

**ADDRESSING THE NEGATIVE IMPACTS OF CLIMATE CHANGE: A
QUEST FOR ENVIRONMENTAL JUSTICE IN NIGERIA**

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CERTIFICATION

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DEDICATION

This book is dedicated to God Almighty, who made my LL.B journey possible, to my dear parents, Mr. and Mrs. Obiajuru, