes the waters of ease of rudders and propellers generation.⁹²¹ On the other hand, ballast waters

⁹¹⁶ *Ibid.*

⁹¹⁷ Umukoro (*supra*), 13.

⁹¹⁸ Umukoro (*supra*), 14.

⁹¹⁹ *Ibid.*, 16.

⁹²⁰ *Ibid.*

⁹²¹ *Ibid.*, 96.

are the vectors through which aquatic pathogens are moved from one location to another which have a wide range of ecological and human health impacts.⁹²²

HRs are not self-reliant. They are interrelated, interdependent, and inseparable. It is therefore practically impossible to achieve one in isolation of others. For instance, the right to life becomes a mere mirage in the absence of a right to health. Some HRs abuses are instantaneously conspicuous. Stabbing a person to death is a trample on human rights. However, the same cannot be said of death occasioned by environmental degradation. Environmental degradations may take years to manifest, and its attendant environmental health risks may also take years to surface. Environmental hazards make the vulnerable population susceptible to health threats.

It is imperative to note that the Ogidigben EPZ multi-billion donor project with all its ambitious economic and developmental implications has not commence operation since its launching in 2015 due to security challenges.⁹²³ This is because, the Federal and Delta State governments in establishing this joint venture failed to comprehensive carry the host community of Ogidigben along. The people of the EPZ host community were denied their procedural rights to ATI participation and involvement. The vulnerable groups of the community were not equally considered in the design of the project. The people in vehement opposition to the project resorted to serious violence against the EPZ workers and facilities which forced the investors to flee the site.

The above scenario underscores the importance of procedural rights in the siting of developmental projects. A project may be pro-green and sustainable, but the immediate environment of such a project must understand it in that light. The Nigerian societies are apprehensive of insincerity of multinational companies, and as such, must deliberately partake in execution of any project within its locality.⁹²⁴ The reason can largely be attributed

⁹²² *Ibid.*

⁹²³ FG to restart the \$16 Billion Gas Project in Ogidigben. Retrieved August 27, 2020 from <https://theoilbloc.com/fg-to-restart-the-16-billion-gas-project-in-ogidigben/>

⁹²⁴ Recently, the Minister of State for Petroleum made a consultation visit to Ogidigben community to enlighten the community on the benefits of the project and also to charge them to peacefully cohabit with the EPZ. This is coming after coming after 5 years of inactivity of the EPZ. This ugly scenario would have been averted had the government involved the community in the decision making and execution of the project at first. *Ibid.*

to lack of involvement of community members in the process of making decisions; lack of access of information regarding such policies; and on the part of government lack of accountability and transparency. The people are detached from these projects, and so, they view these projects as affront to their cultural antiquities; a deliberate measure to deprive them of their lands; and further impoverish them.

Land is fundamental in African societies. Any decision that will affect land and land tenure system must adopt a bottom-top approach if it must be effective. The People of Niger Delta has suffered a lot because of gas flaring. There is no dusk in most flare gas site communities. Agricultural activities have been marred by the effects of gas flaring. The people are already apprehensive, vexed, and suspicious. Any climate mitigation measures that do not fully carry the people along may likely be sabotaged.

Therefore, the Nigerian government owe the Nigerian people the duty to provide them with ATI in relation to CCM. The empirical data retrieved by this researcher shows that the awareness level of Nigerians about climate change is very low, talk more of CCM projects and their impacts. Section 30 of Climate Change Act made provision for PES which make the government to make avail its yearly Climate Action Plan and NDC measures to the public. This is a laudable step; however, the PES is to be published in the Federal Gazette. This kind of publication will not guarantee that the information will get to the hinter lands of Nigeria. It may not guarantee ATI to all Nigerians. This provision is also general in nature, and it did not specifically provide for ATI for host communities for CCM projects and persons that may be adversely affected by these projects.

The mitigation measures for the transportation sector which include fuel subsidy reforms; promotion of transport of cargo by rail from sea ports to inland inter-modal freight hubs, from which freight can be efficiently transported to towns; effect a modal shift in passenger travel from air and road to high-speed rail, focusing on the busiest routes where immediate uptake and substantial savings in travel time can be achieved; Improve overall vehicle efficiency through higher fuel efficiency standards, labelling and testing; upgrading roads in city centers to reduce congestion and increase fuel efficiency, and incentivize the use of public transport; improve public transport connections from satellite towns to city centers; Implement a road-tolling policy that incentivizes the use of public transport and co-finance

improvements in public transport systems on roads that have already been re-habilitated and are operated by the private sector under BOI (BO(O)T) agreements, after review of the perceived need to subsidize CNG use.⁹²⁵

These measures like the Kwale CDM project under the KP are likely to fail. The modal shifting of transportation will definitely encroach on propriety rights of people as the speed rail lines and other rail rails will be constructed on the lands of people. Again, reintroduction of road tolling on the highways requires a lot of consultation and involvement of the people. CNG and LPG are currently expensive for the common people. The government need to implement these action plans in manners that they do not further impoverish the Nigeria people. Participation of the people in the communities in execution and planning of these measures which affect is highly imperative. This will forestall the kind of ugly Kwale and Ogidigben scenarios.

Other HRs concerns include the environmental impact of the proposed post-harvest machines on the workers and the host communities. Guaranteeing a healthy environment from the WHO's standpoint will be herculean task in communities where these mitigating measures will be sited. The local communities have no full grasp of what is coming to them. Air, water, and land pollution are very common in harvest processing factories and environment. More so, Nigeria like other developing countries have no good record of foreign investors complying with environmental and HRs regimes, despite the existence of such laws.

5.3.6 Impact of Corona Virus Pandemic on NNDC implementation action plans

The coronavirus disease (Covid-19) is a communicable respiratory disorder that is caused by novel strains of coronavirus that causes illnesses.⁹²⁶ Current scientific discovery trace the virus to a meat market in Wuhan, China in December 2019.⁹²⁷ The disease now spread from human to human. The World Health Organization delivered the coronavirus disease a global pandemic on the 11th of March, 2020.⁹²⁸ The National Centre for Diseases Control

⁹²⁵Onu (2021), supra 7.

⁹²⁶ Africa Centre for Disease Control, 2020, *Coronavirus Disease (Covid-19)*. Retrieved June 8, 2020 from <https://africacdc.org/covid-19/>

⁹²⁷ *Ibid.*

⁹²⁸ Cucinotta, D. & Vanelli, M. 2020. *WHO Declares COVID-19 a Pandemic*. *PMID*, 191(1), 157-160. 157.

(NCDC) confirmed the first coronavirus case in Nigeria on the 27th of February, 2020.⁹²⁹ In a swift reaction to control the effect of the pandemic, the Nigeria government following the WHO guidelines *inter alia* imposed lockdowns on major hit States of the country; placed ban on inter-state travels; and also imposed curfews.⁹³⁰ The rapid spread of the virus has also led to wide panic in the society.

The pandemic and its containment measures have both positively and negatively impacted the NDC Implementation Action Plans in Nigeria. Some of the major impacts are:

- a. Farm activities have been suspended in some areas of the country due to impact of the virus on people's lives and the restriction of movements. Where they are still in operation, farmers currently have shortage of labour due to morbidity, restriction of movements, and the social distancing rules.⁹³¹ This has occasioned a drop in production, hence, a threat to food security in the coming year.
- b. The coronavirus containment measures like global lockdown and stoppage of businesses have greatly affected community pricing of commodities such as crude oil in the international market.⁹³² The global demand for fossil fuel has drastically reduced. Oil prices slumped to 25 US dollar per barrel (probably the lowest price in history) in the second week of April 2020; as against 56 US Dollar in February, 2020.⁹³³ Many IOCs have either suspended or reduced production of oil in Nigeria. Where they are still in operation, oil producers currently have shortage of labour due to morbidity, restriction of movements, and the social distancing rules.⁹³⁴ This has occasioned a drop in production, hence, a reduction in gas flaring. Gas flaring has

⁹²⁹ NCDC, 2020 *First Case Coronavirus Disease Confirmed in Nigeria*. Retrieved June 8, 2020 from <https://ncdc.gov.ng/news/227/first-case-of-corona-virus-disease-confirmed-in-nigeria>

⁹³⁰ Mba, F. 2020. Nigeria Announces Lockdown of Major Cities to Curb Coronavirus. Retrieved online June 8, 2020 from: <https://www.aljazeera.com/news/2020/03/nigeria-announces-lockdown-major-cities- curb-coronavirus-200330095100706.html>.

⁹³¹ World Bank, 2020, Food Security and Covid-19. Retrieved June 8, 2020 from: <https://www.worldbank.org/en/topic/agriculture/brief/food-security-and-covid-19>

⁹³² Ibid.

⁹³³ Ibid

Ukoha Ukiwo, 'The Covid-19: Challenges and Opportunities in Nigeria's Oil and Gas Industry'. Business Day of May 14, 2020. Retrieved online from: <https://businessday.ng/opinion/article/the-covid-19-challenges-and-opportunities-in-nigerias-oil-and-gas-industry/>

drastically reduced within the second quarter of 2020.⁹³⁵ The lockdown has reduced the emission of GHGs in the country.

- c. Effective implementation of measures a,b,c,e,f, and g for the Agriculture Sector largely depend of Agriculture extension services. Before the outbreak of coronavirus, lack of adequate and available extension services has been noted as a major brick wall for progressive execution; with the outbreak, minimal available extension officers will not be able to make reach farmers because of the fear of contacting the coronavirus and the restriction of movements.
- d. Effective implementation of most the measures under the NDC Implementation Action Plans depend largely on technology transfer. The pandemic has led to the ban on foreign travels, and people are also skeptical to travel; therefore, the needed experts and technologies for the Sector Plan Implementation will not be able to be transported to Nigeria. This will grossly impact negatively on the implementations of the Sector Plans.
- e. All the measures require funding both locally and internationally. They also require international investment, technology, and capacity building. The pandemic has wrecked National economies and has also crumbled businesses all over the world. It is even more difficult to access funds or loan facilities for oil and gas activities. Renewable energy and cook stove investors need funds to invest in energy revolution in Nigeria, but with this pandemic, the investors may be forced to slow down on their activities as they can do much without the requisite investment funds. Power and Energy workers equally need funds to acquire work PPEs which is part of the new normal introduced by the pandemic. Farmers need funds to invest in Climate Smart Agriculture, but with this pandemic, farmers may be left with no other choice than to return to BAU (BAU). Farmers equally need funds to acquire work PPEs which is part of the new normal introduced by the pandemic.
- f. Permit Holders and Greenfield Producers under the Flare Gas Regulation 2018 need funds to invest in gas commercialization as the NGFCP projects that USD 2-3 billion

⁹³⁵ Ibid.

is needed to end gas flaring in Nigeria by 2020, but with this pandemic, producers may be left with no other choice than to return to BAU (BAU) of gas flaring. Oil and gas workers equally need funds to acquire work PPEs which is part of the new normal introduced by the pandemic.

- g. A producer shall not be liable to pay penalties for gas flaring triggered by natural cause.⁹³⁶ One may contend that producers may read the coronavirus pandemic to constitute a natural phenomenon that can trigger gas flaring, in that global price of oil has drastically fallen within the period thereby making the cost of producer higher than the price of sell. So, for the producers to remain a going concern, a reversion to the BAU approach becomes inevitable.

5.4 Mainstreaming HRs in CCM in Nigeria: A Quantitative Approach

This thesis in order to mainstream HRs in CCM used the research method set out in 1.6 to get the public's opinion of CC in Nigeria and the mitigation actions by the government. The research also intervened the relevant regulatory agencies for CC control in Nigeria.

5.4.1 Presentation of Data by study Objectives

The section examines the key outcomes based on the research objectives from quantitative methodologies set out in chapter 1, section 6 of this thesis. The study analyses the international CC regime consisting of the UNFCCC 1992, the KP 1997 and the PA 2015; examined the effectiveness of the relevant provisions of the above regimes that contain obligations that Nigeria have in mitigating CC using a human right based approach; examined the effectiveness of the relevant provisions of the above regimes that contain obligations that Nigeria have in mitigating CC using a human right based approach; examine the Nigerian regulatory framework for environmental protection using a human right based approach; In addition, the study emerged with empirical evidence to discuss the current impact of CC on HRs in Nigeria, and the possible impact of mitigation mechanisms adopted by Nigeria under the PA on human right in Nigeria; and consider an efficient international CC instrument that will mitigate CC using a human based approach.

⁹³⁶ Regulation 13. See also Israel Aye and Emmanuel Wingate, 2019 'Nigeria's Flare Gas (Pollution and Prohibition) Regulation 2018' *Environmental Law Review* Vol. 21(2) 119–127, 125.

5.4.2 Socio-demographic Characteristics of Respondents

Table 1 presents the socio-demographic variables of the respondents which include age, gender, marital status, state of origin, geo-political zones and religion. The age distribution revealed that majority of the respondents fell within the age bracket of 16-24years (51.4%), the sex distribution showed that slightly above half (51.4%) of the respondents are male, while (48.6%) are female. The marital status of the respondents revealed that large majority (77%) of the respondents are single, while few (21.8%) are married, (0.2%) are dating, (0.8%) are separated and (0.2%) are friends with benefits. The frequency distribution of the geo-political zones shows large percentages (41.8%) of the respondents come from the southwest region while minority of the respondents (4%) come from the north west region. On the religion of the respondents, a large majority of the respondents (90.6%) are Christians, while (8%) are Muslims, (0.8%) practice traditional religion, and (0.6%) are atheist.

Table 5.2: Socio-demographic Characteristics of Respondents (N=500)

Demographic Characteristics	Frequency	Percent
Age		
16-24	257	52.4
25 – 34	172	34.4
35 – 44	49	9.8
45 – 54	18	3.6
55 and above	4	0.8
Gender		
Male	257	51.4
Female	243	48.6
Marital Status		
Single	385	77.0
Married	109	21.8
Dating	1	0.2
Separated	4	0.8
Friends with benefit	1	0.2
Geo-Political Zones		
North-Central	82	16.4
North-East	52	10.4
North-West	20	4.0
South-East	62	12.4
South-South	75	15.0
South-West	209	41.8
Religion		
Christianity	453	90.6
Islam	40	8.0
Traditionalist	4	0.8
Atheist	1	0.6

5.4.3 Socio-economic Characteristics of Respondents

Information on educational qualification, employment status of the respondents is categorized under socio-economic characteristics. On educational qualification, Majority (93%) have tertiary education, (4.6%) have secondary education, while a very few (1.2%) have no formal education.

Little above average (54.6%) of the respondents are employed, while (45.4%) of the respondents are unemployed. Data on income revealed that most of the respondents that are employed (49.3%) earn between ₦10,000--₦50,000 monthly, (3.5%) of the respondents earn between ₦ 50,001--₦ 100,000, (1.8%) earn between ₦100,001--₦ 150,000, (1.3%) earn above ₦ 150,000 while (20.7%) earn below ₦10,000 as their monthly income.

Table 5.3: Distribution of Respondents by Socio-economic Characteristics (N=273)

Socio-economic Characteristics	Frequency	Percentage
Highest Educational Qualification(N=500)		
None	6	1.2
Primary school leaving cert	6	1.2
Secondary school leaving cert	23	4.6
Tertiary	465	93.0
Employment status (N=500)		
Employed	227	45.4
Unemployed	273	54.6
Average Monthly Income (N=227)		
Below 10,000	47	20.7
10,001-50,000	112	49.3
50,001-100,000	18	3.5
100,001-150,000	4	1.8
150,001 and above	3	1.3
Others	43	18.9
Employment status relating to CC (N=227)		
Workers of regulatory agencies on environmental protection in Nigeria	29	12.8
Non-Workers of regulatory agencies on environmental protection in Nigeria	198	87.2
CC experts	23	10.1
Non- CC experts	204	89.9
Driving experiences (N=500)		
Regular drivers	146	29.2
Non- Regular drivers	354	70.8
Miles driven per hour (N=146)		
1-100 Miles	65	44.5
101-1000 Miles	14	9.6
1001-10000 Miles	2	1.4
10001 and above	65	44.5
Membership status of environmental organizations (N=500)		
Members of environmental Organizations	36	7.2
Non-Members of environmental Organizations	464	92.8

5.4.4: Distribution of Respondents by state of awareness of CC

This section of the study reports data gotten from respondents on their state of awareness, source of information on CC, how they describe CC, their perception about causes of CC, and their perception about human activities that cause CC. On the state of awareness of CC, majority of the respondents have heard of CC (89.8%). Most of the respondents got information about CC from the television (35.9%). With regards to how they describe CC most of the respondents (47.4%) are of the view that it is the change in the earth's climate, while minority of the respondents are of the opinion that it is feasibility of the earth. In terms of natural causes that induce CC, most of the respondents are of the opinion that volcanic eruption is a natural factor that induces change in climate, also a small percentage of the respondents (5.1%) are of the opinion that solar variation causes CC.

Table 5.4: Distribution of Respondents by state of awareness of CC (N=500)

State of awareness of CC (N=500)			
Variable	Responses	Frequency	Percentage
Ever heard of CC	Yes	449	89.8
	No	51	10.2
Source of information about CC (N=449)	Television	161	35.9
	Radio	44	8.8
	Internet	89	19.8
	News paper	74	16.5
	Family and friends	55	12.3
	Others	26	5.8
Description of CC (N=449)	Change in the earth Climate	213	47.4
	Obstructions in the atmosphere	166	37.0
	Feasibility of the earth	3	0.7
	A danger to the earth	66	14.7
	Others	1	0.2
Perception on natural causes of CC (N=449)	Volcanic eruption	193	43.0
	Ocean current	149	33.2
	Solar variations	23	5.1
	Earth Orbital Changes	62	13.8
	Others	22	4.9

From the qualitative excerpts, the description of CC was sought from CC professionals to get an in-depth understanding of the state of CC and how it is managed in Nigeria. According to one of the professionals interviewed, CC was described as something that occurs naturally and is influenced by some, he said:

CC is a natural process of climatic changes. It becomes a concern when it is induced by anthropogenic activities.

(KII, CC professional, Male)

Similarly, an environmental officer gave his description of CC to be change in climatic conditions induced by human and industrial activities. It is imperative to know that CC is often characterized by global temperatures, depletion of the ozone layer from GHG emission, depletion of ecosystem through draught, melting of polar ice, flooding, and wild fires. In his words, he described CC as:

Human and industrial activities causing rise in global temperatures, depletion of the ozone layer from GHG emission, depletion of ecosystem through draught, melting of polar ice, flooding, wild fires etc. which lead to decrease, in nations' economies, poverty and threat to food and water security.

(KII, Environmental officer, Male)

Also, the opinion of a science officer was sought, he said:

A long-term change in the earth's climate, especially a change due to an increase in the average atmospheric temperature:

(KII, Science officer, Male)

CC is often characterized to alterations in the earth's climate and weather conditions and is often induced by human activities. According to an environmental scientist:

CC is the significant variations in average weather over a long period of time over the entire earth due to use of fossil fuels:

(KII, Environmental scientist, Male)

Similarly, in terms of human activities that cause CC, a percentage of the respondent (17.6%) of the respondents are of the opinion that burning of fossil fuel can cause CC, and a small percentage of the respondents (5.1%) are of the perception that population increase can cause CC. A large majority of the respondent (93.1%) are of the opinion that CC can be tackled. Similarly, a percentage of the respondents (31.4%) are of the opinion that CC can be tackled through creation of laws, another percentage (22.7%) of the respondents believe that tackling CC is solely a responsibility of the government. Also, a minute percentage (5.4%) of the respondents are of the opinion that eradication of deforestation is a solution to CC.

**Table 5.4: Distribution of Respondents by state of awareness of CC (N=500)
(Continued)**

State of awareness of CC (N=500)			
Variable	Responses	Frequency	Percentage
Perception on human activities that cause CC (N=449)	Bush burning	51	11.4
	Cutting down of trees	24	5.4
	Use of generators	20	4.5
	Gas flaring from oil companies	57	12.7
	Burning of fossil fuel	79	17.6
	Excess use of chemicals	68	15.2
	Gases released from industries	54	12.0
	Crude oil spillage	67	14.9
	Population increase	23	5.1
	Others	3	0.7
Do you think anything can be done to tackle CC (N=449)	Yes	418	93.1
	No	31	6.9
Perception on how the problem of CC can be tackled (N=449)	Creation of laws	141	31.4
	Responsibility of government	102	22.7
	Renewable energy options	114	25.4
	Eradication of deforestation	24	5.4
	CC litigation	56	12.5
	Others	12	2.7

5.4.5 Distribution of Respondents by experience of environmental health hazards

Information was elicited from respondents in this study to document their personal experiences of some environmental health hazards. In terms of air pollution, majority (79.4%) have experienced air pollution. Slightly above of the respondents (51.8%) that were affected by air pollution had the experience within a year and majority (60.5%) of them perceive air pollution as a serious environmental hazard. Similarly, with regards to pollution of rivers and seas slightly below half of the respondents (42%) were affected in the past. The incidence occurred to a percentage (46.2%) within a year and most of the respondents (62.9%) perceive pollution of rivers and seas as a serious environmental hazard. Slightly above half of the respondents, (50.8%) of the respondents have at one point in time or the other experienced flooding. Above half of the respondents experienced within a year and in terms of perceived severity of flooding, most of them are of the opinion that it is a serious environmental hazard.

Table 5.5: Distribution of Respondents by experience of environmental health hazards

Environmental hazards experienced (N=500)			
Variable	Responses	Frequency	Percentage
Recent experience of Air pollution (N=500)	Yes	397	79.4
	No	103	20.6
Period that air pollution was experienced last (N=397)	Within a year	206	51.8
	2 years ago	33	8.3
	3 years ago	19	4.8
	>3 years ago	139	35.0
Perceived severity of Air Pollution (N=397)	Common	115	28.9
	Normal	42	10.6
	Serious	240	60.5
Recent experience of Pollution of rivers and seas (N=500)	Yes	210	42
	No	290	58
Period that Pollution of rivers and seas was experienced last (N=210)	Within a year	97	46.2
	2 years ago	19	9.1
	3 years ago	13	6.2
	>3 years ago	81	38.6
Perceived severity of Pollution of rivers and seas	Common	47	22.3
	Normal	31	14.8
	Serious	132	62.9
Recent experience of Flooding (N=500)	Yes	254	50.8
	No	246	49.2
Period that flooding was experienced last (N=254)	Within a year	139	54.7
	2 years ago	21	8.3
	3 years ago	17	6.7
	>3 years ago	77	30.3
Perceived severity of Pollution of flooding (N=254)	Common	53	20.9
	Normal	42	16.5
	Serious	159	62.6

Similarly, the study documented the experience of litter among respondents, a large percentage of them (66.2%) were affected in the past. About half of them (50.5%) were affected within a year, and a large percentage of them (63.4%) perceive litter as a serious environmental hazard. In terms of experience of poor waste management, a great percentage (80.6%) have experienced it in the past. Slightly below half of them (48.6%) experienced it within a year, and most of them (71.0%) perceive poor waste management as a serious environmental health hazard.

Table 5.6: Distribution of Respondents by experience of environmental health hazards (Continued)

Environmental hazards experienced (N=500)			
Variable	Responses	Frequency	Percentage
Recent experience of Flooding (N=500)	Yes	254	50.8
	No	246	49.2
Period that flooding was experienced last (N=254)	Within a year	139	54.7
	2 years ago	21	8.3
	3 years ago	17	6.7
	>3 years ago	77	30.3
Perceived severity of Pollution of flooding (N=254)	Common	53	20.9
	Normal	42	16.5
	Serious	159	62.6
Recent experience of Litter (N=500)	Yes	331	66.2
	No	169	33.8
Period that litters was experienced last (N=331)	Within a year	167	50.5
	2 years ago	22	6.6
	3 years ago	26	7.9
	>3 years ago	116	35.0
Perceived severity of litters (N=331)	Common	82	24.8
	Normal	39	11.8
	Serious	210	63.4
Recent experience of Poor waste management (e.g. overuse of landfills) (N=500)	Yes	403	80.6
	No	97	19.4
Period that Poor waste management (e.g. overuse of landfills) was experienced last (N=403)	Within a year	196	48.6
	2 years ago	23	5.7
	3 years ago	29	7.2
	>3 years ago	155	38.5
Perceived severity of Poor waste management (e.g. overuse of landfills) (N=403)	Common	75	18.6
	Normal	42	10.4
	Serious	286	71.0

In addition, the study documented the experience of traffic/ congestion by respondents and majority of the respondents (87.6%) have been affected in the past. Slightly above half of the respondents (52.3%) experienced it within a year and most of them (67.1%) perceive traffic/congestion as a serious environmental hazard. A small percentage of the respondents (29.6%) have at one point or the other been affected by GM food. Slightly below half of the respondents (42.6%) were affected within a year, while about (35.8%) were affected more than 3 years ago. Also (54.7%) of the respondents perceive GM food as serious.

Table 5.7: Distribution of Respondents by experience of environmental health hazards (Continued)

Environmental hazards experienced (N=500)			
Variable	Responses	Frequency	Percentage
Recent experience of Traffic/ congestion (N=500)	Yes	438	87.6
	No	62	12.4
Period that Traffic/ congestion was experienced last (N=438)	Within a year	229	52.3
	2 years ago	20	4.6
	3 years ago	19	4.3
	>3 years ago	170	38.8
Perceived severity of Traffic/ congestion (N=438)	Common	92	21.0
	Normal	52	11.9
	Serious	294	67.1
Recent experience of GM food (N=500)	Yes	148	29.6
	No	352	70.4
Period that GM food was experienced last (N=148)	Within a year	63	42.6
	2 years ago	20	13.5
	3 years ago	12	8.1
	>3 years ago	53	35.8
Perceived severity of GM food (N=148)	Common	37	37.0
	Normal	30	20.3
	Serious	81	54.7

A small percentage of the respondents, (26.4%) of the respondent have at one point in a time been affected by CC. Most of the respondents (63.6%) affected by CC experienced it within a year and a little below half of the respondents, (47.7%) of the respondents perceive CC to be serious. Few of the respondents, (29.8%) of the respondents have experienced or witnessed hole in the ozone layer, most of them (34.2%) experienced it within 3 years. Most of the respondents that have witnessed hole in the ozone layer, perceive it as being common. A great percentage of the respondents (62%) have not experienced using up of the earth's resources. Most of those that experienced it (54.2%), did so within a year, and a great percentage (62.6%) perceive using up of the earth's resources as serious.

Table 5.8: Distribution of Respondents by experience of environmental health hazards (Continued)

Environmental hazards experienced (N=500)			
Variable	Responses	Frequency	Percentage
Recent experience of CC (N=500)	Yes	132	26.4
	No	368	73.6
Period that CC was experienced last (N=132)	Within a year	84	63.6
	2 years ago	22	16.6
	3 years ago	21	15.9
	>3 years ago	5	3.8
Perceived severity of CC (N=132)	Common	48	36.4
	Normal	21	15.9
	Serious	63	47.7
Recent experience of the hole in the ozone layer (N=500)	Yes	149	29.8
	No	351	70.2
Period that the hole in the ozone layer was experienced last (N=149)	1 year ago	15	10.1
	2 years ago	35	23.5
	3 years ago	51	34.2
	>3 years ago	48	32.4
Perceived severity of the hole in the ozone layer	Common	61	40.9
	Normal	39	26.2
	Serious	49	32.9
Recent experience of using up the earth's resources (N=500)	Yes	190	38
	No	310	62
Period that using up the earth's resources was experienced last (N=190)	Within a year	103	54.2
	2 years ago	23	12.1
	3 years ago	16	8.4
	>3 years ago	48	23.3
Perceived severity of using up the earth's resources (N=190)	Common	54	28.4
	Normal	17	9.0
	Serious	119	62.6

The study also documented the experience on extinction of species, most of them (64.4%) did not experience it. Above half of the respondents that experienced the extinction of species (52.3%) experienced it within 3 years and most of them (62.9%) believe that it is common. With regards to experience of radioactive waste, majority of the respondents (74.4%) did not experience it. Slightly below half of the respondents (47.7%) experienced it within 2 years and above half of the respondents (55.4%) perceive radio-active waste to be serious.

Table 5.9: Distribution of Respondents by experience of environmental health hazards (Continued)

Environmental hazards experienced (N=500)			
Variable	Responses	Frequency	Percentage
Recent experience of extinction of species (N=500)	Yes	178	35.6
	No	322	64.4
Period that using up the extinction of species was experienced last (N=178)	Within a year	14	7.8
	2 years ago	52	29.2
	3 years ago	93	52.3
	>3 years ago	19	10.7
Perceived severity of extinction of species (N=178)	Common	112	62.9
	Normal	48	26.9
	Serious	18	10.1
Recent experience of radioactive waste (N=500)	Yes	128	25.6
	No	372	74.4
Period that radioactive waste was experienced last (N=128)	Within a year	15	11.7
	2 years ago	61	47.7
	3 years ago	43	33.6
	>3 years ago	9	7.0
Perceived severity of radioactive waste (N=128)	Common	12	9.4
	Normal	45	35.2
	Serious	71	55.4

Majority of the respondents (68.4%) have encountered overpopulation. Some of the respondents (29.8%) experienced overpopulation within two years; others (28.7%) experienced it within three years; (28.1%) of the respondents experienced within a year; while (13.4%) of the respondents experienced it more than three years ago. Majority of the respondents (75.1%) that have experienced overpopulation perceive it to be a serious environmental health hazard.

Table 5.10: Distribution of Respondents by experience of environmental health hazards (Continued)

Environmental hazards experienced (N=500)			
Variable	Responses	Frequency	Percentage
Recent experience of Overpopulation (of the earth by humans)	Yes	342	68.4
	No	158	31.6
Period that Overpopulation (of the earth by humans) was experienced last (N=342)	Within a year	96	28.1
	2 years ago	102	29.8
	3 years ago	98	28.7
	>3 years ago	46	13.4
Perceived severity of Overpopulation (of the earth by humans) (N=342)	Common	43	12.6
	Normal	42	12.3
	Serious	257	75.1

5.4.6 HRs and CC

Information was elicited from respondents in this study to document their awareness of any law on CC. Most of the respondents (29.2%) are not aware of any law on CC. Majority of the respondents (68.2%) that are aware of laws on CC are aware that Nigeria has signed the PA 2015 on CC. However slightly below half of the respondents (42.5%) are aware of the 8 Nigeria's National Determined Contributions (NDC) towards CCM under the PA. According to a percentage of the respondents (38.7%) reforestation is one of the most effective NDCs for CCM in Nigeria. Also (20.9%) and (16.1%) of the respondents are of the view that end of gas flaring and emission reduction are effective NDCs for CCM in Nigeria.

Table 5.11: Distribution of Respondents by HRs and CC (N=500)

Environmental hazards experienced (N=500)			
Variable	Responses	Frequency	Percentage
Awareness of any law on CC? (N=500)	Yes	146	29.2
	No	344	70.8
Aware that Nigeria has signed the PA 2015 on CC (N =146)	Yes	100	68.5
	No	46	31.5
Awareness of the 8 Nigeria's National Determined Contributions (NDC) towards CCM under the PA (N =146)	Yes	62	42.5
	No	84	57.5
Most effective NDCs for CCM in Nigeria (N =62)	30% Energy Efficiency by 2030	6	3.7
	45% Conditional/20% Unconditional	2	3.2
	Car to Bus	1	1.6
	Climate Smart Agriculture	3	4.8
	Emissions Reduction	10	16.1
	End Gas Flaring	13	20.9
	Improve Electricity Grid	3	4.8
	Reforestation	24	38.7

The study also documented respondent's views on mitigation mechanisms and its effect on the right to property and other HRs. Majority of the respondents (78.8%) believe that mitigation mechanisms have no effect on right to property and other HRs, while (87.0%) of the respondents believe that mitigation mechanisms have no effect on HRs in Nigeria. Also, the study examined people's perception on who the responsibility for tackling CC should fall on. Some of the respondents (30.1%) are of the opinion that tackling CC is solely a responsibility of the national government. Some respondents (14.4%) and (12.3%) were of the opinion that the responsibility of tackling CC should fall on individuals and the local government respectively. Information was also elicited on how the respondents have engaged in actions to curb CC. Above half of the respondents (56.9%) have not taken any action to curb CC.

Table 5.12: Distribution of Respondents by HRs and CC (N=500)

Mitigation mechanisms and HRs (N=500)			
Variable	Responses	Frequency	Percentage
Mitigation mechanisms under the agreement may affect the right to property and other HRs (N =146)	Yes	31	21.2
	No	115	78.8
Mitigation mechanisms under the agreement may affect human right in Nigeria (N =146)	Yes	19	13.0
	No	127	87.0
Perception on why mitigation mechanisms under the agreement may affect human right in Nigeria (N=19)			
Who do you think should have the main responsibility for tackling CC (N =146)	Business and industry	7	4.8
	Environmental organizations	11	7.5
	Individuals	21	14.4
	International Organizations	10	6.9
	Local government	18	12.3
	The National government	44	30.1
Ever taken any action to curb CC (N =146)	Yes	63	43.1
	No	83	56.9

5.4.7 NDC CCM and HRs in Nigeria

The study also documented views on CC as a leading cause of environmental crisis, and majority of the respondents agree (40.6%) and strongly agree (36.1%) that CC affects crisis in the environment. Also, in terms of views of respondents on how severe CC is in Nigeria, slightly above half of the respondents (50.2%) agree, and a quarter of the respondents (25.0%) strongly agree that it has severe effects in Nigeria. Majority of the respondents both agree (43.0%) and strongly agree (28.1%) that the resilience of energy systems in Nigeria to withstand the impact of CC is very low.

Table 5.13: Respondents views on CC, environmental crisis and resilience of energy systems

Responses	Frequency	Percentages
CC is one of the major causes of environmental crisis (N=416)		
Agree	169	40.6
Disagree	22	5.3
Neutral	41	9.9
Strongly agree	150	36.1
Strongly disagree	34	8.2
Missing	84	
Climatic impacts in Nigeria are very severe (N=416)		
Agree	209	50.2
Disagree	21	5.0
Neutral	58	13.9
Strongly agree	104	25.0
Strongly disagree	24	5.8
The resilience of energy systems in Nigeria to withstand the impact of CC is very low (N=409)		
Agree	176	43.0
Disagree	13	3.2
Neutral	79	19.3
Strongly agree	115	28.1
Strongly disagree	26	6.4

In terms of perception of respondents on how CC is a threat to fundamental HRs. A vast majority of the respondents both agree (46.8%) and strongly agree (20.3%) that CC directly threatens some fundamental HRs. Also, with regards to CC posing a threat to human equality, slightly above half of the respondents both agree (36.7%) and strongly agree that (19.8%) the impact of CC has posed a threat to human equality. Below half of the respondents were neutral (39.1%) about the impact that CC has posed on non-discrimination.

Table 5.14: Respondents views on CC and threats to HRs

Responses	Frequency	Percentages
CC directly threaten some fundamental HRs (412)		
Agree	193	46.8
Disagree	31	7.6
Neutral	75	18.3
Strongly agree	84	20.3
Strongly disagree	29	7.0
The impact of CC has posed a threat to human equality (N=409)		
Agree	150	36.7
Disagree	43	10.5
Neutral	109	26.7
Strongly agree	81	19.8
Strongly disagree	26	6.4
The impact of CC has posed a threat to non-discrimination (N=404)		
Agree	108	26.7
Disagree	69	17.1
Neutral	158	39.1
Strongly agree	47	11.6
Strongly disagree	22	5.4

Below half of the respondents (49.7%) are of the perception that there is a strong regulatory framework for the protection of GHG emission and protection in Nigeria. Also, more than half of the respondents both agree (31.9%) and strongly agree (39.5%) that the government in Nigeria place economic interest over environmental protection. With regards to if the Nigerian government has been able to protect and improve the environment and safeguard the water, air and land, below half of the respondents (36.1%) disagree with that.

Table 5.15: Respondents views on environmental protection

Responses	Frequency	Percentages
There is a strong regulatory framework for protection of GHG emission and protection in Nigeria (N= 384)		
Agree	60	15.6
Disagree	71	18.5
Neutral	191	49.7
Strongly agree	24	6.3
Strongly disagree	38	9.9
The government in Nigeria place economic interest over environmental protection (N=408)		
Agree	130	31.9
Disagree	25	6.1
Neutral	66	16.2
Strongly agree	161	39.5
Strongly disagree	26	6.4
The Nigerian government has been able to protect and improve the environment and safeguard the water, air and land (N=410)		
Agree	58	14.1
Disagree	115	28.0
Neutral	75	18.3
Strongly agree	14	3.4
Strongly disagree	148	36.1

Table 5.16 shows that (29.4%) of the respondents strongly agree and (19.0%) agree that the government has made progress in educating the populace on dangers of CC. More than half of the respondents both agree (46.9%) and strongly agree (27.8%) that the fundamental HRs of people living in a CC affected community is being threatened. About (35.6%) of the respondents are neutral about their perception on the fact that there are many legal and institutional challenges militating against implementation of CC policies and law in Nigeria.

Table 5.16: Respondents views on CC, awareness, experience and laws in Nigeria

Responses	Frequency	Percentages
The government has made progress in educating the populace on dangers of CC (N=411)		
Agree	78	19.0
Disagree	114	27.7
Neutral	86	20.9
Strongly agree	12	2.9
Strongly disagree	121	29.4
The fundamental HRs of people living in a CC affected community has been threatened (N=403)		
Agree	189	46.9
Disagree	25	6.2
Neutral	57	14.1
Strongly agree	112	27.8
Strongly disagree	20	5.0
There are many legal and institutional challenges militating against implementation of CC policies and law in Nigeria (N=399)		
Agree	135	33.8
Disagree	32	8.0
Neutral	142	35.6
Strongly agree	60	15.0
Strongly disagree	30	7.5

With regards to the law in Nigeria which caters for mitigation of CC in Nigeria below half of the respondents (41.0%) have neutral views about it. Also, below half of respondents (38.6%) have neutral views on if the law in Nigeria on CC protects right to life and (43.4%) of the respondents are indifferent about the law in Nigeria on CC protection of right to privacy.

Table 5.17: Respondents views on mitigation of CC and protection of rights in Nigeria

Responses	Frequency	Percentages
The law in Nigeria caters for mitigation of CC in Nigeria (N=398)		
Agree	90	22.6
Disagree	80	20.1
Neutral	163	41.0
Strongly agree	23	5.8
Strongly disagree	42	10.6
The law in Nigeria on CC protects right to life (N=399)		
Agree	121	30.3
Disagree	70	17.5
Neutral	154	38.6
Strongly agree	17	4.3
Strongly disagree	37	9.3
The law in Nigeria on CC protects right to privacy (N=396)		
Agree	79	19.9
Disagree	94	23.7
Neutral	172	43.4
Strongly agree	16	4.0
Strongly disagree	35	8.8

Table 5.18 shows that both (32.3%) of the respondents agree and also (32.3%) of the respondents are indifferent about if the law in Nigeria on CC protects right to healthy environment. With regards to how the law in Nigeria on CC protects right to water below half of the respondents (37.7%) have neutral views on it. And in terms of if the law in Nigeria on CC protects right to food, about (42.3%) of the respondents have neutral perceptions about it.

Table 5.18 Respondents views on CC and protection of rights in Nigeria (Contd)

Responses	Frequency	Percentages
The law in Nigeria on CC protects right to healthy environment (N=400)		
Agree	129	32.3
Disagree	72	18.0
Neutral	129	32.3
Strongly agree	29	7.2
Strongly disagree	41	10.3
The law in Nigeria on CC protects right to water (N=398)		
Agree	113	28.4
Disagree	64	16.1
Neutral	150	37.7
Strongly agree	22	5.5
Strongly disagree	49	12.3
The law in Nigeria on CC protects right to food (N=390)		
Agree	94	24.1
Disagree	70	17.9
Neutral	165	42.3
Strongly agree	15	3.8
Strongly disagree	46	11.8

Table 5.19 shows that out of a total of 392 respondents, (31.6%) agreed, (15.1%) disagreed, (37.8%) were neutral, (4.3%) strongly agreed, and 44 (11.2%) strongly disagreed that the law in Nigeria on CC protects rights to health. (31.6%) of those respondents however agreed that the law in Nigeria on CC protects rights to health. Also, out of a total of 388 respondents, (27.3%) were agreed, (17.5%) disagreed, (39.4%) were neutral, (4.1%) were strongly agreed, (11.6%) strongly disagreed on if the law in Nigeria on CC protects rights to shelter. Thus, slightly more than one fourth of the respondents (27.3%) of those responding to the question agreed that the law in Nigeria on CC protects rights to shelter. The table further depicts that out of a total of 385 respondents (21.3%) were agreed, (18.7%) disagreed, (45.7%) were neutral, (3.9%) were strongly agreed, (10.5%) and strongly disagreed and the data on the law in Nigeria on CC protects right to self-determination. Thus, a small percentage of the respondents (22.1%) agreed that the law in Nigeria on CC protects right to self-determination.

**Table 5.19 Respondents views on CC and protection of rights in Nigeria
(Continued)**

Responses	Frequency	Percentages
The law in Nigeria on CC protects rights to health (N=392)		
Agree	124	31.6
Disagree	59	15.1
Neutral	148	37.8
Strongly agree	17	4.3
Strongly disagree	44	11.2
The law in Nigeria on CC protects rights to shelter (N=388)		
Agree	106	27.3
Disagree	68	17.5
Neutral	153	39.4
Strongly agree	16	4.1
Strongly disagree	45	11.6
The law in Nigeria on CC protects right to self-determination (N=385)		
Agree	82	21.3
Disagree	72	18.7
Neutral	176	45.7
Strongly agree	15	3.9
Strongly disagree	40	10.4

Table 5.20 shows that out of a total of 385 respondents 82 were agree, 72 disagree, 176 were neutral, 15 were strongly agree, 40 strongly disagree on the existence of adequate domestic legislations that bordered on CC. Hence, slightly below one quarter of the respondents (21.3%) agree that there exists, adequate domestic legislations that bordered on CC. The table also shows that out of a total of 384 respondents (15.4%) agreed, 19.6% disagreed, 52.3% were neutral, 2.3% were strongly agree, 10.3% strongly disagree and the data on Nigeria has made progress in adhering to the principles of the Paris CC Agreement in tackling CC in Nigeria. Thus, a very small percentage of the respondents (15.4%) agree that Nigeria has made progress in adhering to the principles of the Paris CC Agreement in tackling CC in Nigeria. More than half of the respondents both agree (31.0%) and strongly agree (32.0%) that there exists a level of human right abuse through oil production activities of multinational oil companies in Nigeria.

**Table 5.20 Respondents views on CC and protection of rights in Nigeria
(Continued)**

Responses	Frequency	Percentages
There exist adequate domestic legislations that bordered on CC (N=385)		
Agree	82	21.3
Disagree	72	18.7
Neutral	176	45.7
Strongly agree	15	3.9
Strongly disagree	40	10.4
Nigeria has made progress in adhering to the principles of the Paris CC Agreement in tackling CC in Nigeria (N=384)		
Agree	59	15.4
Disagree	76	19.8
Neutral	201	52.3
Strongly agree	9	2.3
Strongly disagree	39	10.2
There exist a level of human right abuse through oil production activities of multinational oil companies in Nigeria (N=387)		
Agree	120	31.0
Disagree	13	3.4
Neutral	106	27.4
Strongly agree	124	32.0
Strongly disagree	24	6.2

Table 5.21 shows that out of a total of 370 respondents, (44.3%) agreed, (4.6%) disagreed, (33.8%) neutral, (13.2%) strongly agreed, (4.1%) strongly disagreed that the NDC CCM Projects may bring about sustainable development. Thus, slightly more than half of the respondents both agreed (44.3%) and strongly agreed (13.2%) that NDC CCM Projects may bring about sustainable development. The table also shows that out of a total of 367 respondents, (40.6%) agreed, (6.3%) disagreed, (36.2%) were neutral, (12.5%) strongly agreed, and (4.4%) strongly disagreed and the data on NDC CCM Projects may help unemployment and poverty. Accordingly, slightly more than half of the respondents both agreed (40.6%) and strongly agreed (12.5%) that NDC CCM Projects may help tackle unemployment and poverty. Also, table 5.4.7.9 shows that out of a total of 363 respondents, (22.9%) agreed, (17.1%) disagreed, (47.4%) gave neutral responses, (6.1%) strongly agreed, and (6.6%) strongly disagreed that NDC CCM Projects may bring about forced displacements and loss of proprietary rights. Hence only (30.1%) agreed that NDC CCM Projects may bring about forced displacements and loss of propriety rights.

Table 5.21 Respondents views on NDC CCM

Responses	Frequency	Percentages
NDC CCM Projects may bring about sustainable development (N=370)		
Agree	164	44.3
Disagree	17	4.6
Neutral	125	33.8
Strongly agree	49	13.2
Strongly disagree	15	4.1
NDC CCM Projects may help tackle unemployment and poverty (N=367)		
Agree	149	40.6
Disagree	23	6.3
Neutral	133	36.2
Strongly agree	46	12.5
Strongly disagree	16	4.4
NDC CCM Projects may bring about forced displacements and loss of propriety rights (N=363)		
Agree	83	22.9
Disagree	62	17.1
Neutral	172	47.4
Strongly agree	22	6.1
Strongly disagree	24	6.6

Literature has it that Parties' Commitments and Review Mechanisms under the PA entailed making pledges which it called the Nationally Determined Contribution (NDC).⁹³⁷ PA is based on pledge and review system whereby parties pledge their post 2020 climate action known as NDC which shall be reviewed every five years and be communicated to the secretariat. In Nigeria, the Sectorial Action Plan NDC according to some CC professionals include, employing consultative approach to improve Nigeria's climatic conditions. According to one of the professionals interviewed, he said that:

The Department uses the Economic Recovery & Growth Plan (ERGP) and consultative approach with the relevant sectors in the implementation of the sectorial plans. Our Department is the national Focal Point for UNFCCC, KP and the PA implementation in Nigeria. We coordinate all the activities geared towards implementation of the Agreement

(KII, CC professional, DCC, Male)

Similarly, an environmental officer gave his view on the Sectorial Action Plan NDC. According to him a lot of actions have been taken by relevant government ministries. In his words, he described the NDCs as:

A number of actions has been taken by relevant government Ministries which include; approval of the National Action Plan for Short Lived Climate Pollutants (SLCP) which enumerated the sectoral actions, measuring and reporting system, Regulations for flare out programmes, securing funding to finance flare down programmes, strengthen regulatory enforcement on gas flaring, the kick of the gas flare commercialization programme. Continuous engagement with the UNEP and other international agencies on how to improve the climate mitigation action plans.

(KII, Environmental officer, DPR, Male)

⁹³⁷ Article 4(2) of the PA

Also, the opinion of a science officer was sought, she said:

The Government of Nigeria acknowledged the importance of developing a national response to CC and is taking steps to build a governance structure to manage the issue.

(KII, Science officer, NESREA, Female)

She also pointed out that:

Federal Government of Nigeria has several Ministries/Agencies dealing with the issue of CC as it relates to their mandates. That NESREA is concerned with its own mandate; Federal Ministry of Environment is designated the National Focal Point for the implementation of the UNFCCC and the KP, and the Department of CC (DCC) executes this responsibility; and Development of National GHG Inventory Management system for reporting national communications to the UNFCCC.

(KII, Science officer, NESREA, Female)

In this regard emphasis is placed on NESREA's contribution to regulation of NDCs. In his words She stated that:

In carrying out her mandate NESREA has developed and enforced 33 National Environmental Regulations in various sectors of the Nigerian economy; About thirteen (13) of these Environmental Regulations are geared towards regulating the increase in GHGs, thus reducing the effects of CC. The enforcement of these environmental regulations has contributed tremendously to people off setting their carbon emission which is the essence of NDC

(KII, Science officer, NESREA, Female)

He also stated that:

The Agency therefore is empowered to contribute towards the implementation of NDC in the country through her two flagship programmes: the National Vehicular Emission Control Programme (NVECP) and the National Generator Emission Control Programme (NGECP) and that the main thrust of these two programmes is to reduce emission from mobile and stationary sources of air pollution

(KII, Science officer, NESREA, Female)

The NDCs sectorial plan under the umbrella of NOSDRA have been committed to ensuring reduction in harmful gases that affect human health and climate condition.

According to an environmental scientist:

Nigeria ratified the PA on CC and is committed towards ensuring that reduction in greenhouse gas emission (GHGs) in oil and gas industries is realized. However, NOSDRA as an Environmental Regulatory Agency is currently reviewing its Acts to enable her to become more committed in the areas of gas flare out by international oil companies and ancillary firms. A regulation in gas is currently domiciled with DPR.

(KII, Science officer, NOSDRA, Male)

Table 5.22 shows that out of a total of 363 respondents, (22.9%) agree, (17.1%) disagree, (47.4%) gave neutral response, (6.1%) strongly agree, and (6.6%) strongly disagree that NDC CCM projects may bring about loss of traditions and cultural benefits. A small percentage (22.9%) however agrees that NDC CCM projects may bring about loss of traditions and cultural benefits. Also, the table shows that out of a total of 364 respondents, (18.1%) agree, (23.6%) disagree, (44.5%) gave neutral response, (6.0%) strongly agree, (7.7%) strongly disagree that NDC CCM Projects may bring about loss of right to life. Thus, (18.1%) agree that that NDC CCM Projects may bring about loss of right to life. In addition, the table also shows that out of a total of 363 respondents, (19.0%) agree, (22.6%) disagree, (45.2%) gave neutral responses, (5.5%) strongly agree and (7.7%) respondents strongly that NDC CCM Projects may bring about loss of right to food. Thus, about (19%) of the respondents agree that NDC CCM Projects may bring about loss of right to food.

Table 5.22 Respondents views on NDC CCM (Continued)

Responses	Frequency	Percentages
NDC CCM Projects may bring about loss of traditions and cultural benefits (N=363)		
Agree	83	22.9
Disagree	62	17.1
Neutral	172	47.4
Strongly agree	22	6.1
Strongly disagree	24	6.6
NDC CCM Projects may bring about loss of right to life (N=364)		
Agree	66	18.1
Disagree	86	23.6
Neutral	162	44.5
Strongly agree	22	6.0
Strongly disagree	28	7.7
NDC CCM Projects may bring about loss of right to food (N=363)		
Agree	69	19.0
Disagree	82	22.6
Neutral	164	45.2
Strongly agree	20	5.5
Strongly disagree	28	7.7

HRs are rights that every human being has by virtue of his or her human dignity⁹³⁸. C.K. Allen defines right as a legally guaranteed power to realize an interest.⁹³⁹ Jhering defines rights as legally protected interests comprising of state and individual wills. To him, a right is based on substance while protection comes from possible intervention of the courts.⁹⁴⁰ It is our view that HRs are privileges every human being is entitled to irrespective of their status, age, sex, race or location. Although HRs may be protected by the instruments of the state, they are not creations of the state. HRs are innate in every individual by virtue of their being. In terms of how NDC implementation in Nigeria has affected HRs, A CC professional was of the opinion that:

In the implementation plan of NDC in Nigeria, human right was catered for, because each sectorial plan was carried out taking into consideration its effects on the daily lives of people

(KII, CC professional, DCC, Male)

Similarly, an environmental officer gave his view on how the Sectorial Action Plan NDC affects HRs. According to him the implementations of the NDCs have protected human life in terms of better health and improved environmental conditions. In his words, he stated that:

The major goal of NDC in Nigeria is to protect human health and environment and that has been properly catered for

(KII, Environmental officer, DPR, Male)

Also, the opinion of a science officer was sought; he was of the opinion that the NDC implementation has promoted human right. In her words, she explained that:

The UN conference in Paris in 2015, countries agreed to incorporate the promotion of HRs into their climate action plans. The PA, acknowledging this intertwined reality, became the first international environmental treaty to explicitly reference HRs. Its preamble specifies that Parties ‘should, when taking action to address CC, respect, promote and consider their respective obligations on HRs’, citing ‘the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in

⁹³⁸Office of the united nations high commissioner for HRs. *Human Right Hand book for Parliamentarians inter-parliamentary union* . Assessed 12th May 2018 from www.ipu.org/pdf/publications/hr_guide_en.pdf

⁹³⁹ Allen, C. K. 1958. *Law in the Making* 7th ed. Glasswork, London, P. 614

⁹⁴⁰ Oyedele and Onu (2021), supra 7.

vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity'. By forging an explicit link with HRs law, the PA recalls and strengthens the expectation that Parties will take into account their existing HRs obligations concerning matters such as, for example, public participation or the rights of women and indigenous peoples when they design and implement CC responses.

(KII, Science officer, NESREA, Female)

In addition, another respondent was of the opinion that:

The implementation of NDCs has been subjected to achieving SDGs and protection of HRs

(KII, Science officer, NOSDRA, Male)

Existing literature has shown profoundly that the last two decades has experienced unprecedented agitations and demands on the necessity of linking HRs and environmental protection through the creation of substantive right to environment. Some scholars have opined that an international direct recognition of the right to environment will definitely cover CC being that CC forms part of the environment.⁹⁴¹ Some other scholars have clamored for a direct recognition of HRs against the effects of CC (both direct and the indirect) which they referred to as right to be cold.⁹⁴² The substantive approach appears to be the most debated approach for mainstreaming HRs and environmental protection.⁹⁴³ A CC professional was of the opinion that:

In the implementation plan of NDC through the Department of CC, was created to better the lives of people and create more job opportunities. We have not encountered any HRs issue, and our lawyers have never raised such issue to us.

(KII, CC professional, DCC, Male)

Similarly, an environmental officer gave his view on the contribution of the Sectorial Action Plan for NDC to protect HRs. According to him the implementations of the NDCs has protected HRs in Nigeria through measures that improve human health and clean environment. In his words, he stated that:

⁹⁴¹ Ole et al, (2023) supra.

⁹⁴² Oyedele and Onu (2022) supra; Omaka 2022 (supra).

⁹⁴³ Ibid

The likelihood is very slim because the concept of the NDC (in the oil and gas sector) is to give nations the platform to voluntarily set target on reduction of emission of harmful gases that contribute to the current national and global CC challenges which has directly and indirectly resulted in all the issues mentioned in a-g above. Attaining the NDC is a positive step towards promoting improved quality of lives, economies and protection of the environment. The oil and gas sector is unique because its strive to attain NDC directly (and almost immediately) create jobs, protects human health and the environment.

(KII, Environmental officer, DPR, Male)

In addition, another respondent was of the opinion that:

The implementation of NDCs does not affect HRs because of planned resettlement and even distribution of environmental benefits and liabilities which translates to environmental justice. Also, the resettlement if carried out with the best intention will not lead to loss of right to life; consultation with the local communities and the involvement of relevant Government organs will guarantee equity in distribution of royalties through global memorandum of understanding (GMoU); and once the GMoU is in place, there is high likelihood for equitable representation in project execution. In terms of health and poverty, GMoU will finance setting up of cottage hospitals that will take care of the health needs of the people and livelihood support initiatives in form of skill acquisition, employment of locals through local content Act provisions will be quite beneficial and complement the SDG vision. Also, the NDC will stimulate influx of people and eradicate human trafficking

(KII, Science officer, NOSDRA, Male)

Table 5.23 shows that out of a total of 357 respondents, 70 agree, 77 disagree, 162 gave neutral response, 22 strongly agree, 26 strongly disagree that NDC CCM Projects may bring about inequalities and discriminations against vulnerable minorities. Thus, only (19.6%) and (6.2%) both agree and strongly agree that NDC CCM Projects may bring about inequalities and discriminations against vulnerable minorities. The table also shows that out of a total of 357 respondents, 71 agreed, 60 disagreed, 185 gave neutral responses, 20 strongly agreed, and 22 strongly disagreed that NDC CCM Projects may bring about loss of participatory and consultative rights in projects sited in one's locality. Slightly more than half of the respondents (51.7%) gave neutral responses to NDC CCM Projects bringing about loss of participatory and consultative rights in projects sited in one's locality. In

addition, the table shows that out of a total of 358 respondents, (15.9%) agreed, (21.8%) disagreed, (47.5%) gave neutral responses, (5.3%) strongly agreed and (9.5%) strongly disagreed that NDC CCM Projects may bring about loss of right to health. Thus, slightly more than half of the respondents (47.5%) gave neutral responses.

Table 5.23 Respondents views on NDC CCM (Continued)

Responses	Frequency	Percentages
NDC CCM Projects may bring about inequalities and discriminations against vulnerable minorities (N=357)		
Agree	70	19.6
Disagree	77	21.6
Neutral	162	45.4
Strongly agree	22	6.2
Strongly disagree	26	7.3
NDC CCM Projects may bring about loss participatory and consultative rights in projects sited in once locality (N=358)		
Agree	71	19.8
Disagree	60	16.8
Neutral	185	51.7
Strongly agree	20	5.6
Strongly disagree	22	6.1
NDC CCM Projects may bring about loss right to health (N=358)		
Agree	57	15.9
Disagree	78	21.8
Neutral	170	47.5
Strongly agree	19	5.3
Strongly disagree	34	9.5

Table 5.24 shows that out of a total of 357 respondents, (16.0%) agree, (22.1%) disagree, (47.9%) gave neutral response, (5.3%) strongly agree, (8.7%) strongly disagree that NDC CCM Projects may bring about poverty on the long run. A small percentage (16%) of the respondents agrees that NDC CCM Projects may bring about poverty on the long run. The table also shows that out of a total of 358 respondents, (15.6%) agree, (25.1%) disagree, (45.8%) gave neutral responses, (4.2%) strongly agree, (9.2%) strongly disagree that NDC CCM Projects may bring about trafficking in human persons. Hence, only about (15.6%) of those respondents agree that NDC CCM Projects may bring about trafficking in human persons. Additionally, the table shows that out of a total of 361 respondents, (18.3%) agree, (21.9%) disagree, (47.6%) gave neutral responses, (4.7%) strongly agree, (7.5%) strongly disagree that NDC CCM Projects may bring about armed conflicts. Thus, a small percentage of respondents (18.3%) agree that NDC CCM Projects may bring about armed conflicts.

Table 5.24 Respondents views on NDC CCM (Continued)

Responses	Frequency	Percentages
NDC CCM Projects may bring about poverty on the long run (N=357)		
Agree	57	16.0
Disagree	79	22.1
Neutral	171	47.9
Strongly agree	19	5.3
Strongly disagree	31	8.7
NDC CCM Projects may bring about trafficking in human persons (N=358)		
Agree	56	15.6
Disagree	90	25.1
Neutral	164	45.8
Strongly agree	15	4.2
Strongly disagree	33	9.2
NDC CCM Projects may bring about armed conflicts (N=361)		
Agree	66	18.3
Disagree	79	21.9
Neutral	172	47.6
Strongly agree	17	4.7
Strongly disagree	27	7.5

Table 5.25 shows that out of a total of 390 respondents, (49.3%) agree, (8.3%) disagree, (22.1%) gave neutral response, (15.1%) strongly agree, (5.2%) strongly disagree that NDC CC can be best tackled from the aspect of social justice. Above half of the respondents both agree (49.3%) and strongly agree (15.1%) that CC can be best tackled from the aspect of social justice. The table also shows that out of a total of 382 respondents, (48.4%) agree, (5.5%) disagree, (16.5%) gave neutral responses, (25.4%) strongly agree, (4.2%) strongly disagree that governments and other duty-bearers should be held accountable to reducing the vulnerability of the people to CC. Hence, a great percentage of the respondents both agree (48.4%) and strongly agree (25.4%) that governments and other duty-bearers should be held accountable to reducing the vulnerability of the people to CC. Additionally, the table shows that out of a total of 381 respondents, (49.9%) agree, (1.3%) disagree, (16.6%) gave neutral responses, (28.6%) strongly agree, (3.4%) strongly disagree that a framework that promotes accountability will help to promote and protect HRs in terms of CC impacts. Thus, a great percentage of the respondents both agree (49.9%) and strongly agree (28.6%) that a framework that promotes accountability will help to promote and protect HRs in terms of CC impacts.

Table 5.25 Respondents views on how best to improve the state of CC in Nigeria

Responses	Frequency	Percentages
CC can be best tackled from the aspect of social justice (N=390)		
Agree	201	49.3
Disagree	27	8.3
Neutral	86	22.1
Strongly agree	56	15.1
Strongly disagree	20	5.2
Governments and other duty-bearers should be held accountable to reducing the vulnerability of the people to CC (N=382)		
Agree	185	48.4
Disagree	21	5.5
Neutral	63	16.5
Strongly agree	97	25.4
Strongly disagree	16	4.2
A framework that promotes accountability will help to promote and protect HRs in terms of CC impacts (N=381)		
Agree	190	49.9
Disagree	5	1.3
Neutral	64	16.8
Strongly agree	109	28.6
Strongly disagree	13	3.4

Table 5.26 shows that out of a total of 386 respondents, (47.7%) agree, (3.6%) disagree, (19.7%) gave neutral response, (24.9%) strongly agree, (4.1%) strongly disagree constitutionally guaranteed “environmental right” under Nigerian will help to eradicate environmental abuses that cause CC. Above half of the respondents both agree (47.7%) and strongly agree (24.9%) that constitutionally guaranteed “environmental right” under Nigerian will help to eradicate environmental abuses that cause CC. The table also shows that out of a total of 384 respondents, (51.0%) agree, (3.1%) disagree, (19.5%) gave neutral responses, (23.2%) strongly agree, (3.1%) strongly disagree that the existence of environmental right in the Nigerian law will impose an obligation on individuals to contribute to environmental protection. Hence, a great percentage of the respondents both agree (51.0%) and strongly agree (23.2%) that the existence of environmental right in the Nigerian law will impose an obligation on individuals to contribute to environmental protection. Additionally, the table shows that out of a total of 386 respondents, (47.2%) agree, (2.6%) disagree, (23.3%) gave neutral responses, (24.4%) strongly agree, (2.6%) strongly disagree that the existence of environmental rights in the Nigerian law will help to remove the barriers that confront many environmental litigants. Thus, a great percentage of the respondents both agree (47.2%) and strongly agree (24.4%) that the existence of environmental rights in the Nigerian law will help to remove the barriers that confront many environmental litigants.

Table 5.26 Respondents views on how best to improve the state of CC in Nigeria (Continued)

Responses	Frequency	Percentages
Constitutionally guaranteed “environmental right” under Nigerian will help to eradicate environmental abuses that cause CC (N=386)		
Agree	184	47.7
Disagree	14	3.6
Neutral	76	19.7
Strongly agree	96	24.9
Strongly disagree	16	4.1
The existence of environmental right in the Nigerian law will impose an obligation on individuals to contribute to environmental protection (N=384)		
Agree	196	51.0
Disagree	12	3.1
Neutral	75	19.5
Strongly agree	89	23.2
Strongly disagree	12	3.1
The existence of environmental right in the Nigerian law will help to remove the barriers that confront many environmental litigants (N=386)		
Agree	182	47.2
Disagree	10	2.6
Neutral	90	23.3
Strongly agree	94	24.4
Strongly disagree	10	2.6

Table 5.27 shows that out of a total of 384 respondents, (41.4%) agree, (3.1%) disagree, (17.7%) gave neutral response, (34.4%) strongly agree, (3.4%)strongly disagree that the Nigerian law on CC should cater for compensation of affected people in case of violation of HRs. Above half of the respondents both agree (41.4%) and strongly agree (34.4%) that the Nigerian law on CC should cater for compensation of affected people in case of violation of HRs. The table also shows that out of a total of 386 respondents, (45.6%) agree, (1.8%) disagree, (18.4%) gave neutral responses, (30.8%) strongly agree, (3.4%) strongly disagree that judicial powers in Nigeria should be able to determine issues relating to CCM. Hence, a great percentage of the respondents both agree (45.6%) and strongly agree (30.8%) that judicial powers in Nigeria should be able to determine issues relating to CCM. Additionally, the table shows that out of a total of 382 respondents, (43.3%) agree, (4.0%) disagree, (18.3%) gave neutral responses, (31.1%) strongly agree, (3.3%) strongly disagree that public participation and environmental justice will help to contribute to CC litigation in Nigeria. Thus, a great percentage of the respondents both agree (43.3%) and strongly agree (31.1%) that public participation and environmental justice will help to contribute to CC litigation in Nigeria.

Table 5.27 Respondents views on provision of Nigerian law and CC

Responses	Frequency	Percentages
The Nigerian law on CC should cater for compensation of affected people in case of violation of HRs (N=384)		
Agree	159	41.4
Disagree	12	3.1
Neutral	68	17.7
Strongly agree	132	34.4
Strongly disagree	13	3.4
Judicial powers in Nigeria should be able to determine issues relating to CCM (N=386)		
Agree	176	45.6
Disagree	7	1.8
Neutral	71	18.4
Strongly agree	119	30.8
Strongly disagree	13	3.4
Public participation and environmental justice will help to contribute to CC litigation in Nigeria (N=382)		
Agree	170	43.3
Disagree	8	4.0
Neutral	71	18.3
Strongly agree	124	31.1
Strongly disagree	9	3.3

Table 5.28 shows that out of a total of 379 respondents, (40.5%) agree, (4.5%) disagree, (19.9%) gave neutral response, (31.4%) strongly agree, (3.7%) strongly disagree that expanding ATI on CC will promote mitigation. Above half of the respondents both agree (40.5%) and strongly agree (31.4%) that expanding ATI on CC will promote mitigation. The table also shows that out of a total of 382 respondents, (39.0%) agree, (1.8%) disagree, (15.7%) gave neutral responses, (40.1%) strongly agree, (3.4%) strongly disagree that the government should uphold the right of communities to participate in decisions likely to affect their well-being. Hence, a great percentage of the respondents both agree (39.0%) and strongly agree (40.1%) that the government should uphold the right of communities to participate in decisions likely to affect their well-being.

**Table 5.28 Respondents views on how best to improve the state of CC in Nigeria
(Continued)**

Responses	Frequency	Percentages
Expanding ATI on CC will promote mitigation (N=379)		
Agree	161	40.5
Disagree	6	4.5
Neutral	75	19.9
Strongly agree	127	31.4
Strongly disagree	10	3.7
The government should uphold the right of communities to participate in decisions likely to affect their well-being (N=382)		
Agree	149	39.0
Disagree	7	1.8
Neutral	60	15.7
Strongly agree	153	40.1
Strongly disagree	13	3.4

5.4.8 Effectiveness of NNDC

Although NDC remains the principal mitigation framework under the PA, the agreement however encouraged its parties to develop and adopt a long term GHG emission mitigation strategy.⁹⁴⁴ Parties must be mindful of article 2 of the PA is developing this long term strategy.⁹⁴⁵ Germany is the first country to develop and communicate their long term strategy plan called Climate Protection Plan which is composed of emission reduction commitment by 80-90% in years to come.⁹⁴⁶ Thus, providing a guide for setting of short term plans adopted under the NDCs (otherwise called the pledge-and-review mechanism).⁹⁴⁷ In terms of the effectiveness of the NDCs implemented in Nigeria, A CC professional was of the opinion that:

There is an inter-ministerial committee on the implementation of the sectorial Action plan. The implementation has not been very effective because of lack of fund and awareness.

(KII, CC professional, DCC, Male)

Similarly, an environmental officer gave his view on the effectiveness of the Sectorial Action Plan NDC. According to him the implementations of the NDCs have been successful. In his words, he stated that:

The regulatory framework and guideline for flare out and flare commercialization has been implemented effectively, with bidding of flare site to prospective up takers. Other relevant regulation is being reviewed to include management of fugitive/methane emission across oil and gas value chain. Tier 1 data gathering on GHG's/CH4 inventory from oil and gas operators has commenced.

(KII, Environmental officer, DPR, Male)

Also, the opinion of a science officer was sought; he was of the opinion that the NDC implementation has not been successful. In his words, he explained that:

⁹⁴⁴ Andrei Marci 2016, 'Governance of Carbon Markets under Article 6 of the PA' in Robert N. Stavins and Robert C. Steve (eds.). *The PA and Beyond: International CC Policy Post-2020* Havard Project on Climate Agreements, 47.

⁹⁴⁵ Article 4(19) of PA.

⁹⁴⁶ Taryn Franson and Kelly Levin, 2016 'Germany Becomes First Country to Release a 2050 Emission-Reduction Plan. Retrieved January 12, 2020 from <http://www.wri.org/blog/2016/11/germany-first-country-2050-emissions-reductions-plan>.

⁹⁴⁷ Bennett, 2008 (supra) 27.

The implementation has not been effective because the structures in place are not empowered financially, as sustainable development is very expensive.

(KII, Science officer, NESREA, Female)

In addition, another respondent was of the opinion that:

The implementation is as far as the Agency's Act receives the much-needed revision and accent. The Agency through its strict enforcement of clean-up and remediation of oil impacted sites is indirectly encouraging investment by multinational and local or indigenous companies to take advantage of the green bond to reduce pollution on land, water and the atmosphere

(KII, Science officer, NOSDRA, Male)

5.4.9 Public Participation and Procedural Rights in the Implementation of NDC's Sectorial Action Plans

The NNDC implementation action plan for the Power Sector is very ambitious and if properly implemented will not only reduce GHGs emission from the power sector, but will also end overreliance on fossil fuel energy and epileptic power issues in Nigeria; and stimulate improved productivity through energy efficiency which will increase Nigeria's Gross Domestic Product (GDP). This will go a long way to lift many Nigerians out of poverty, create more job opportunities, improve environmental health, and make energy/power available to Nigeria's ever-growing population.

It can be said that the proposed outcome of the NNDC implementation Action Plan for the Power Sector is pro-HRs as it intends to end epileptic power supply and over reliance on unsustainable fossil fuel energy which is a major threat to right to health, right to healthy environment and life. However, can the NNDC implementation Action Plans which is supposed to improve human lives infringe on procedural rights of the people?

The provisions made by the procedural rights were used as measures to ascertain whether the regulatory agencies involve the public in their decision making and implementation.

On whether the regulatory agencies charged with the implementation of the NDC in various sectors of the country give people who are affected by the mitigation measures ATI relating to such measures? The expert from DPR which is charged with NDC Implementation of the Oil and Gas Sector posits that

The mitigation measures are positive in the oil and gas sector and do not negatively impact people directly. However, in line with the FOI Bill we are always open to share information with all relevant stakeholders.

(KII, Environmental officer, DPR, Male)

For the other sectors of the economy, the expert from DCC has this to say:

Yes, the NDC Sectorial Action Plan preparation and implementation involves related stakeholders and the information about the mitigation can be accessed. For example, the mitigation measures are made public through the National Communications and the Nationally Determined Contribution Documents.

(KII, CC professional, DCC, Male)

Then, the expert from NESREA simply said: yes.

Coming to the involvement of the people in decision making process in the NDC sectorial action plans implementation. The expert from DPR stated that the Department do involve the public in its decision-making process. In his words, he stated that:

if projects are to be initiated that will reduce emission of Short-lived Climate Pollutants, (Environmental Impact Assessment) of such a project will be conducted. The EIA will cover socio-economic impact of such a project and all likely stakeholder who will be impacted by this "positive" project will make input into the project.

(KII, Environmental officer, DPR, Male)

On their part, NESREA is also in the affirmative that they involve people in decision making. The expert from NESREA in her words stated that:

Several government and private sector bodies are involved in various issues of CC. It is expected that the private sector could be more efficient than the public authorities in implementing sectoral CC measures. The need to engage indigenes to ensure legitimacy of adaptation/mitigation and inclusion of locally relevant knowledge can be seen as critical to success.

(KII, Science officer, NESREA, Female)

The expert from DCC also states that the people are involved in the decision making by the DCC. In his words:

there are workshops at the National and Subnational level. The aim is to gather inputs during the preparation and development stage. There are also validation workshops where key stakeholders including Civil Societies, NGOs, Government Representatives and the public are invited to participate in the process. It is a people oriented-process.

(KII, CC professional, DCC, Male)

The experts were also questioned about the involvement of the people in the implementation of the NDC sectorial Action Plans. All (DCC, NESREA and DPR) stated that the people are involved in the implementation of the NDC sectorial Action Plans.

They also stated that the sectorial action plans and their implementation processes protect the vulnerable group like women, child, and minority groups.

They all agree that the sectorial action plans make room for accountability and access to justice. Unfortunately, none of the expert respondents made explicit statement on the way and manner in which the NDC and its sectorial action plans on the provision for accountability and access to justice.

Ironically, the responses from the questionnaire shows that over 80 percent of the respondents do not know about the NDC, talk less of its sectorial action plan.⁹⁴⁸ Tables 6.7 to 6.12 shows that over 50 percent of the respondents are neutral on the NDC and its mitigation projects and action plans. This implies that the position of the regulatory agencies do not represent the perception of the people. The people are very passive about the NDC and its implementation action plans. This may lead to a repeat of the Kwale CDM and Ogidigben EPZ crisis. The Ogidigben EPZ multi-billion donor project with all its ambitious economic and developmental implications has not commenced operation since its launching in 2015 due to security challenges.⁹⁴⁹ This is because, the Federal and Delta State governments in establishing this joint venture failed to comprehensively carry the host

⁹⁴⁸ See Table 6.8

⁹⁴⁹ FG to restart the \$16 Billion Gas Project in Ogidigben. Retrieved August 27, 2020 from <https://theoilbloc.com/fg-to-restart-the-16-billion-gas-project-in-ogidigben/>

community of Ogidigben along. The people of the EPZ host community were denied their procedural rights to ATI, participation and involvement in decision making regarding the EPZ. The vulnerable groups of the community were not equally considered in the design of the project. The people in vehement opposition to the project resorted to serious violence against the EPZ workers and facilities which forced the investors to flee the site. The above scenario underscores the importance of procedural rights in the siting of developmental projects. A project may be pro-green and sustainable, but the immediate environment of such a project must understand it in that light. The Nigerian societies are apprehensive of insincerity of multinational companies, and as such, must be deliberately involved in the decision making and execution of any project within its locality.⁹⁵⁰

The reason can largely be attributed to the low level in which people participate in the decision-making process; lack of ATI regarding such policies; with the minimality of accountability and transparency on the part of the government. The people are detached from these projects, and so, they view these projects as affront to their cultural antiquities; a deliberate measure to deprive them of their lands; and further impoverish them. Land is fundamental in African societies. Any decision that will affect land and land tenure system must adopt a bottom-top approach if it must be effective. The Nigeria People are used to wood fuel for their domestic needs and GHG generating generators for their power demands, any move to change the *status quo* at extra demand will attract a negative response from the people. More so, the native communities will sabotage renewable energy projects when they are not fully carried along with development process. The people are already apprehensive, vexed, and suspicious of any developmental project. Any climate mitigation measures that do not fully carry the people along may likely be sabotaged. It is therefore imperative to mainstream procedural rights in the implementation action plan if they must be succeeding.

⁹⁵⁰ Recently, the Minister of State for Petroleum made a consultation visit to Ogidigben community to enlighten the community on the benefits of the project and also to charge them to peacefully cohabit with the EPZ. This is coming after coming after 5 years of inactivity of the EPZ. This ugly scenario would have been averted had the government involved the community in the decision making and execution of the project at first. Ibid.

5.4.10 Challenges of NDC Implementation in Nigeria

Garrett Hardin's theory of the 'tragedy of the commons'⁹⁵¹ offers a fantastic conceptual lens for the consideration of the dynamics of PA and its pledge and review mechanism. The metaphor deployed by Hardin is that a common pasture field open to all. Each herder deems it wise to add other animals to his herd which will benefit from the open pasture field and suffer both a fraction of the total cost of over-grazing. Hardin noted that the tragedy lies in the fact all the herders are stocked in a system that makes them increase their herds without limit in a limited world.⁹⁵² The resultant effect is that each of the herders' individual decision capsule into depletion or even destruction of the pasture. This tragedy of the commons may rare its head in the implementation of the NDCs under the PA through the misalignment of collective interests and individual incentives. The global temperature goal of the agreement represents the collective interest of all the parties; however, individual parties have the incentive of designing their NDCs as they deem fit. In other words, parties enjoy the individual incentive in their contribution to the collective goal of the agreement.'⁹⁵³

This agreement could potentially influence the architectural framework of NDCs in uncountable ways, such as: the adopting of suitable assumptions about BAU (BAU) emissions;⁹⁵⁴ adoption of economic modelling that inflates achieving cost of the mitigation targets;⁹⁵⁵ the justification of modest targets through the identification of supposed 'special' national circumstances.⁹⁵⁶ In Nigeria the implementation of the NDCs have faced a number of challenges. According to a CC professional:

They made reference to HRs in its implementation.

(KII, CC professional, DCC, Male)

⁹⁵¹ Garrett Hardin 1968 'The Tragedy of the Commons,' *Science* 162:3859, 1243.

⁹⁵² Ibid

⁹⁵³ Robert O. Keohano and Michael Oppenheimer, 2016 'Paris: Beyond the Climate Dead End Through Pledge and Review?' *Politics and Governance* 4, 142.

⁹⁵⁴ This is very important for countries that has as part of their baseline the business-as-usual projections like Nigeria and Republic of Korea. See NDC Registry, Retrieved January 9, 2020 from <https://www4.unfccc.int/sites/ndcstaging/Pages/Home.aspx>.

⁹⁵⁵ Andrew Macintosh, 2013, 'Mitigation Targets, Burden Sharing and the Role of Economic Modelling in Climate Policy' *Australian Journal of Public Administration* 73, 164.

⁹⁵⁶ For example, reference to Nigeria's abundant fossil fuel (such as petroleum and coal) as a factor relevant to her level of emission reduction targets.

Similarly, an environmental officer gave his view on the challenges that affect the Sectorial Action Plan NDC. According to him the implementations of the NDCs have faced challenges in terms of the state of technology in Nigeria. In his words, he stated that:

The lack in Nigeria's capacity in terms of technology for accurate measurement of emissions, leak detection and repair militate against the successful implementation of NDCs in Nigeria.

(KII, Environmental officer, DPR, Male)

Also, the opinion of a science officer was sought; she was of the opinion that the NDC implementation has faced challenges in terms of availability of sufficient funds. In her words, she explained that:

The major challenge that the major challenge that Nigeria faces in terms of NDC implementation is the insufficient fund to implement low carbon project especially in developing countries

(KII, Science officer, NESREA, Female)

In addition, another respondent was of the opinion that:

The only challenge lies with the revision of the Agency's Act to give it more powers to strictly enforce gas flare out deadline by 2030 and stimulate gas utilization to curb indiscriminate emission of GHGs

(KII, Science officer, NOSDRA, Male)

5.4.11 Measures taken to improve HRs in terms of NDC implementation in Nigeria

The United Nations HRs Based Approach (HRBA) framework is a policy framework based on the procedural rights approach.⁹⁵⁷ The HRBA offers a framework that is procedural in nature which is focused on institutionalizing HRs into extant CC regimes.⁹⁵⁸ HRBA harmonized and incorporated procedural HRs into programs and project actions, and as such furnish the indigenes with bases for enforcement of such rights. The HRBA presents a

⁹⁵⁷ See Shelton, D. 2010. Equitable Utilization of the Atmosphere: A Rights-Based Approach to CC. Humphreys, S. Ed. *HRs and CC* (CUP) 91-126.

⁹⁵⁸ Olawuyi (supra).

The_Human_Rights_Based_Approach_to_Development_Cooperation_Towards_a_Common_Understanding_among_UN.pdf>

departure for the need driven approach that demands that proponents of projects and government consider the impact of such engagement on existing HRs. HRBA incorporates HRs safeguards and benchmarks into planning of projects and their execution. According to a respondent, a crucial strategy to improve NDC implementation in Nigeria include:

An inclusive regulation, implementation strategy with stakeholder participation, public awareness/campaigns highlighting the net benefits of attaining the NDCs.

(KII, Environmental officer, DPR, Male)

Also, the opinion of a science officer was sought; he was of the opinion that part of the measures to improve NDC implementation in Nigeria, policies and programs to improve public awareness must be put into place. In his words, he explained that:

There is need for more awareness on the impact of CC on human health and the environment especially in a developing country like Nigeria whose adaptive capacity is very low. Thus, people will understand the need for low carbon development which is the essence of NDC and that its implementation might not have much negative impact on human right if given the right approach.

(KII, Science officer, NESREA, Female)

In addition, another respondent was of the opinion that:

The measures will involve continuous consultation and sensitization of people on the imperative of the implementation of the sectorial action plan of NDC and the need to be open to changes aimed at achieving the goals encapsulated in the plan for the benefits of all

(KII, Science officer, NOSDRA, Male)

5.4.12 Way forward for Climate Action in Nigeria

In a bid to improve climate action the NNDC adopted a Reduction from BAU (BAU) approach to achieve its objective of Economic and Social Development,⁹⁵⁹ and targets to achieve the said objective by the year 2030.⁹⁶⁰ If Nigeria's economic growth is maintained

⁹⁵⁹ This objective consists of 5% economic growth per year period, improved standard of living, and electricity access for all.

⁹⁶⁰ The implementation is period spins from the year 2015-2030. See Nigeria's Intended Nationally Determined Contribution, retrieved February 13, 2020 from

at 5% per year under a BAU growth scenario, by 2030, Nigeria's emissions per year should be around 900 million tonnes of GHGs which will amount to around 3.4 tons per individual. Nigeria pledges (through the mitigation measures under NNDC) to make an unconditional contribution of 20 per cent below her BAU which will amount to the emission of 700 million tonnes of GHGs by the year 2030.⁹⁶¹ In accordance to this, the qualitative excerpts revealed that:

Climate Action in the area of Oil and Gas in Nigeria can be improved by buying into the idea and keying into it, and by encouraging and supporting clean energy entrepreneurs. Also, more research is needed to develop indigenous technology and create awareness. Capacity building and development of a legal framework is necessary to do achieve this

(KII, CC professional, DCC, Male)

Similarly, an environmental officer gave his view on the contribution on ways to improve climate action in the area of Oil and Gas in Nigeria. In his words, he explained that:

Effective implementation (energy efficiency) and enforcement of regulations (use of cleaner fuels for power/energy) on emissions, political (clean energy penetration), and collaboration between government, operators, communities and civil societies (public enlightenment on the benefits of attainment of NDCs.

(KII, Environmental officer, DPR, Male)

Also, the opinion of a science officer was sought; he was of the perception that the deployment of innovative technology will improve climate action in the area of Oil and Gas in Nigeria. In his words, he stated that:

The deployment of innovative technologies is crucial to making the effect of CC not much felt in the country. The option mentioned above will transform the energy system in the country. In advanced and poorer countries like Nigeria, and policymakers must adopt the smart measures needed to encourage further momentum and ensure a fair and open global market for innovation, clean technologies and know-how. Furthermore, it is required of governments and the private sector to work closely together and shift their focus to low-carbon

https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nigeria%20First/Approved%20Nigeria%27s%20INDC_271115.pdf

⁹⁶¹ Unconditional contribution means what Nigeria can contribute without international supports.

technologies. The challenge is daunting, but it is possible to fill the gap.

(KII, Science officer, NESREA, Female)

In addition, another respondent was of the opinion that:

The successful revisions of the Agency's Act to enable her become responsible for more strict environmental enforcement in oil and gas subsector. Also, the compliance enforcement in clean-up and remediation of oil impacted sites to conserve natural resources. It is also important to point out that environmental audit of gas emitting entities during facility inspection to ascertain their level of compliance to technology improvisation and innovation aimed at reducing GHGs. And also, the continuous engagement with NGOs and civil society organizations in mounting robust sensitization and awareness campaign in oil bearing communities on the dangers of illegal refinery operations which is currently contributing to GHGs emission during disposal and open burning of heavy waste oil

(KII, Science officer, NOSDRA, Male)

5.4.13 Discussion of findings

This section discusses the findings of the study and juxtaposes it with existing literature. Existing literature on CC has the potential to affect all natural systems because it is a threat to human development and survival socially. In a bid to analyze the Nigerian Laws to determine whether they are effective to the extent that they will mitigate the emission of GHGs in the countries using a human right-based approach. The study found out that most respondents were aware of CC with the mass media been a major contributor to this source of awareness. This fact is contrary with the findings of Nzaedibe et al⁹⁶² in their study on CC awareness and adaptation in the Niger delta region of Nigeria, where the level of awareness of local communities of CC impacts was still low in the Niger Delta region of Nigeria. However, the majority of the respondents seem not to be aware of the nitty-gritty of CC.

On description of CC, the study found out slightly below half of the respondents describes it as change in the earth climate. This is however in accordance to the study of Nzaedibe et

⁹⁶² Onu (2021) supra, 20.

al⁹⁶³ where the level of knowledge was also very low. Similarly, the study found out that part of the natural causes attributed to cause CC includes volcanic eruption and ocean current. Likewise, the study found out that respondent's perception on human activities that cause CC include burning of fossil fuel, Excess use of chemicals, Gas flaring from oil companies, Gases released from industries and so on. This is similar to findings in existing literature where it was revealed that anthropogenic activities such as the burning of coal oil and natural gas, as well as deforestation and various agricultural and industrial practices are altering the composition of the atmosphere and contributing to CC.⁹⁶⁴ With regards to the perception of respondents on if CC could be tackled, the study found out that a great percentage of those aware of CC were positive that the problem could be tackled. Also, in terms of how the problem of CC could be tackled, most of the respondent's, creation of laws, renewable energy options and the engagement of government are useful measures to tackle CC in Nigeria.

Literatures have shown that CC is a serious international concern because the alterations attendant to it possesses the capacity to alter people's way of life globally.⁹⁶⁵ This universal modification will not only lead to loss of land by man but also threaten the survival of living things that cannot adapt to the frenzied weather condition that the world is experiencing. In tandem to this, the study revealed that majority of the respondents have experienced environmental hazards such as Air pollution; Pollution of rivers and seas; Litter; Poor waste management; Traffic/ congestion; GM food; and overpopulation. They mostly perceive these hazards to be a serious threat to health and environmental sustainability.

Further findings revealed that most of the respondents were not aware about any law on CC. For most respondents aware of laws on CC, a great percentage of them were aware that Nigeria has signed the PA 2015 on CC. However above half of these respondents are not aware of the eight Nigeria's National Determined Contributions (NDC) towards CCM under the PA. And for those aware of the NDCs most of them were of the perception that

⁹⁶³ *Ibid.*

⁹⁶⁴ Okali, D. 2004. *Nigeria CC: A Guide for Policy Makers*. Ibadan: NEST.14; see also Egbule, Op. cit. 18

⁹⁶⁵ Intergovernmental Panel on CC IPCC 2007. CC 2007- *The Physical Science Basis: Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on CC*. Cambridge: Cambridge University Press. 222

reforestation, ending of gas flaring and emissions reduction are most effective NDCs for CCM in Nigeria.

On perceived mitigation mechanisms and HRs, a very great percentage of the respondents do believe that mitigation mechanisms under the agreement may affect the right to property and other HRs both globally and in Nigeria. Findings from the study also revealed that most of the respondents were of the opinion that responsibility for tackling CC should be placed on the National government, Individuals, and the local government. In addition, the study also revealed that majority of the respondents has not taken any action in the past to curb CC in the past. Also, the study revealed that in terms of CC, environmental crisis and resilience of energy systems most of the respondents both agree and strongly agree that CC has a great influence on environmental crisis; Climatic impacts in Nigeria are very severe; and The resilience of energy systems in Nigeria to withstand the impact of CC is very low.

On perceived views on CC and threats to HRs most of the respondents both agree and strongly agree that CC directly threaten some fundamental HRs; and the impact of CC has posed a threat to human equality. In terms of respondents view on environmental protection most of the respondent's shared indifferent views on how the regulatory framework has catered for the protection of GHG emission and protection in Nigeria has progressed in Nigeria. However, most of the respondents both agree and strongly agree that the government in Nigeria place economic interest over environmental protection. Also, most of the respondents both disagree and strongly disagree that the Nigerian government has been able to cater for environmental sustainability.

Many scholars in the field of HRs have posited that to ascertain whether the effects of CC violate HRs, it is imperative to view such effects or impact through the lanes of rights guaranteed by existing international HRs regimes.⁹⁶⁶ This right is inherent in man. It inures to him simply by being a human. Aminzadeh posited that it is the States responsibility to be proactive in the protection of their environment, and where they slack or fail to take action

⁹⁶⁶ Olawuyi supra.

in such responsibility that CC is one of the resultant effects, so, people injured by the effects of CC may approach the court for a redress of the innate right to life.⁹⁶⁷

CC effects are upsetting the gratification of the fundamental right to life of persons living in affected communities both directly and indirectly. Heat waves, expanding deserts, rise in sea level, flood induced by weather, storms all caused by CC are the reasons for the degrading quality and standard of life. Inhabitants of CC affected communities will not have access to clean water, suffer from poor health and nutrition. They are more exposed to diseases.

Increase in harsh weather conditions such as cyclones, floods, drought; and frequency of occurrence of extreme events are likely to be caused by CC.⁹⁶⁸ These extreme weather conditions will in turn increase cholera and diarrhea. CC induced malaria, cholera, malnutrition is estimated to cause the death of over 150,000 people each year. It is also projected that increasing intensity, droughts, floods, and heat waves will cause more deaths.⁹⁶⁹ For instance, extra 27,000 deaths occurred as a result of 2003 Europe's CC induced heat wave.⁹⁷⁰ It is projected that CC will expose more than 50 million people to hunger, and by 2050, it is estimated that an additional 132 people will also face similar risk.⁹⁷¹ On the other hand, CCM efforts unintentionally threaten right to life in developing countries, including Nigeria. The killing of members of Kwale community that resisted the siting of Kwale Gas Flare reinjection project in their community due to lack of involvement is a vivid example.⁹⁷²

Article 25 of UNDR though a soft law institutionalized the right to health. This right is also recognised under Article 24 of CRC, Article 12 of CEDAW, and article 12 (1) of ICESCR which all binding international regimes. CC has been predicted to cause frequency of occurrence of extreme events such as cyclone, droughts, floods among others.⁹⁷³ These extreme weather conditions will in turn increase cholera and diarrhea.

⁹⁶⁷ Olawuyi supra.

⁹⁶⁸ Ibid.

⁹⁶⁹ Majid, M, 2016, supra.

⁹⁷⁰ Ibid.

⁹⁷¹ Ibid.

⁹⁷² Olawuyi, supra, p. 4.

⁹⁷³ Ibid.

CC induced malaria, cholera, malnutrition is estimated to cause the death of over 150,000 people each year.⁹⁷⁴ It is also projected that increasing intensity, droughts, floods, and heat waves will cause more deaths.⁹⁷⁵ For instance, extra 27,000 deaths occurred because of 2003 Europe's climate-change induced heat wave.⁹⁷⁶ CC may expose more than 50 million people to hunger, and by 2050, it is estimated that an additional 132 million people will also face similar risk.⁹⁷⁷

It has also been predicted that changes in rainfall and weather conditions in the Pacific will make the control of dengue fever harder. On the other hand, waste products from CCM projects results in serious medical condition for workers at such sites and the members of the host community. This was the case of the Kwale Gas Flare Reinjection Project in Nigeria under the KP.⁹⁷⁸

RTD is one of the late comers within the international HRs jurisprudence.⁹⁷⁹ The Right is established pursuant to a UN declaration, hence, a soft law, but it is universally accepted as it forms part of the fundamental rights.⁹⁸⁰ It is a right to a route of development which all mankind are both right holders and duty bearers.⁹⁸¹ RTD recognizes human person as being central to every developmental stride, and as such, all human persons must work towards the actualization of this right. RTD unifies all the other fundamental HRs. It therefore connotes that a violation of any one of the fundamental HRs will prejudice RTD.

CC (CC) is currently impairing the availability of food and access to good water; decreasing the earth's mass through ocean rising; causing dangerous weather conditions like cyclones, flood and droughts; increasing disease outbreaks; and as such a threat to right to development,⁹⁸² especially among developing countries.

⁹⁷⁴ Majid 2016, op. cit. 45.

⁹⁷⁵ Ibid

⁹⁷⁶ Ibid

⁹⁷⁷ Ibid.

⁹⁷⁸ Olawuyi (*supra*), 125.

⁹⁷⁹ Ibid.

⁹⁸⁰ Ibid.

⁹⁸¹ Majid 2016, op. cit. 45.

⁹⁸² Ibid.

The indigenous peoples live mostly in the earth's most vulnerable ecosystem and are prone to the effects of environmental disasters.⁹⁸³ This explains why the world accords the inhabitants of these vulnerable regions some special protection for their survival and preservation of their cultural heritage and institutions.⁹⁸⁴

The rights of indigenous people are often threatened by CC due to their close affiliation to the environment and their dependence on them for their sustenance.⁹⁸⁵ They depend on the environment for everything, so, CC has impaired on their rights to food, shelter, health, and survival. Moreover, these indigenous people have natural attachment to their culture and environment. CC may result into their displacement and as such deprive them permanently of their ancestral antiquity.⁹⁸⁶ CCM efforts such as the construction of hydroelectric power station have led to the displacement of indigenous people in Brazil and Nigeria.⁹⁸⁷

CC is also making people to be refugees because of its effects. Although the current definition of refugees do not extend to victims of the effects of CC, but records abounds of communities completely displaced by floods who now live as refugees in other places and countries thereby creating CC refugees.⁹⁸⁸ Migration induced by environmental disasters are proliferating in the 21st century.⁹⁸⁹ These refugees lose their ancestral homes and their right to self-determination. They are also prone to HRs abuses in their host communities or countries.

More succinctly, in terms of respondents' views on CC, awareness, experience and laws in Nigeria, most of the respondents both disagree and strongly disagree that the government has made progress in educating the populace on dangers of CC. Furthermore, the study also revealed that most of the respondents both agree and strongly agree that the fundamental HRs of people living in a CC affected community is being threatened; and there are many

⁹⁸³ Ibid.

⁹⁸⁴ Ibid. See also article 1 and 27 of ICCPR.

⁹⁸⁵ Ibid.

⁹⁸⁶ Ibid.

⁹⁸⁷ Mayer B. 2020, CCM and HRs, (London, Oxford Press), 6.

⁹⁸⁸ Ibid.

⁹⁸⁹ Majid 2016, op. cit. 45.

legal and institutional challenges militating against implementation of CC policies and law in Nigeria.

In terms of respondents' views on mitigation of CC and protection of rights in Nigeria, most of the respondents are of the view that the protection of HRs have not been adequately catered for through mitigation of CC. However, with regards to NDC CCM, most of the respondents both agree and strongly agree that NDC CCM Projects may bring about sustainable development; and NDC CCM Projects in the Sectorial Action Plans may help tackle unemployment and poverty. Also in terms of respondents views on how best to improve the state of CC in Nigeria most of the respondents both agree and strongly agree that CC can be best tackled from the aspect of social justice; major stakeholders in the society should be held accountable to lowering the extent to which people are vulnerable to the effect of CC; a framework that promotes accountability will help to promote and protect HRs in terms of CC impacts; constitutionally guaranteed "environmental right" under Nigerian will help to eradicate environmental abuses that cause CC; the existence of environmental right in the Nigerian law will impose an obligation on individuals to contribute protection of the environment; and the existence of environmental right in the Nigerian law will help to remove the barriers that confront many environmental litigants.

In terms of participation of the public in the procedural rights in NDC implementation, the KII respondents from DPR, DCC and NESREA all agree that public participation and procedural rights are fully embedded in the NDC sectorial Implementation Action Plans. On the contrary, the responses from the questionnaire shows that over 80 percent of the respondents do not know about the NDC, talk less of its sectorial action plans.⁹⁹⁰ The respondents are neutral on the NDC and its mitigation projects and action plans. This implies that the position of the regulatory agencies do not represent the perception of the people. The people are very passive about the NDC and its implementation action plans. This may lead to a repeat of the Kwale CDM and Ogidigben EPZ crisis.

The study also found out that most of the respondents both agree and strongly agree that the Nigerian law on CC should cater for compensation of affected people in case of violation

⁹⁹⁰ See Table 6.8

of HRs; judicial powers in Nigeria should be able to determine issues relating to CCM; and public participation and environmental justice will help to contribute to CC litigation in Nigeria. Also, in terms of how best to improve the state of CC in Nigeria, most of the respondents both agree and strongly agree that expanding ATI on CC will promote mitigation; and expanding ATI on CC will promote mitigation.

5.5 Mainstreaming HRs in CCM in Nigeria: Lessons from Norway

Norway is a European country located within the arctic region. Norway like Nigeria is major producer of petroleum. It is equally a coastal state. Norway is a member of the of the European Economic Area (EEA) which means that it is part of EU internal market (European Free Trade Association (EFTA))⁹⁹¹ since signing the EEA Agreement in 1994.⁹⁹² The essence of the EEA Agreement is to promote and strengthen economic and trade relations between EU members and EEA/EFTA States.⁹⁹³ EEA covers internal market and environmental policies. The implication of being a part to EEA is that Norway must adopt similar legislations with the EU on trade and environment.⁹⁹⁴ Norway is also obligated to under article 73 of EEA Agreement to ensure that all her environmental related actions are geared towards the protection, preservation and improvement of the environment. Norway is a party to UNFCCC having ratified the convention on 9 July 1993.⁹⁹⁵ Norway equally ratified the KP on the 30th of May 2002, and its Doha amendment in 2014. Norway on the 20th of June, 2016.⁹⁹⁶

Norway is an open small economy. 35% of her GDP comes from exports.⁹⁹⁷ As at 2016, petroleum and natural gas production accounts for 15% of Norwegian GDP.⁹⁹⁸ Norway's manufacturing sector is comparatively small, while the private and public service sector

⁹⁹¹ European Free Trade Agreement. Retrieved September 4, 2020 from <https://www.efta.int/>.

⁹⁹² Norway's Seventh National Communication Under the Framework Convention on CC. (*Supra*).

⁹⁹³ Article 1 of EEA Agreement. Retrieved September 4, 2020 from <https://www.efta.int/media/documents/legal-texts/eea/the-eea-agreement/Main%20Text%20of%20the%20Agreement/EEAagreement.pdf>.

⁹⁹⁴ Norway's Seventh National Communication Under the Framework Convention on CC. (*Supra*).

⁹⁹⁵ *Ibid.*

⁹⁹⁶ *Ibid.*

⁹⁹⁷ *Ibid.*

⁹⁹⁸ *Ibid.*

accounts for 65% of her GDP.⁹⁹⁹ As at 2015, Norway emissions stood at 53.9 million tonnes of CO₂ equivalents.¹⁰⁰⁰ Transport, petroleum and manufacturing sectors are the largest GHG emitters in Norway, as the three sectors cumulatively account for 81% of GHG emissions in Norway.¹⁰⁰¹ Electricity production in Norway is almost completely renewable as its energy-intensive industry does not use fossil fuel in producing its energy but grid electricity. The industrial sector accounts for 15.7% of GHGs emission in Norway.¹⁰⁰² The Agriculture sector accounts for 8.4% of Norway's GHGs emissions.¹⁰⁰³

5.5.1 Norwegian CCM Framework

Norwegian climate policy is anchored on UNFCCC, KP, and PA. Norway has a comprehensive sets of climate adaptation and mitigation measures that covers almost all GHGs emissions as well as their removals.¹⁰⁰⁴ These policies are centered on the polluter pays principle. Norway overachieved her commitment under the KP for the period of 2008-2012 by 13%. Norway ratified the PA on the 20th of June, 2016. The Norwegian 1st National Determined Contribution (NDC) under PA targets to reduce her GHGs emission to at least 30% by 2020, 40% by 2030 when compared to 1990.¹⁰⁰⁵ It also seek to become carbon-neutral by 2030 and become a low-emission society by 2050.¹⁰⁰⁶ Norway intends to fulfil this target jointly with the EU.¹⁰⁰⁷

Norway further enacted the CC Act 2017 to promote the implementation of the Norwegian NDC¹⁰⁰⁸ in a bid to lower emission by 40% by 2030,¹⁰⁰⁹ and achieve energy efficiency in

⁹⁹⁹ *Ibid.*

¹⁰⁰⁰ *Ibid.*

¹⁰⁰¹ Transport sector accounts for 31% of GHGs emissions in Norway, while petroleum activities and industry sector accounts for 28% and 22% respectively of GHGs emissions in Norway. *Ibid.*

¹⁰⁰² Hydrofluorocarbon (HFC) and metal production are the major contributors in this regard.

¹⁰⁰³ *Ibid.*

¹⁰⁰⁴ *Ibid.*

¹⁰⁰⁵ Norway's First National Determined Contribution. Retrieved September 5, 2020 from [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/NorwayINDC%20\(Archive%20d\).pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/NorwayINDC%20(Archive%20d).pdf)

¹⁰⁰⁶ *Ibid.*

¹⁰⁰⁷ *Ibid.*

¹⁰⁰⁸ Sections 1 and 2, Climate Act, Royal Degree No. 790 of 16 June, 2017. The Act entered into force on January 1, 2018. The Act was retrieved September 5, 2020 from <https://lovdata.no/dokument/NLE/lov/2017-06-16-60>

¹⁰⁰⁹ Section 3, *ibid.*

the years to come.¹⁰¹⁰ Following the partner of the PA, the CC Act established a 5 year climate targets review for Norway.¹⁰¹¹ It also introduced an annual report mechanism by the Government to the Parliament updated on attainment of climate targets, adaptation measures, budgets on GHG emissions and projected reduction and removals.¹⁰¹²

5.5.2 Norwegian NDC Implementation Measures

Over 80% of Norway's GHGs emission mitigation approach is emission trading, taxes on GHGs, or both.¹⁰¹³ Norway first introduced CO2 taxes in 1991 as part of its steps towards a GHG emission reduction policy that is cost-effective.¹⁰¹⁴ At the moment, CO2 taxes are levied on over 60% of GHGs. On the average, the standard CO2 tax per tonne of GHG is 500 Norwegian Krone (NOK) which is equal to USD55.93.¹⁰¹⁵ The national emission trading scheme of Norway which was patterned after the EU Emission Trading Scheme (ETS)¹⁰¹⁶ was established in 2005, and it covers 11% of total Norwegian GHG emissions.¹⁰¹⁷ The Norwegian ETS covers all GHG emissions not subject to CO2 tax. Norway joined the EU ETS in 2008 and her ETS coverage broadened to cover over 40% of Norwegian GHG emission.

The other measures in partnership with the EU include the Efforts Sharing Regulation.¹⁰¹⁸

¹⁰¹⁰ Section 4, *ibid.*

¹⁰¹¹ Section 5, *Ibid.*

¹⁰¹² Section 6, *ibid.*

¹⁰¹³ Norway's Seventh National Communication under the Framework Convention on CC. Retrieved September 4, 2020 from https://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/529371_norway-nc7-br3-1-nc7_-_br3_-_final.pdf, 8.

¹⁰¹⁴ *Ibid.*, 9.

¹⁰¹⁵ *Ibid.*

¹⁰¹⁶ The EU-ETS is a kind of 'cap and trade' method, whereby a 'cap' or limit is set on aggregate GHG emission within the system. See Emission to Air. Retrieved September 7, 2020 from <https://www.norskpetroleum.no/en/environment-and-technology/emissions-to-air/#:~:text=the%20carbon%20tax,-The%20carbon%20tax,Tax%20Act%20on%20Petroleum%20Activities.>

¹⁰¹⁷ *Ibid.*, 13.

¹⁰¹⁸ This regulation covers sectors not covered under the EU ETS, to wit: transport, waste, building and agriculture. Under this regulation Norway commits to make annually a binding commitment towards GHGs emission reduction targets for the periods of 2021-2030. See The European Union, Iceland and Norway agree to deepen their cooperation in climate action. Retrieved September 8, 2020 from https://ec.europa.eu/clima/news/european-union-iceland-and-norway-agree-deepen-their-cooperation-climate-action_en.

The Norwegian Pollution Control Act prohibits all forms of outdoor pollution without permission from relevant authorities of government and/or the law.¹⁰¹⁹ This Act applies to all GHGs in Norway. Hence, the discharge permit that industries usually obtain pursuant to the Act must disclose their GHG emissions.¹⁰²⁰

The following are the sectorial action measures for CCM in Norway:

5.5.2.1 Petroleum Sector

In 1991, Norway promulgated the **CO2 offshore tax Act**.¹⁰²¹ This regime covers emissions from offshore petroleum and gas activities. The tax rate per standard cubic meter of gas or per liter of oil in 2020 is NOK 1.15. The rate for natural gas combustion is NOK 491 per tonne of CO₂, while the rate per standard cubic meter emission of natural gas is NOK 7.93.¹⁰²²

It is pertinent to note that offshore activities were added to the **EU ETS** in 2008. The most significant instrument for GHG emission reduction in the petroleum sector till date is CO₂ tax and it has yielded tremendous impact. Norway has experienced remarkable improvements in emission reduction measures and technology due to the CO₂ tax and regulations under the Pollution Control Act.¹⁰²³

Norway's Carbon capture and storage (CCS) has enhanced its national climate action. This CCS extends *interalia* to research, development, and CCS promoting projects. The

¹⁰¹⁹ Pollution Control Act, No. 6 of 1981. Retrieved September 7, 2020 from <https://www.regjeringen.no/en/dokumenter/pollution-control-act/id171893/#:~:text=The%20purpose%20of%20this%20Act,provided%20for%20information%20purpose%20only.>

¹⁰²⁰ Norway's Seventh National Communication under the Framework Convention on CC. Retrieved September 4, 2020 from https://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/529371_norway-nc7-br3-1-nc7_-_br3_-_final.pdf, 14.

¹⁰²¹ Emission to Air. Retrieved September 7, 2020 from <https://www.norskpetroleum.no/en/environment-and-technology/emissions-to-air/#:~:text=the%20carbon%20tax.-The%20carbon%20tax,Tax%20Act%20on%20Petroleum%20Activities.>

¹⁰²² *Ibid.*

¹⁰²³ Norway's Seventh National Communication under the Framework Convention on CC. Retrieved September 4, 2020 from https://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/529371_norway-nc7-br3-1-nc7_-_br3_-_final.pdf, 14.

Technology Centre Mongstad (TCM) in Norway is the largest in the world. Through its operation over the years, Norway has been able to devise new strategies to reduce CO2 emissions and improve energy efficiency¹⁰²⁴

5.5.2.2 Energy and transformation industries

Renewable energy constitute almost the entire electricity generation in Norway.¹⁰²⁵ In a normal year, hydro-power accounts for 96% of the electricity generation, whereas thermal power plants and wind power each account for 2% respectively of Norwegian electricity generation.¹⁰²⁶ When comparing Norway to other countries, GHG emission from the power and energy sector is very low. Hence, new renewable energies and energy efficiency measures may not have been needed in Norway. The power and energy sector is covered by the EU ETS. Norway also has a market-based electricity certificate scheme which basic objective is to increasing renewable electricity generation.¹⁰²⁷

CO2 tax is equally levied on natural gas, PMS and kerosene. The Erna Solberg led Norwegian government in June, 2007 introduced a regulation banning the heating of buildings with mineral oil from this year 2020.¹⁰²⁸ The Norwegian government through her ministries created a fund scheme which is used to cater for energy and climate related projects. The Fund receives a capital accumulating to about NOK 2.8 billion. This Fund is administered by Enova,¹⁰²⁹ based on agreement between the Ministry and Enova. This partnership focuses on reduction and elimination of barriers to new technological development and promote market changes. However, Norway is working towards achieving a market with climate-friendly solutions and energy efficient without governmental support.¹⁰³⁰

¹⁰²⁴ *Ibid.*

¹⁰²⁵ *Ibid.*, 15

¹⁰²⁶ *Ibid.*

¹⁰²⁷ *Ibid.*

¹⁰²⁸ *Ibid.*

¹⁰²⁹ Enova is owned by the Norwegian Ministry of Climate and Environment with the responsibility to contribute to GHG emission reduction, energy development, climate technology and to secure and strengthen the supply system in transport sector and other sectors not covered under EU ETS. See Enova. Retrieved September 8, 2020 from <https://www.enova.no/about-enova/>.

¹⁰³⁰ Norway's Seventh National Communication under the Framework Convention on CC. Retrieved September 4, 2020 from

5.5.2.3 Transport

Taxation is the Norwegian main GHG emission reduction measure for the transport sector. Norway levies CO₂ tax on fossil fuel combustion. This connotes that CO₂ tax is levied on diesel and petroleum, while biodiesel, hydrogen and bio ethanol are exempted from such tax. Norway introduced mandatory turnover of biofuel to increase its usage. Since 1st of January, 2018, biofuel must account for 10% of total amount fuel sold for road transportation annually.¹⁰³¹

Norway also introduced a vehicle purchase tax scheme that provides a decreased level of CO₂ emission and enacts penalties for vehicles with increased level of CO₂ emission which greatly contributed to emission reduction from new cars.¹⁰³² The average emission limit for new passenger vehicles as from this 2020 should not exceed 85 grams CO₂/km.¹⁰³³ Urban mobility demand has been addressed through the use of public transportation system, cycling and walking. The public transport was achieved through targeted investment, future-oriented solutions and better public transport. Urban transport projected jointly funded by the national, regional, local governments and road tolls sets the construction of new railways and maintenance of existing rails as its top priority.

Norway has been partnering with the IMO to achieve the limitation of GHGs.¹⁰³⁴ Within the country of Norway, there has been implementation of all IMO guidelines on GHGs emission reduction. Additionally, she has also introduced battery-electric car ferries. Norway has also developed more energy-efficient shipping technologies through research

https://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/529371_norway-nc7-br3-1-nc7-br3-final.pdf, 14.

¹⁰³¹ *Ibid.*

¹⁰³² *Ibid.*, 15.

¹⁰³³ See The White Paper on Climate Policy (Report no. 21 (2011-2012)) adopted by the Norwegian Parliament. This Policy was quoted in Norway's Seventh National Communication under the Framework Convention on CC. Retrieved September 4, 2020 from https://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/529371_norway-nc7-br3-1-nc7-br3-final.pdf, 14. It should be noted that in 2017, the Parliament approved CO₂ emission limit for a new passenger car was 83 grams CO₂/km.

¹⁰³⁴ *Ibid.*

and development programs done through the Enova, Innovation Norway and the Research Council of Norway.¹⁰³⁵

5.5.2.4 Industry

GHGs emission reduction in the manufacturing sector is mainly covered under the EU ETS. However, Norway has set up internal CO₂ compensation scheme for this sector. The essence of this scheme is to prevent release of carbon rising from increased electricity tariffs.¹⁰³⁶ Norway also established its environmental technology scheme in the year 2010 in order to encourage local industries to engage in projects that are relevant to environmental technology of the market. This has enhanced the competitiveness of Norwegians industry globally.¹⁰³⁷

5.5.2.5 Agriculture

N₂O from nitrogen fertilizer and methane emanating from animal husbandry constitute the bulk of GHG emissions from the agriculture sector.¹⁰³⁸ Being that these emissions emanate from diverse smaller sources, they are very difficult to be calculated hence, they are either covered by CO₂ taxes or ETS. At the moment, Norway has set up a committee to assess the possibility of introducing GHG-taxation to the agriculture sector. In the meantime, the government has outline new strategies to decrease GHG emission from the country's sector of agriculture in the policy guideline drafted in 2016 and 2017 for climate and agriculture in its white papers on Agricultural policy and Climate policy.¹⁰³⁹

5.5.2.6 Forestry

In Norway, forest constitute a major source of renewable energy, CO₂ sink, and wooden material that can be used to substitute materials with stronger carbon footprint.¹⁰⁴⁰ Norway has set in place measures in the forest sector to mitigate CO₂, and these measures include legislation, taxation, research, economic support, and administrative support systems. The

¹⁰³⁵ *Ibid.*

¹⁰³⁶ *Ibid.*

¹⁰³⁷ *Ibid.*

¹⁰³⁸ *Ibid*, 16.

¹⁰³⁹ Cited in *Ibid*, 16.

¹⁰⁴⁰ *Ibid*, 17.

Norwegian Forestry Act, 2005 promotes sustainable use and management of Norway's forests. The Act applies to all forms of forestry ownership in Norway.

Norway has substantially increased funding for forest related GHG emission mitigation efforts. Norway has developed economic support schemes for improved forest fertilization, enhanced breeding of forest seedlings and improved seedling density.¹⁰⁴¹ It is expected that over time, these measures will lead to uptakes in forest carbons and produce environmentally friendly raw materials.¹⁰⁴²

5.5.2.7 General Mitigation Measures: Public Awareness, Education and Training

Public awareness, training and education have been pivotal elements of climate policies in Norway since 1990s.¹⁰⁴³ Norway has instituted several activities and programmes to sensitize the general Norwegian publics on sustainable development, CC and its effects on the society unlike the situation in Nigeria. The education system in Norway have long been restructured to embed CC and sustainable development into the educational system. Norway is participating in Sustainable Development Agenda 2030¹⁰⁴⁴ and other programs that cater for public awareness, education, and training.¹⁰⁴⁵ The current Norwegian government led by Solberg in 2017 broadened the curriculum for Primary and secondary education to infuse sustainability and respect for nature in it.

The Norwegian government ministries handling issues on education, research, climate and environment established the Sustainable Backpack Initiative in order to enhance the implementation of sustainable development into conventional education at schools. This initiative was designed in cooperation with some private parastatals.¹⁰⁴⁶

¹⁰⁴¹ Ibid, 17-18.

¹⁰⁴² Ibid.

¹⁰⁴³ Ibid, 21.

¹⁰⁴⁴ Norway. Retrieved September 9, 2020 from <https://sustainabledevelopment.un.org/memberstates/norway#:~:text=Norway%20regards%20the%202030%20Agenda,promoting%20prosperity%2C%20peace%20and%20justice>.

¹⁰⁴⁵ Global Action Programme on Education for Sustainable Development (2015-2019). Retrieved September 9, 2020 from <https://en.unesco.org/globalactionprogrammeeducation>.

¹⁰⁴⁶ Norway's Seventh National Communication under the Framework Convention on CC. Retrieved September 4, 2020 from https://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/529371_norway-nc7-br3-1-nc7-br3_-_final.pdf, 14.

With regards to public enlightenment, the Environmental Information Act¹⁰⁴⁷ gives all Norwegians the constitutional right to obtain and on the part of the government disseminate information on the environment to the masses and create public awareness. The ministry has also built up information resources on the internet. The ministry's website www.miljo.no publishes press releases, news, and other relevant information on the environment. Also, the Website State of the Environment Norway, www.environment.no publishes statistics on Norway's natural resources, pollutions, environmental challenges, and waste management.¹⁰⁴⁸

Norway targets to attain transparency in environmental policy development and regulatory implementations. Hence, the Norwegian environmental agencies have a long-standing tradition of involving civil society organizations in environmental policy making. The Ministry of Climate and Environment also give financial support to Norwegian NGOs in the area of environmental protection.¹⁰⁴⁹

5.5.3 Updated Norway's NDC of 2020

The first Norwegian NDC is very ambitious, with its lofty measures discussed above. However, HRs were not mainstreamed into it, being that it was silent on HRs consideration in attaining the climate targets that it proposed and implemented. It was also procedure right to ATI provided under the Environmental Information Act, 2004 that was available to the people.

On the 7th of February, 2020, Norway updated her NDC with the PA secretariat.¹⁰⁵⁰ In this Updated NDC, Norway enhanced and improved on its first NDC submitted in 2016. The Norwegian Updated National Determined Contribution (NDC) under PA targets to reduce her GHGs emission to at least by 50% and towards 55% by 2030 when compared to

¹⁰⁴⁷ entered into force on 1st January 2004.

¹⁰⁴⁸ Ibid.

¹⁰⁴⁹ Ibid.

¹⁰⁵⁰ Updated Norway's Nationally Determined Contribution. Retrieved September 5, 2020 from [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/Norway_updatedNDC_2020%20\(Updated%20submission\).pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/Norway_updatedNDC_2020%20(Updated%20submission).pdf)

1990.¹⁰⁵¹ It also seek to become carbon-neutral by 2030 and become a low-emission society by 2050.¹⁰⁵² Norway intends to voluntarily cooperate and collaborate with the EU and Iceland in fulfilling this target pursuant to article 6 of PA.¹⁰⁵³

5.5.3.1 HRs Clauses in the Updated Norwegian NDC of 2020

Norway in updated NDC of 2020 explicitly made HRs commitments in the implementation of the NDC.

5.5.3.1.1 Procedural Rights

In the area of public participation and ATI, the Updated NDC¹⁰⁵⁴ in addition to the application of Environmental Information Act in its implementation also committed to apply the Aarhus Convention.¹⁰⁵⁵ The Aarhus convention was negotiated under the auspices of UNECE and the provisions of the convention are binding on the parties. The convention is the first to create a binding procedural environment rights.¹⁰⁵⁶ The convention has 47 parties including the EU.¹⁰⁵⁷ Article 1 of the convention provides that parties to the convention must guarantee the rights of ATI, public participation in decision-making, and access to justice in environmental matters in order to protect the right of all persons (both present and future generation) to live in an environment adequate to his or her health and well-being.

The convention institutionalizes the three pillars of procedural rights to wit: ATI, public participation in decision-making and access to justice. Article 4 and 5 of the convention deals with ATI. Members of the public have the right to request for environmental information from both public and private sector without any duty to disclose a legitimate

¹⁰⁵¹ *Ibid.*

¹⁰⁵² *Ibid.*

¹⁰⁵³ *Ibid.*

¹⁰⁵⁴ See paragraph 4(a)(i) of the Updated Norway's NDC (*supra*).

¹⁰⁵⁵ The United Nations Economic Commission for Europe's (UNECE) Convention on ATI, Public Participation in Decision-Making and Access to Justice in Environmental Matters. Aarhus Convention 1999 (adopted 25 June 1998; entered into force 30 October 2001).

¹⁰⁵⁶ Počuča, M., Mladenov, M. and Mirković, P. 2018. The Analysis of The Aarhus Convention in The Context of Good Environmental Governance. *Economics of Agriculture*, 65:4, 1615-1625, 1615.

¹⁰⁵⁷ *Ibid.*

interest.¹⁰⁵⁸ The information sought must be released with a period of one month from the date of request, and in latest in two months period in the case of complex or voluminous information. Article 4(4) of the convention lays down some grounds for refusal of the information, *inter alia*: where such disclosure involves confidential diplomatic relations or public security; where such information does not exist; or where such information is inchoate. However, where information is refused, the refusing authority must disclose the reason for such refusal. Parties are also mandated to set up system to enable the public to obtain information from existing or proposed projects that is likely to have a significant impact on the environment.¹⁰⁵⁹ Parties are also expected to submit regular reports on environment assessment.

Articles 6, 7 and 8 of the convention enshrined the right to public participation in environmental decision-making process. Article 6 provides that parties must notify the concerned public¹⁰⁶⁰ among other things: a proposed project; the nature of the project; the possible decisions; projected procedure; venue and time for public hearing; and opportunities for public participation. In order to ensure that the public participation do not become an administrative rubber-stamp, the convention goes further to provide that the decisions arrived at the proceeding must be a product of the public participation, this does not in any way bequeath to the public a veto power in the decision making. It is only states that the public authorities must not arrive at any decision without first giving a serious consideration to opinions and comments of the public.¹⁰⁶¹ Article 8 stipulates that parties must design adequate measures for participation of the public in the planning process, programmes, and strategy relating to issues on the environment in a transparent regime. Article 8 mandates parties to ensure public participation in the development of executive regulations.

Article 9 guarantees the right to access to justice in environmental issues and matters. The implication of the inclusion of the Aarhus Convention in the Norwegian updated NDC is

¹⁰⁵⁸ Ibid, 1619.

¹⁰⁵⁹ Article 5.

¹⁰⁶⁰ Concerned public mean persons interested or affected by the environmental decision making. See article 2 of the Convention.

¹⁰⁶¹ Ibid, 1620.

that Norwegians and residents can demand from both private and public institutions working in the area of environment, or whose project are geared towards the environment or attainment of the NDC to furnish him/her with details of the project. They have the right under the convention to demand to be part of making decisions. Where the private or public institution default in the above duties, the concerned members of the public can seek for redress before the court.

Based on the above convention, Norwegian government have engaged in consultation with the Sami People and other indigenous people in designing a framework that caters for human rights protection.¹⁰⁶²

5.5.3.1.2 Substantive Rights

Paragraph 4(a)(ii) of the Updated Norwegian NDC provides that Norway takes cognizance of its existing HRs obligations before ratifying the PA. It further stated that the HRs guaranteed under the Norwegian Constitution Norway,¹⁰⁶³ and the HRs Act shall apply in climate actions in Norway.¹⁰⁶⁴ The HRs Act of Norway seeks to strengthen HRs' status in Norway.¹⁰⁶⁵ The Act domesticated all the generations and made them applicable in Norway. Hence, where a CCM project or measures infringes on any of the rights guaranteed under these conventions, the aggrieved person can seek for redress in court.

The updated Norwegian NDC explicitly catered for the human rights protection of people. First, paragraph 4(a) (i) of the Updated NDC made provisions for the protection of the vulnerable population who might be impacted by public or private institution's CCM actions or omissions. Norwegian government have engaged in consultation with the Sami People

¹⁰⁶² Updated Norway's Nationally Determined Contribution. Retrieved September 5, 2020 from [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/Norway_updatedNDC_2020%20\(Updated%20submission\).pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/Norway_updatedNDC_2020%20(Updated%20submission).pdf)

¹⁰⁶³ Part E, Article. 110 b of the Norwegian Constitution provides that 'Every person has a right to an environment that is conducive to health and to natural surroundings whose productivity and diversity are preserved'.

¹⁰⁶⁴ Ibid.

¹⁰⁶⁵ Section 1 of the HRs Act.

and other indigenous people in designing a framework for the vulnerable population of sami.¹⁰⁶⁶

Second, the updated NDC also explicitly made provisions for gender equality in planning and implementation of climate actions in Norway. Paragraph 4(a) (i) of the Updated NDC provides that the Equality and Anti-Discrimination Act 2018 is applicable in the entire process of achieving the NDC. Hence, an aggrieved person may initiate an action based on this Act where gender equality was not considered in climate actions or where he/she is discriminated upon on any of the grounds enumerated in the Act.

5.5.4 Lessons for Nigeria

- a. **Improved Carbon Taxation:** Taxation is Norway's main CCM measure. Through this measure, Norway was able to exceed her commitment under the KP by 15%. Carbon tax on gas emission in Norway is NOK7.93 per standard cubic meter (SCM), while in Nigeria, the Flare Gas (Waste and Pollution Prevention) Regulation, 2018 fixes the penalty for gas emission for per million standard cubic foot (mscf) to be USD 2 for a field that has a daily capacity of 10,000 barrels or more. For fields with production capacity that is lower than 10,000 barrels daily, then the rate for flare gas is USD 0.50. To determine the difference between the taxes, we will focus on fields with over 10,000 production capacity. the following procedure will apply:

$$\text{Mscf} = 1000\text{scf}$$

$$1000\text{scf} = 28.3168\text{scm}$$

$$\text{But } 1000\text{scf} = \text{USD}2.00 \text{ in Nigeria}$$

$$\text{While } 1\text{scm} = \text{NOK}7.93 \text{ in Norway (1USD} = \text{NOK}9.04)$$

$$\underline{1\text{scm}} \quad \times \quad \text{NOK}7.93 =$$

$$28.31685\text{scm} \quad \quad \quad (\text{cross multiple the equation})$$

$$= \text{NOK}224.552224$$

Then, converting the NOK value back to dollars

¹⁰⁶⁶ Updated Norway's Nationally Determined Contribution. Retrieved September 5, 2020 from [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/Norway updatedNDC 2020\(Updated%20submission\).pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Norway%20First/Norway%20updatedNDC%202020(Updated%20submission).pdf)

NOK 224.552224 = USD24.79

Hence, the tax rate for emission of 1mscf in Norway is USD24.79, while in Nigeria, it is USD2. Therefore, the difference between the Norwegian (USD24.79) and Nigerian (USD2) regimes is USD22.79. The Nigerian tax is too small to compel compliance with the major emitters like the International Oil Companies (IOCs). Nigeria must develop stringent tax regime on GHG emission. Secondly, carbon taxation in Nigeria is seemingly restricted to companies and organizations that deal in oil and gas. This is because of the other sectorial action plans did not make provision for GHG taxation.

- b. **Integration of Sustainable Development and Environment Studies in Educational Curriculum:** The education system in Norway have long been restructured to embed CC and sustainable development into the educational system. Norway is participating in Sustainable Development Agenda 2030¹⁰⁶⁷. The current Norwegian government led by Solberg in 2017 broadened the curriculum for Primary and secondary education to infuse sustainability and respect for nature in it. The Ministry of Education and Research and the Ministry of Climate and Environment established the Sustainable Backpack Initiative in order to enhance the implementation of sustainable development into conventional education at schools. This initiative was designed in cooperation with Non-governmental organizations (NGOs).¹⁰⁶⁸
- c. **Public Awareness:** in the area of public enlightenment, the Environmental Information Act¹⁰⁶⁹ gives all Norwegians the access to receive and disseminate information on the environment to the masses and create public awareness. The ministry has also built up information resources on the internet. Through this

¹⁰⁶⁷ Norway, supra.

¹⁰⁶⁸ Norway's Seventh National Communication under the Framework Convention on CC. Retrieved September 4, 2020 from https://unfccc.int/files/national_reports/annex_i_natcom/submitted_natcom/application/pdf/529371_norway-nc7-br3-1-nc7-br3-final.pdf, 14.

¹⁰⁶⁹ entered into force on 1st January 2004.

strategy they have been able to publish natural resources, pollutions, environmental challenges, and waste management.¹⁰⁷⁰

- d. CC Legislation:** Norway enacted the CC Act 2017 to promote the implementation of the Norwegian NDC¹⁰⁷¹ in a bid to meet its commitment to lower emission by 40% by 2030,¹⁰⁷² and attain a transition to a low-emission country by 2050.¹⁰⁷³ Following the partner of the PA, the CC Act established a 5 year climate targets review for Norway.¹⁰⁷⁴ It also introduced an annual report mechanism by the Government to the Parliament updated on attainment of climate targets, adaptation measures, budgets on GHG emissions and projected reduction and removals.¹⁰⁷⁵ An Act has the operation of law unlike policies that we have in Nigeria. Policies are more like soft laws that do not create a strong binding obligation on the government and the people. A legislation on the other gives the citizenry a legal standing to challenge government or private sector action or inaction which infringes on their legal rights before a court of competent jurisdiction.
- e. Procedural Rights:** the Updated NDC¹⁰⁷⁶ broadened the scope of public participation and ATI by providing that in addition to the application of Environmental Information Act in its implementation, the Aarhus Convention will also apply in climate actions in Norway.¹⁰⁷⁷ The convention institutionalizes the three pillars of procedural rights to wit: ATI, public participation in decision-making and access to justice. The implication of the inclusion of the Aarhus Convention in the Norwegian updated NDC is that Norwegians and residents can demand from both private and public institutions working in the area of environment, or whose project are geared towards the environment or attainment of the NDC to furnish

¹⁰⁷⁰ Ibid.

¹⁰⁷¹ Sections 1 and 2, Climate Act, Royal Degree No. 790 of 16 June, 2017. The Act entered into force on January 1, 2018. The Act was retrieved September 5, 2020 from <https://lovdata.no/dokument/NLE/lov/2017-06-16-60>

¹⁰⁷² Section 3, *ibid.*

¹⁰⁷³ Section 4, *ibid.*

¹⁰⁷⁴ Section 5, *Ibid.*

¹⁰⁷⁵ Section 6, *ibid.*

¹⁰⁷⁶ See paragraph 4(a)(i) of the Updated Norway's NDC (*supra*).

¹⁰⁷⁷ UNECE, *supra*..

him/her with details of the project. They have the right under the convention to demand to participate in the decision-making process on such matters. Where the private or public institution default in the above duties, the concerned members of the public can seek for redress before the court. Based on the above convention, Norwegian government have engaged in consultation with the Sami People and other indigenous people in designing a framework for the protection of the Rights of Sami People in the execution of projects within the region.¹⁰⁷⁸

- f. **Substantive Rights:** Paragraph 4(a)(ii) of the Updated Norwegian NDC provides that Norway took cognizance of its existing HRs obligations before ratifying the PA. It further stated that the HRs guaranteed under the Norwegian Constitution and the HRs Act shall apply in climate actions in Norway.¹⁰⁷⁹ The HRs Act of Norway seeks to strengthen HRs' status in Norway.¹⁰⁸⁰ The section 2 of Act domesticated all the generations of HRs, and made them applicable in Norway. It therefore means that all the above listed conventions have the full force of law in Norway. Hence, where a CCM project or measures infringes on any of the rights guaranteed under these conventions, the aggrieved person can seek for redress in court.

The updated Norwegian NDC explicitly make provisions for the protection of the rights of the vulnerable groups in the society. First, paragraph 4(a) (i) of the Updated NDC made provisions for the protection of the rights of indigenous people who may be affected by public or private institution's CCM actions or omissions. Norwegian government have engaged in consultation with the Sami People and other indigenous people in designing a framework for the protection of the Rights of Sami People in the execution of projects within the region.¹⁰⁸¹

Second, the updated NDC also explicitly made provisions for gender equality in planning and implementation of climate actions in Norway. Paragraph 4(a) (i) of

¹⁰⁷⁸ Updated Norway's NDC, *supra*

¹⁰⁷⁹ *Ibid.*

¹⁰⁸⁰ Section 1 of the HRs Act.

¹⁰⁸¹ Norway's updated NDC, *supra*.

the Updated NDC provides that the Equality and Anti-Discrimination Act 2018 is applicable in the entire process of achieving the NDC. Hence, an aggrieved person may initiate an action based on this Act where gender equality was not considered in climate actions or where he/she is discriminated upon on any of the grounds enumerated in the Act.

5.6 Conclusion

This chapter considered Nigeria's obligation under PA, that is, NNDC and its HRI. It also examined the sectoral implementation action plans and their HRI. It found that NNDC failed to mainstream HR in its CCM. The chapter appraised the position of CCM in Norway which has mainstreamed HRs in all her CCMs. It concluded by drawing lessons that Nigeria can learn from the Norwegian approach to CCM.

CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

6.1 Summary

The struggle to get a human right based approach to global climate policy drive has had a checkered history with the developed nation suppressing such moves.¹⁰⁸² The PA which is to take over from the KP is the first climate policy to elaborately refer to human right. However, there is no ‘independent human right obligation’¹⁰⁸³ in the PA, and as such parties may not be compelled to respect, protect and fulfill HRs in carrying out their mitigation or adaptation mechanisms. Nigeria is a party to the PA and has submitted her NDC to the secretariat of the PA. The implementation of the NDC leads to unintended HRs violation. However, Nigeria lacks a comprehensive legal framework for CC control.

The above problem prompts this research calling for the examination of Nigeria's obligation under the PA 2016 and the national laws in order to determine their adequacy to mitigate the emission of greenhouse gases in Nigeria using a HRs-based approach. In order to attain the aim of this research, the researcher sets out the following specific objectives, which is to:

¹⁰⁸² Doolittle, A.A. 2010. The Politics of Indigeneity: Indigenous Strategies for Inclusion in CC Negotiations. *Conservation and Society*. 8 (4): 286–291, 287; and Kant, P., Swati C. and Wu S. 2011. The REDD Safeguards of Cancun. *New Delhi: Institute of Green Economy Working Paper No. 19-2011*, 23.

¹⁰⁸³ Mayer, B. 2016. HRs in the PA. *Climate Law*. 6:1/2. 109-117, 111.

1. ascertain the current impacts of CC, and the link between CC and HRs in Nigeria
2. examine extant Nigerian regulatory frameworks for environmental protection in order to determine if they can mitigate CC without violating HRs;
3. examine the effectiveness of the relevant provisions of the UNFCCC 1992, the KP 1997 and the PA 2015 that contain obligations that Nigeria have in mitigating CC using a HRs-based approach;
4. ascertain the possible impact of mitigation mechanisms that is adopted by Nigeria under the PA on human right in Nigeria, and design right-based CC legislation.

The first research question arose from objective 1. The answer to this question is contained in chapters 2 and 5. This research finds that CC is one of the major crisis in the 21st century.¹⁰⁸⁴ It creates a gargantuan universal problem and will have momentous impacts on humanity.¹⁰⁸⁵ More so, it has been forecasted that CC will have damming impacts on economies, the environment and social life of people globally.¹⁰⁸⁶

HRs scholars have now come to agree that CC directly threatens some fundamental HRs such as right to life, water, food, health and shelter.¹⁰⁸⁷ Massive landslides and floods which will decrease the prospects for people to market their farm produce; lead to water scarcity, and will also reduce the productivity of farmers. This will definitely impact on the right to food, health, and life. Also, frequent flood and droughts may necessitate the disappearance of animal and plant species that have been fundamental to the ceremonial life of indigenous people or have been a source of subsistent food for them. This will affect the right of indigenous people. More so, extreme cold and wet environment may lead to health challenges like bronchitis, hypothermia and pneumonia especially among children and old people. Decrease in productivity will also give rise to shortage or loss of revenue, which will have a negative impact on national GDP and the income of rural dealers. This will

¹⁰⁸⁴ O.J. Oyedele & K.O.N. Onu (2022), *supra*.

¹⁰⁸⁵ Australian HRs Commission. 2008. CC Context – International and Domestic. Native Title Report. Chapter four, Page-91. Retrieved September 11, 2018 from:
http://www.humanrights.gov.au/social_justice/nt_report/ntreport08/pdf/chap4.pdf

¹⁰⁸⁶ Adejumo et al, 2022, *supra*.

¹⁰⁸⁷ Majid, M, 2021, *supra*, note 87.

sprout the young rural population to migrate to urban centres for greener pasture, and in turn lead to urban over population and pollution.

The second research question arose from the objective 2. This question was answered in chapter 4 of the thesis. This research finds that there is no explicit right-based legislation on CC control in Nigeria. Hence, CCM and HRs violations that are incidental to CCM can only be addressed through the existing environmental laws in Nigeria. These laws are not focused on CC except for CCA 2021. They do not also have environmental HRs mainstreamed in them save the African Charter on Human and People's Right Act in its Article 24. However, the article prioritizes development over environmental protection.

The proliferation of CC litigation has helped litigants to test the waters of the recondite aspects of the various trends of CC litigation discussed in this work. Many CC litigations have emerged successfully in jurisdictions like Netherlands, Australia, the United Kingdom, India, and the United States of America. It is suggested that other jurisdictions especially, developing countries (like Nigeria) should take a leaf from them. This thesis also finds that several factors are militating against CC litigation globally. These include justiciability of CC claims, locus standi, scientific expertise, lack of awareness of the existence of the right to a health environment, and access to justice.

The third research question arose from the objective 3. This question was answered in chapter 5 of the research. This research finds that the three major international frameworks for CC control are the UNFCCC 1992, its KP of 1997, Doha Amendment, and the current PA. It finds that these international frameworks failed to explicitly create a binding obligation on parties to respect HRs in the implementation of their CCM and adaptation plans. The implementation of CDM projects under the KP led to some unanticipated HRs violations in their host countries. The PA (which have now replaced the KP) made a provision that catered for HRs in its preamble and not in the operative articles. It is still a serious debate by scholars if parties to the PA should be compelled to respect HRs in the implementation of their NDC under the PA. However, HRs and CC cannot be separated

anymore, as CC and its mitigation measures impact on HRs.¹⁰⁸⁸ Hence, Nigeria, like every other party to the PA owe its citizens the due to respect and protect HRs in the implementation of her NDC.

The fourth research question arose from the objective 4. These questions were answered in chapter 5 of the research. The thesis finds that the Nigeria's NDC is ambitious enough to mitigate CC in Nigeria if properly implemented. It also finds that both substantive and procedural HRs were not mainstreamed in the NDC and in its sectoral implementation action plans. The lack of express HRs obligation in the NDC creates no obligation on institutions and companies implementing it to respect and protect HRs in the process.

The CCA established a broad institutional and legal regime for the realization of Nigeria's commitments under its Amended NDC and LTV. The Act fixed the period for the achievement of Nigeria's obligation to be 2050-2070. There also exist the Petroleum Industry Act, 2021 and policy documents like NCCP, and ETP.

Section 26 of the CCA included provisions for climate education. It instructs the secretariat to work with the relevant Ministries, Departments, and Agencies (MDAs) in charge of education to develop curricula that will incorporate climate change education across all levels of education in Nigeria with the approval of the council. Actually, this is a positive development.

The Climate Change Act's Section 30 made provision for PES, which requires the government to make its annual Climate Action Plan and NDC measures available to the public. The PES must be published in the Federal Gazette, so while this is a commendable step, it must be done. The dissemination of the information to Nigeria's hinterlands cannot be accounted for by this type of publication. ATI might not be available to all Nigerians as most Nigerians do not have access to the official gazette. This clause is also general in nature and did not include any specific language regarding ATI for CCM project host communities or individuals who might be negatively impacted by these projects.

¹⁰⁸⁸ Mayer B., 2021, 'CCM as an Obligation under HRs Treaties?' *American Journal of International Law*, 9, 2.

The Nigerians approach to climate change mitigation is ambitious and if properly implemented, will help Nigeria attain its net zero carbon ambition for 2060. However, these measures are likely to negatively impact on fundamental rights of people, and the Climate Change Act did not create any human rights obligation for the government or the executors of the CCM projects.

There is also no clear provision for ATI, public participation and access to justice, despite Nigeria being obligated to so do, under article 12 of PA.

There also exist overlapping responsibilities for the regulatory institutions.

The primary data revealed that there is low level of awareness of NDCs and its sectoral implementation action plans among Nigerians. This may lead to the ugly situation witnessed in Kwale CDM project and the Ogidigben EPZ crisis. Nigeria can learn lessons from the Norwegian approach where HRs was expressly mainstreamed in her Revised NDC to the PA. Norway has also promulgated a CC Act which explicitly provided that substantive and procedural HRs must be respected in attaining the ambitions set out in her NDC.¹⁰⁸⁹ Norway has introduced environmental education into her school curriculum. She has also launched a website through which indigenes can track all environment related projects and seek for information if need be. Norway also has strict carbon taxation law.

6.2 Conclusion

CC is a serious global burden for the 21st century. Nigeria is very susceptible and vulnerable to the effects of CC due to the existing geographic realities of her country's location, climatic condition, political, economic and social conditions. In order to tackle the problem of CC, Nigeria has endorsed the UNFCCC, the KP and the PA. Nigeria has also designed and tendered its allegiance through its NDC to the PA secretariat.

The NNDC seeks to lower Nigeria's GHG emission unconditionally by 20% and conditionally by 45% in 2030. To achieve the above target, Nigeria has designed sectorial implementation action plans for the five high GHG emitting sectors in Nigeria. The thesis

¹⁰⁸⁹ Updated Norway's NDC, 2021 (supra), note 1028.

examined the existing environmental laws in Nigeria to ascertain whether they could achieve the target of the NNDC using a right-based approach. It discovered that in Nigeria, there is no comprehensive constitutional guide on CC management.

It examined the existing policies and sectorial action plans for NNDC implementation using a right based approach. The thesis also issued questionnaires and conducted interviews in order to design an effective legal framework for CCM using a right based approach. The thesis made recommendations that are right based and designed constitutional guide for CCM in Nigeria. This thesis focused on HR approach to CCM in Nigeria. It did not consider CC the adaptation strategies put in place by NNDC and the impact of these strategies on HRs. There is therefore need for further research to ascertain the effect of CC adaptation measures on HRs. Also further research needs to be carried out on the new NDC, CCA, ETP and their HRs impacts.

6.3 Recommendations

The researcher makes the following recommendations:

6.3.1 Stringent NDCs Regime under the PA:

- a. The contents of the PA in article 4 should be amended to give parties a minimum emission reduction benchmark for their NDCs. This will make parties to come up with ambitious NDCs and faithfully implement them. The current approach gives parties a lot of free riding incentives which may be counterproductive on the long run.
- b. The PA pledge and review mechanism should be made to be legally binding by backing it up with sanctions for failure to meet the pledged contribution in NDCs.

6.3.2 Explicit Inclusion of HRs Obligation in Operative Clauses of the PA

- a. The PA should be amended to insert HRs protections on parties in the drawing and implementation of their NDCs. HRs commitment should be inserted in the operative articles of 3,4,5,7, and 8.
- b. There should be inter-institutional cooperation and collaboration between the OHCHR and UNEP; the UNFCCC secretariat and civil rights actors in mainstreaming HRs into the PA. Training of CC administrators on short courses or special courses on HRs is also

necessary. The UNFCCC secretariat can make it a policy that people to be appointed into such positions must be trained in HRs. The Secretariat can also develop a Human right unit to train and retrain its staff on HRs. HRE can also be used in the area of CC.

6.3.3 Liberal Approach to Climate Justice and CC Litigation

- a. Countries must adopt the liberal approach that the Nigerian, Netherland, and US Supreme Courts have respectively adopted in CC litigation. NGOs and civil rights organisations should take advantage of this liberal approach to initiate public interest CC litigations in Nigeria and elsewhere.
- b. The judiciary must remain vigilant to watch against the duplicity of suits and unreasonable litigations. This will block the corridors of the court against meddlesome interlopers and busybodies that may want to take undue advantage of this liberalized approach to *locus standi* to initiate vexatious actions in hunt of monetary gains.
- c. Governments of developing countries may not need to create special courts for CC litigations due to the cost implications, however, they may have to train and re-train their judicial officers on the interface between environmental injuries, effects of CC, and the activities of GHGs emitter and their regulators.
- d. There is need for awareness among Nigerian CC litigants about the existence and enforceability of the African Charter in Nigeria. There is also a need for an express constitutional provision for environmental sustainability. This kind of provision will mount pressure on both GHGs emitters and the government to be resilient in their actions.

6.3.4 Improved Carbon Taxation:

Nigeria needs to make her GHGs emission tax more stringent than the current rate set by the Flare Gas (Waste and Pollution Prevention) Regulation, 2018 which is USD 2 per million standard cubit foot (mscf) for a field that has a daily capacity of 10,000 barrels or more cannot compel international oil companies to comply. Since it is expensive to vent gas, oil field license holders and gas permit holders may choose to pay the paltry fine than comply with the regulation. The Carbon taxation should be extended to all GHG emitting sectors.

6.3.5 Integration of Sustainable Development and Environment Studies in Educational Curriculum:

Nigeria should restructure her educational system to introduce sustainable development and CC into the educational curriculum of primary and secondary school. It should also be made a compulsory General Education Study in tertiary institutions. The course content should promote sustainable development principles in the upcoming generation. It should contain practical programmes like tree planting and carrying out other climate actions as part of the course requirement.

6.3.6 Development of Innovative Indigenous Technology

The deployment of innovative technologies is crucial to making the effect of CC not much felt in the country. The option mentioned above will transform the energy system in the country. Furthermore, it is required that all major stakeholders in the society such as the private sector and government parastatals should unite and make provision for the public to have access to low-carbon technologies. Although, the burden placed by CC is very daunting, but it is still very possible to achieve environmental sustainability.

The government need to encourage and support clean entrepreneurship. The government also needs to build local capacity to encourage the implementation of the NDC.

6.3.7 Improved Research on CC

The government must as a matter of urgency increase research on CC. This will assist in coming up with innovative ideas on CCM that is home grown. The government should set up climate research centers and fund climate related researches for an improved response to CC and its effects on the society.

6.3.8 Public Awareness:

There is need for more awareness on the effect of CC on human health and the environment especially in a developing country like Nigeria whose adaptive capacity is very low. Thus, people will understand the need for low carbon development which is the essence of NDC and that its implementation might not have much negative impact on human right if given

the right approach. The Nigerian government needs to create public enlightenment programmes about CC, its causes and effects.

The Ministry of Environment need to partner with the Ministry of Information and Culture, the National Orientation Agency, Media outlets, and civil society organisations in developing and implementing this public awareness and enlightenment. The programme can also make use of social media and online platforms. The government can develop incentives and reward mechanisms for individuals, groups, and organisations that successfully carry out climate actions and climate neutral actions.

The measures will involve continuous consultation and sensitization of people on the imperative of the implementation of the sectoral action plan of NDC and the need to be open to changes aimed at achieving the goals encapsulated in the plan for the benefits of all. Continuous engagement with NGOs and civil society organizations in mounting robust sensitization and awareness campaign in oil bearing communities on the dangers of illegal refinery operations which is currently contributing to GHGs emission during disposal and open burning of heavy waste oil.

6.3.9 CC Legislation:

Nigeria should enact a CC Act which will seek the implementation of the Nigerian NDC¹⁰⁹⁰ which seeks to lower emission by 20% unconditional, and conditional 45% by 2030. The act should provide for the emission reduction target, the sector implementation plans, annual emission report to the National Assembly, adaptation measures, budgets on GHG emissions and projected reduction and removals. This legislation will give the citizenry a legal standing to challenge government or private sector climate actions or inactions which infringes on their legal rights before a court of competent jurisdiction.

The Act shall broaden the scope of information accessibility and engagement by all through the encouragement of public participation in addition to the application of the Freedom of

¹⁰⁹⁰ Sections 1 and 2, Climate Act, Royal Degree No. 790 of 16 June, 2017. The Act entered into force on January 1, 2018. The Act was retrieved September 5, 2020 from <https://lovdata.no/dokument/NLE/lov/2017-06-16-60>

Information Act and Environmental Impact Assessment Act, the Act will institutionalize the three pillars of procedural rights to wit: information accessibility, engagement of the public in decision making process, and the provision of justice in climate actions. It will be drafted in a way that Nigerians and residents can demand from both private and public institutions working in the area of environment, or whose projects are geared towards the environment or attainment of the NDC to furnish him/her with details of the project. They will have the right under the Act to be important stakeholders to reckon with in terms of decision making. Where the private or public institution default in the above duties, the concerned members of the public can seek for redress before the court.

The Act should also guarantee the substantive rights that may be affected in the process of planning and implementing the Nigerian NDC. The essence of this Act should be that human development and not emission reduction must be at the center of climate action in Nigeria. A CC Bill has been developed by the research and it is attached to this research as annex 1.

6.3.10 Additional recommendations after Defense

It is recommended that the CCA should be amended in the following manner:

a. Section 1: Section should be amended by the insertion of a paragraph ‘g’ that will read

‘ensuring that HRs (substantive and procedural) are respected, protected and fulfilled in at stages of the NDC and ETP implementations, including all action plans made pursuant to them.’

b. Section 4: Section should be amended by the insertion of a paragraph ‘s’ that will read

‘ensure that human rights (substantive and procedural) are respect, protected and fulfilled at all stages of climate actions’

c. Section 30 should be amended by inserting the following

Right to public participation

30A. (1) This Act guarantees rights of AIT, public participation in decision-making, and access to justice in environmental matters in order to protect the right of all persons (both

present and future generation) to live in an environment adequate to his or her health and well-being.

(2) (a) Members of the public have the right to request for environmental information from both public and private sector without any duty to disclose a legitimate interest.

(b) The information sought must be released within a period of one month from the date of request, and latest in two months period in the case of complex or voluminous information.

(c) A government agency or private sector may decline to disclose information;

i. where the disclosure involves confidential diplomatic relations or public security;

ii. where such information does not exist; or

iii. where such information is inchoate.

(d) Where information is refused, the refusing authority must disclose the reason for such refusal.

(e) Ministry of Environment and the NESREA shall set up a system to enable the public to obtain information from existing or proposed projects that is likely to have a weighty effect on the environment.

(3) (a) A proponent of a project and the concerned regulatory agency must notify the public among other things: a proposed project; the nature of the project; the possible decisions; projected procedure; venue and time for public hearing; and opportunities for public participation.

(b) The decisions arrived at the proceeding must be a product of the public participation. The public authorities must not arrive at any decision without first giving a serious consideration to opinions and comments of the public.

(c) The Minister for Environment shall design adequate measures for participation of the public in the planning process, programmes, and strategy relating to issues on the environment in a transparent regulation.

(d) The public must actively participate in the development of executive regulations that relate to the environment.

(4) The government shall ensure that members of the public have access to administrative and judicial procedures to challenge the omissions and acts of private or public institutions that contravene the provisions of this Act and its regulations.

Human rights protection

30B. (1) Human rights guaranteed under chapter four of the 1999 CFRN and the ACHPR Act shall be protected in all climate and environmental actions in Nigeria.

(2) Where a climate change mitigation or adaptation project or measure infringes or is likely to infringe on any of the rights guaranteed under the Constitution and/or Act above, the aggrieved person(s) can seek for redress in court under the Fundamental Rights Enforcement Procedure.

C. Nigeria should address the overlapping responsibilities of regulatory agencies.

6.4 Contributions to Knowledge

The thesis examined right-based approach to CCM in Nigeria using both doctrinal and empirical research methodologies. This thesis developed and has made effective recommendations that will serve as constitutional guides and legal framework for CCM in Nigeria that is human right based. This legal framework was designed using the Norwegian approach and empirical data results drawn from the analysis of the primary data used in this research. The essence of this Act and this thesis is that human development and not emission reduction must be at the center of climate action in Nigeria.

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APPENDIXS

APPENDIX ONE

CC BILL

LONG TITLE

A bill for an act to provide a regulatory framework for a resilient response to CC; achieve Nigeria's emission reduction target under the PA; protect HRs in the climate actions and measures, and other related matters.

ENACTED by the National Assembly of the Federal Republic of Nigeria.

PART I - PRELIMINARY

1. This Act shall be cited as CC Act

Short Title.

Objective of the Act

2. (1) The objective of this Act is to stimulate the implementation of Nigeria's climate targets under the PA and to set Nigeria on the part to a low-emission society by 2050.

(2) The Act also aims to promote HRs, public participation, transparency and accountability in achieving the above climate targets.

Objective of the Act

(3) Human development and not emission reduction must be at the center of all climate actions and policies for the attainment of the above objectives.

Greenhouse gases emission reduction target

3. (1) The Nigeria's emission reduction target is to reduce greenhouse gas emission unconditionally by 30 per cent by 2030 when compared with the 1990 position.

(2) The Nigeria's emission reduction target is to reduce greenhouse gas emission unconditionally by 50 per cent by 2030 when compared with the 1990 position.

5-year review and update of emission reduction target.

(3) Notwithstanding the foregoing, Nigeria's ultimate target is to become a carbon neutral society by 2050.

Review of greenhouse gases emission reduction target every five years

4. (1) To attain the goals of section 3 above, the Federal Government shall review and update the emission reduction target every five years and submit same to the National Assembly.

(2) The updated emission reduction target shall be based on available scientific knowledge, and the target must be quantifiable and measurable.

(3) The Updated targets shall be improvement on their predecessors.

(4) The updated target shall be communicated to the PA secretariat as Nigeria's Updated Nationally determined Contribution after its approval by the National Assembly.

(5) This Act does not preclude Nigeria from adopting other targets and measures not included in this Act and the National Determined Contribution.

Members of the National Council on Environment and CC.

PART TWO - INSTITUTIONAL FRAMEWORK AND REPORTING

Implementation of Nigeria's nationally determined contribution to the PA

5. (1)(a) There is established, a National Council on Environment and CC.

(b) The Council shall consist of the President as chairman, all Ministers, Director Generals of the National Environmental Standards and Regulation Enforcement Agency (NESREA); National Electricity Regulatory Commission; Department of Petroleum Resources and National Oil Spill Response Agency (NOSRA); Director, Department of Petroleum

Resources; 10 persons from private sector and the general public to be nominated by the Nigerian Labour Congress, Nigerian Bar Association, Civil Society Organisation, Private Sector; and Director, Department of CC, Federal Ministry of Environment as the secretary. Functions of the council.

All the nominees shall be experts of not less than 10 years' experience in either law, environment, finance, economy, CC, public administration or health.

(c) Minister for Environment shall be the alternate chairman in the absence of the President.

(d) the Council shall coordinate the attainment of the climate targets set out in this Act, and shall-

- i. ensure that CCM and adaptation are mainstreamed in government decisions and functions at all levels.
- ii. Design and approve the national targets set out in this Act.
- iii. Design policies that are necessary for adequate CC response and achieving the goal of a low carbon society by 2050.
- iv. Design an educational curriculum that will mainstream environmental and CC awareness; sustainable development and resilient actions at all educational levels in Nigeria;
- v. initiate policies on environmental and climate research and training.
- vi. provide for online, on air and offline information dissemination on the environment subject to section 7 of this Act;
- vii. harmonize environmental laws in Nigeria to achieve the aims of this Act.
- viii. administer the CC Response Fund (CCRF) established under this Act
- ix. develop a National CC Response Plan for Nigeria.

NESREA's coordination of the Implementation of Nigeria's nationally determined contribution to the PA, subject to the approval of the council.

(2) Subject to the approval of the Council, the Department of CC, Federal Ministry of Environment and the National Environmental Standards and Regulation Enforcement Agency (NESREA) shall coordinate the

NOSRA's coordination of the Implementation of Nigeria's nationally

implementation of the Nigeria's nationally determined contribution to the PA and its sectorial action plans with the relevant sectors and ministries except for the oil and gas sector.

Delegation of the functions of the council.

(3) Subject to the approval of the Department of CC, Federal Ministry of Environment, the Department of Petroleum Resources and National Oil Spill Response Agency (NOSRA) shall coordinate the implementation of the Nigeria's nationally determined contribution to the PA and its sectorial action plan for the oil and gas sector.

Annual report on the progress of attaining the objects set out in this Act.

(4) Subject to the provisions of this Act the council may delegate any of her functions in this Act either generally or particularly to a committee, officer, member of the council, or agent of the council.

Annual report

6. (1) The council, through the Ministry of Environment shall submit a detailed annual report on the progress of attaining the objects set out in sections 2,3 and 5 of this Act to the National Assembly.

(2) This report shall be contained in the Ministry's annual budget proposal.

(3) The report shall contain the mitigation and adaptation measures to be taken towards attaining the goals set out in this Act.

Rights guaranteed under the Act.

PART THREE - PUBLIC PARTICIPATION AND HRS OBLIGATION

Right to public participation

7. (1) This Act guarantees rights of ATI, public participation in decision-making, and access to justice in environmental matters in order to protect the right of all persons (both present and future generation) to live in an environment adequate to his or her health and well-being.

Time-frame within which information sought must be released.

(2) (a) Members of the public have the right to request for environmental information from both public and private sector without any duty to disclose a legitimate interest.

Grounds for refusal to

(b) The information sought must be released within a period of one month from the date of request, and latest in two months period in the case of complex or voluminous information.

(c) A government agency or private sector may decline to disclose information;

i. where the disclosure involves confidential diplomatic relations or public security;

ii. where such information does not exist; or

iii. where such information is inchoate.

(d) Where information is refused, the refusing authority must disclose the reason for such refusal.

(e) Federal Ministry of Environment and the National Environmental Standards and Regulation Enforcement Agency (NESREA) shall set up a system to enable the public to obtain information from existing or proposed projects that is likely to have a significant impact on the environment.

Public participation relating to issues on the environment.

(3) (a) A proponent of a project and the concerned regulatory agency must notify the public among other things: a proposed project; the nature of the project; the possible decisions; projected procedure; venue and time for public hearing; and opportunities for public participation.

Measures to ensure public participation.

(b) The decisions arrived at the proceeding must be a product of the public participation. The public authorities must not arrive at any decision without first giving a serious consideration to opinions and comments of the public.

(c) The Minister for Environment shall design adequate measures for participation of the public in the planning process, programmes, and strategy relating to issues on the environment in a transparent regulation.

Public access to administrative and judicial procedures.

(d) The public must actively participate in the development of executive regulations that relate to the environment.

(4) The government shall ensure that members of the public have access to administrative and judicial procedures to challenge the omissions and acts of private or public institutions that contravene the provisions of this Act and its regulations.

HRs protection

8. (1) HRs guaranteed under chapter four of the 1999 Constitution of the Federal Republic of Nigeria and the African Charter on Human and Peoples (Ratification and Enforcement) Act shall be protected in all climate and environmental actions in Nigeria.

Power of the minister of environment to regulate carbon taxation.

(2) Where a CCM or adaptation project or measure infringes or is likely to infringe on any of the rights guaranteed under the Constitution and/or Act above, the aggrieved person(s) can seek for redress in court.

Penalty for greenhouse gas emission.

PART FOUR - CARBON TAXATION

Carbon taxation

9. (1) The Minister of Environment shall subject to sections 5 and 7 of this Act make regulation on greenhouse gas taxation for all sectors except oil and gas.

(2) The Minister of Petroleum shall subject to sections 5 and 7 of this Act make regulation on greenhouse gas taxation for the oil and gas sector.

(3) Notwithstanding the foregoing, the penalty for greenhouse gas emission per million standard cubic foot (mscf) shall not be less than #20,000.

Functions of the Department of CC under the Ministry of Environment.

PART FIVE - IMPLEMENTATION AND FUNDING OF CLIMATE ACTIONS

Establishment of the department of CC

10. (1) There is established in the Ministry of Environment, a Department of CC.

(2) The Department shall;

(a) Be the focal point for CC treaties in Nigeria;

(b) co-ordinate national implementation of the United Nations Framework Convention on CC, its protocol and any other legally binding agreement for implementing CC activities.

(c) regularly update information regarding national inventory of the Green House Gas emission and mitigation options, vulnerability assessment and adaptation measures and to satisfactorily provide a sustainable policy framework and enabling environment for the implementation of the UNFCCC and KP and any other CC guidelines, laws and control in Nigeria.

(d) Provide various sectors, agencies, ministries, states, institutions and the general public with CC analytical support;

(e) Create and maintain a national registry to register suitable mitigation and adaptation actions by public and private institutions;

(f) Collaborate with the ministry and agencies in charge of information in coordinating national information management and dissemination on CC.

(g) Collaborate with other agencies, government and private entities to identify strategies for low carbon development; design strategies for building resilience and capacity to CC; ensure adherence to national obligations in international treaties and their associated requirement for reports.

(h) Collaborate with relevant ministries and agencies to coordinate the implementation of intergenerational and gender-balanced climate education.

(3) The Department shall be headed by a Director in line with the Civil Service Rules, provided that he/she is an Nigerian and has a postgraduate degree and experience in any of these fields: law, environmental studies, economics, climatology, meteorology, engineering or any other relevant field that the Minister of Environment may determine in consultation with the Federal Civil Service Commission.

Head of the Department
of CC.

Sources of CC Response
Fund (CCRF).

Funding

11. (1) There is established the CC Response Fund (CCRF) which shall be used to finance CC actions and interventions.

(2) The fund shall be domiciled with the Central Bank of Nigeria.

- (3) The sources of this Fund shall be:
- (a) budgetary appropriated monies from the Consolidated Revenue Fund by the National Assembly.
 - (b) Grants, gifts, endowments, and donations.
 - (c) Penalties and Carbon taxes charged pursuant to this Act.
- (4) The Council and Director of the Department of CC shall administer the Fund.
- (5) Requests for funds shall be approved by the councils.
- (6) The Director of the Department of CC shall design the modalities for daily management of the Fund including the application and eligibility determination.

PART SIX - MISCELLANEOUS PROVISIONS

Delegated legislation

12. The Minister for Environment in consultation with the Council shall make regulations for effective implementation of the provisions of this Act.

Offences and penalties

13. (1) Any person, institution or entity that fails, neglects or refuses to comply with sections 7,8, and 9 of this Act commits an offence and is liable on conviction to imprisonment for a term of not less than 7 years and a fine of not less than N2,000,000.00.

(2) Where the offender in subsection 1 above is a corporate entity, it shall be liable to a fine of N10,000,000.

(3) The offender in subsections 1 and 2 above shall be liable to an additional 50% fine for every day in default.

(4) where an offender is convicted of an offence under this Act, the court may order the offender to pay compensation to the victim(s), in addition to any other punishment ordered by the Court.

(5) Notwithstanding any other provision of this Act, a victim of greenhouse gas emission, environmental pollution, persons affected by the effects of CC, or persons refused information under this Act or its regulation by any entity or person(s) including a public officer or institution may institute a civil action against such an entity or person under the Fundamental Rights Enforcement Procedure Rules, provided that the Court will take into

consideration the amount awarded in the criminal Proceeding in determining the amount to award as compensation in the civil suit.

Pre-action notice

14. No civil action shall be commenced against the Council, the Department or any of their authorized officers before the expiration of a period of 30 days after written notice of intention to commence the suit has been served on the Agency by the intending plaintiff or his agent

Jurisdiction of court

15. All High Courts shall have jurisdiction to entertain cases both civil and criminal emanating from this Act.

Interpretation

16. In this Act:

“Council” means National Council on Environment and CC;

“Court” means Federal High Court; State High Courts, High Court of the Federal Capital Territory;

“Department” means the Department of CC;

“Fund” means CC Response Fund (CCRF);

“Greenhouse Gases” include but not limited to gases agreed upon under the PA;

“PA” means Agreement reached in 2015 under the United Nations Framework Convention on CC;

“President” means the President of the Federal Republic of Nigeria.

Commencement

This Act shall enter into force once assented to by the President.

APPENDIX TWO

QUESTIONNAIRE

Dear Respondent,

I am a doctoral student of the Department International Law and Jurisprudence, Faculty of Law, University of Ibadan. This questionnaire is designed to obtain information on CCM in Nigeria. Your open and sincere response will be treated with utmost respect and confidentiality. The information is required solely for research purpose.

Thank you.

Yours faithfully,

Onu K.O.N.

SECTION ONE: RESPONDENTS' SOCIO-DEMOGRAPHIC CHARACTERISTICS

SN	QUESTIONS	RESPONSES	CODE
1	How old are you as at your last birthday?	16-24 25-34 35-44 45-54 55 and above	1 2 3 4 5
2	What is your sex?	Male Female	1 2
4	Marital Status	Single Married Separated Others (please specify)	1 2 3 99
5	Religious affiliation	Christianity Islam Traditional Others (please specify)	1 2 3 99
6	Ethnic Affiliation	Yoruba Hausa Igbo Others (specify)	1 2 3 99
7.	What is your state of residence		Actual
8.	What geo-political zone are you based	South-South South-East South-West North-Central North-East North-West	1 2 3 4 5 6

9	What is your highest level of education?	Non formal Primary Secondary Tertiary Others (specify)	1 2 3 4 99
10	Are you currently employed?	Yes No	1 2
11	If yes, occupation	Civil servant Business Man Farmer Artisan Others (Specify)	1 2 3 4 99
12	If no, what do you do?		Actual
13	Level of income (Monthly)	Below # 10,000 #10,000 - #50,000 #50,000 - #100,000 #100,000- #150,000 Above #150,000 Others	1 2 3 4 5 99
14	Do you belong or work for a regulatory agency that is related to environmental protection in Nigeria?	Yes No	1 2
15	Are you a climate expert?	Yes No	1 2
16	If yes, what aspect do you specialize in?		Actual
17	Do you own (or regularly drive) a car/van?	Yes No	1 2
18	If yes, roughly how many miles do you drive (per year)		Actual
19	Are you a member of any environmental organizations (e.g. Friends of the Earth, Worldwide Fund for Nature)?	Yes No	1 2

SECTION TWO: Awareness of CC

21	Have you heard of CC before? (If the selected option is No, please skip to Q28)	Yes No	1 2
22	If yes, what is your source of awareness?	Television Radio News Paper Internet	1 2 3 4

		Friends/Family members Others	5 99
23	How would you describe CC?	Change in the earth Climate Obstructions in the atmosphere	1 2
		It is a feeble It is dangerous Others	3 4 99
24	What do you think are the natural causes of CC	Volcanic eruption Ocean current Solar variations Earth Orbital Changes Others	1 2 3 4 99
25	What human activities do you think causes CC?	Bush burning Cutting down of trees Use of generators Gas flaring from oil companies Burning of fossil fuel Gases released from industries Excess use of chemicals Crude oil spillage Population increase Others	1 2 3 4 5 6 7 8 99
26	Do you think anything can be done to tackle CC?	Yes No	1 2
27	If yes, what do you think can be done to tackle CC?	Law should be made Government should take responsibility Industries should opt for renewable options Deforestation should be discouraged CC Litigation Others	1 2 3 4 5 99

SECTION THREE: The following seeks to get information on environmental hazards that you've experienced before. Kindly indicate the issues that you have been affected by.

28	Environmental hazards	Recent experience		Period				Perceived severity of environmental hazards		
		Yes	No	1 year ago	2 years ago	3 years ago	>3 years ago	Common	Normal	Serious
A	Air pollution									

B	Pollution of rivers and seas									
C	Flooding									
D	Litter									
E	Poor waste management (e.g. overuse of landfills)									
F	Traffic/ congestion									
G	GM food									
H	CC									
I	The hole in the ozone layer									
J	Using up the earth's resources									
K	Extinction of species									
L	Radioactive waste									
M	Overpopulation (of the earth by humans)									
N	Others.....									

SECTION FOUR: HRS

29	Are you aware of any law on CC? (If no, please skip to Q....)	Yes No	1 2
30	If Yes, are you aware that Nigeria has signed the PA 2015 on CC (If Yes, please continue, but if no kindly skip....)	Yes No	1 2
31	Are you aware of the 8 Nigeria's National Determined Contributions (NDC) towards CCM under the PA?	Yes No	1 2
32	Which these NDCs will be most effective for CCM in Nigeria?	Reforestation Climate Smart Agriculture Car to Bus Improve Electricity Grid 30% Energy Efficiency by 2030 Off-Grid Solar 13GW	1 2 3 4 5 6

		End Gas Flaring 45% Conditional/20% Unconditional Emissions Reduction	7 8
32a	Give Reason for your answer above		Actual
33	Do you think the mitigation mechanisms under Nigeria's National Determined Contribution (NDC) may affect human right in Nigeria?	Yes No	1 2
34	If yes, Why?		Actual
35	Do you think the mitigation mechanisms (NDC) under agreement will affect the human right?	Yes No	1 2
36	If yes, Why?		Actual
39	If yes, what did you do/ are you doing?		Actual
40	What do you recommend that will help to tackle CC?		Actual

The effectiveness of law in Nigeria in mitigating CC. Kindly tick appropriately,

		SA	A	DA	SDA	UD
41	CC is one of the major causes of environmental crisis					
42	Climatic impacts in Nigeria are very severe					
43	The resilience of energy systems in Nigeria to withstand the impact of CC is very low					
44	Nigeria solely depends on energy exports for economic growth					

Nigerian regulatory framework and environmental protection of human right. Kindly tick appropriately,

		SA	A	DA	SDA	UD
45	CC directly threaten some fundamental HRs					
46	The impact of CC has posed a threat to human equality					
47	The impact of CC has a posed a threat to non-discrimination					
48	There is a strong regulatory framework for protection of GHG emission and protection in Nigeria					
49	The government in Nigeria place economic interest over environmental protection					
50	The Nigerian government has been able to protect and improve the environment and safeguard the water, air and land					
51	The government has made progress in educating the populace on dangers of CC					

The current impact of CC on HRs in the Nigeria. Kindly tick appropriately,

		SA	A	DA	SDA	UD
52	The fundamental HRs of people living in a CC affected community is been threatened					

53	There are many legal and institutional challenges militating against implementation of CC policies and law in Nigeria					
54	The law in Nigeria caters for mitigation of CC in Nigeria					
55	The law in Nigeria on CC protects right to life					
56	The law in Nigeria on CC protects right to privacy,					
57	The law in Nigeria on CC protects right to healthy environment					
58	The law in Nigeria on CC protects right to water					
59	The law in Nigeria on CC protects right to food					
60	The law in Nigeria on CC protects rights to health					
61	The law in Nigeria on CC protects rights to shelter					
62	The law on CC right to self-determination					
63	There exists adequate domestic legislations that bordered on CC					
64	Nigeria has made progress in adhering to the principles of the Paris CC Agreement in tackling CC in Nigeria					
65	There exist a level of human right abuse through oil production activities of multinational oil companies in Nigeria					

Effects of National Determined Contributions on CCM Mechanism Projects on Human Right in Nigeria. Kindly tick appropriately,

		SA	A	DA	SDA	UD
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67	NDC CCM Projects may bring about sustainable development					
68	NDC CCM Projects may help tackle unemployment and poverty					
69	NDC CCM Projects may bring about forced displacements and loss of propriety rights					
70	NDC CCM Projects may bring about loss of traditions and cultural benefits					
71	NDC CCM Projects may bring about loss of right to life					
72	NDC CCM Projects may bring about loss of right to food					
73	NDC CCM Projects may bring about inequalities and discriminations against vulnerable minorities					
74	NDC CCM Projects may bring about loss participatory and consultative rights in projects sited in once locality					
75	NDC CCM Projects may bring about loss right to health					
76	NDC CCM Projects may bring about poverty on the long run					
77	NDC CCM Projects may bring about trafficking in human persons					
78	NDC CCM Projects may bring about armed conflicts					

Measures to improve CCM in Nigeria. Kindly tick appropriately,

		SA	A	DA	SDA	UD
79	CC can be best tackled from the aspect of social justice					

80	Governments and other duty-bearers should be held accountable to reducing the vulnerability of the people to CC					
81	A framework that promotes accountability will help to promote and protect HRs in terms of CC impacts					
82	Constitutionally guaranteed “environmental right” under Nigerian will help to eradicate environmental abuses that cause CC.					
83	The existence of environmental right in the Nigerian law will impose an obligation on individuals to contribute to environmental protection					
84	The existence of environmental right in the Nigerian law will impose an obligation on governments to contribute to environmental protection					
85	The existence of environmental right in the Nigerian law will help to remove the barriers that confront many environmental litigants.					
86	The Nigerian law on CC should cater for compensation of affected people in case of violation of HRs					
87	Judicial powers in Nigeria should be able to determine issues relating to CCM					
88	Public participation and environmental justice will help to contribute to CC litigation in Nigeria					
89	Expanding ATI on CC will promote mitigation					
90	The government should uphold the right of communities to participate in decisions likely to affect their well-being					

APPENDIX THREE
RIGHT-BASED APPROACH TO CCM IN NIGERIA
(DOCTORAL RESEARCH INTERVIEW QUESTIONS FOR DEPARTMENT OF
CC)

By
ONU, KINGSLEY OSINACHI NNANNA
(MATRIC NO: 180447)

1. What is your name
2. What is your position
3. What is your years of experience
4. What do you understand by CC
5. You are aware that Nigeria ratified the PA on CC in 2017?
6. Your Department is in charge CC response in Nigeria?
7. You are aware of Nigeria’s Nationally Determined Contribution (NDC) to the PA?
8. Are you aware of the 8 mitigation measure under Nigeria’s National Determined Contributions (NDC) towards CCM under the PA?

Reforestation
Climate Smart Agriculture
Car to Bus
Improve Electricity Grid
30% Energy Efficiency by 2030
Off-Grid Solar 13GW
End Gas Flaring
45% Conditional/20% Unconditional Emissions Reduction
.....
.....
.....

9. You know about the Nigeria’s Sectoral Action Plan for the NDC?
 - a. Agriculture
 - b. Industry
 - c. Power
 - d. Oil and Gas
 - e. Transportation

.....
10. How has Nigeria and your Agency implemented the above Sectorial Action Plan NDC?

(Kindly give a detail but brief explanation for the implementation of the action plan by Nigeria and your Department)

11. How effective has the implementation being?
12. What are the challenges that you face in the Implementation of the NDC Sector Plans?
13. In the design and implementation of the NDC SECTOR PLANS, does your department and the Federal Institutions charged with their implementations:
A. Give the people who are affected by the mitigation measures *ATI* relating to such measures?
 - b. Do the people *participate in the decision making process of the sectoral CC measures*
 - c. Do they participate in the implementation of the sector plans?
 - d. Do the implementation process make room for accountability to the public?
 - e. Do the sector plans and their implementation process protect the vulnerable vulnerable group like women, child, and minority groups?
 - f. Does the sector plans and their implementation process make room for access to justice for people aggrieved with the process?
14. The NDC did not make reference to HRs in its implementation?
15. **Are you aware that the NDC Oil and Gas sectoral Action Plan implementation may affect HRs such as:**
 - a. may bring about forced displacements and loss of propriety rights? may bring about loss of traditions and cultural benefits
 - b. may bring about loss of right to life
 - c. may bring about inequalities and discriminations against vulnerable minorities
 - d. may bring about loss participatory and consultative rights in projects sited in once locality
 - e. may bring about loss right to health
 - f. may bring about poverty on the long run
 - g. may bring about trafficking in human persons

Yes/No (Kindly give reason for each or all the answer(s) please)
16. **What measures can be taking to advert this above scenario?**
17. **What is the way forward for Climate Action in the area of Oil and Gas in Nigeria?**

APPENDIX FOUR
RIGHT-BASED APPROACH TO CCM IN NIGERIA
(DOCTORAL RESEARCH INTERVIEW QUESTIONS FOR DEPARTMENT OF
PETROLEUM RESOURCES)

By
ONU, KINGSLEY OSINACHI NNANNA
(MATRIC NO: 180447)

1. What is your name:
2. What is your position:
3. What is your years of experience
4. What do you understand by CC:
5. You are aware that Nigeria ratified the PA on CC in 2017?
6. Your Department is in charge of Petroleum and Environmental Protection in the Oil sector in Nigeria?
7. You are aware of Nigeria's Nationally Determined Contribution (NDC) to the PA?
8. Are you aware of the 8-mitigation measure under Nigeria's National Determined Contributions (NDC) towards CCM under the PA?
 - Reforestation
 - Climate Smart Agriculture
 - Car to Bus
 - Improve Electricity Grid
 - 30% Energy Efficiency by 2030
 - Off-Grid Solar 13GW
 - End Gas Flaring
 - 45% Conditional/20% Unconditional Emissions Reduction
9. You know about the Nigeria's Sectoral Action Plan for the NDC?
 - a. Agriculture
 - b. Industry
 - c. Power
 - d. Oil and Gas
 - e. Transportation

10. NDC SECTOR PLAN IMPLEMENTATION FOR OIL AND GAS SECTOR

In the design and implementation of the NDC SECTOR PLANS, does your department and the Federal Institutions charged with their implementations:

- a. Give the people who are affected by the mitigation measures *ATI* relating to such measures?
 - b. Do the people participate in the decision-making process of the sectoral CC measures*.
 - c. Do they participate in the implementation of the sector plans?
 - d. Do the implementation process make room for accountability to the public?
 - e. Do the sector plans and their implementation process protect the vulnerable group like women, child, and minority groups?
 - f. Does the sector plans and their implementation process make room for access to justice for people aggrieved with the process?
11. How has Nigeria and your Agency implemented the above Sectoral Action Plan NDC?
 12. How effective has the implementation being?
 13. What are the challenges that you face the NDC implementation in the Oil and Gas sector?
 14. The NDC did not make reference to HRs in its implementation?
 15. Are you aware that the NDC Oil and Gas sectoral Action Plan implementation may affect HRs such as:
 - a. may bring about forced displacements and loss of propriety rights? may bring about loss of traditions and cultural benefits
 - b. may bring about loss of right to life
 - c. may bring about inequalities and discriminations against vulnerable minorities
 - d. may bring about loss participatory and consultative rights in projects sited in once locality
 - e. may bring about loss right to health
 - f. may bring about poverty on the long run
 - g. may bring about trafficking in human persons
 16. What measures can be taking to advert this above scenario?
 17. What is the way forward for Climate Action in the area of Oil and Gas in Nigeria?

APPENDIX FIVE
RIGHT- BASED APPROACH TO CCM IN NIGERIA
INTERVIEW QUESTIONS FOR National Environmental Standards and
Regulation Enforcement Agency (NESREA)

By

ONU, KINGSLEY OSINACHI NNANNA
(MATRIC NO: 180447)

1. What is your name
2. What is your position
3. What is your years of experience
4. What do you understand by CC
5. You are aware that Nigeria ratified the PA on CC in 2017?..
6. Your Agency is in charge of Environmental Protection in Nigeria?
7. You are aware of Nigeria’s Nationally Determined Contribution (NDC) to the PA?
.....
8. Are you aware of the 8 mitigation measure under Nigeria’s National Determined Contributions (NDC) towards CCM under the PA?

Reforestation

Climate Smart Agriculture

Car to Bus

Improve Electricity Grid

30% Energy Efficiency by 2030

Off-Grid Solar 13GW

End Gas Flaring

45% Conditional/20% Unconditional Emissions Reduction

9. You know about the Nigeria’s Sectoral Action Plan for the NDC?

- a. Agriculture
- b. Industry
- c. Power
- d. Oil and Gas
- e. Transportation

10. How has Nigeria and your Agency implemented the above Sectoral Action Plan NDC?

(Kindly give a detail but brief explanation for the implementation of the action plan for each of the 5 sectors by Nigeria and your Agency)

11. How effective has the implementation being?

12. What are the challenges that you face the NDC implementation?

13. NDC SECTOR PLAN IMPLEMENTATION

In the design and implementation of the NDC SECTOR PLANS, does your agency and the Federal Institutions charged with their implementations:

A. Give the people who are affected by the mitigation measures *ATI* relating to such measures?

b. Do the people *participate in the decision making process of the sectoral CC measures*

c. Do they participate in the implementation of the sector plans?

d. Do the implementation process make room for accountability to the public?

e. Do the sector plans and their implementation process protect the vulnerable group like women, child, and minority groups?

f. Does the sector plans and their implementation process make room for access to justice for people aggrieved with the process?

14. The NDC did not make reference to HRs in its implementation? ...

15. Are you aware that the NDC sectoral Action Plan implementation may affect HRs such as:

- a. may bring about forced displacements and loss of propriety rights? may bring about loss of traditions and cultural benefits
- b. may bring about loss of right to life
- c. may bring about inequalities and discriminations against vulnerable minorities
- d. may bring about loss participatory and consultative rights in projects sited in once locality
- e. may bring about loss right to health
- f. may bring about poverty on the long run

g. may bring about trafficking in human persons

16. What measures can be taking to advert this above scenario?

17. What is the way forward for Climate Action in Nigeria?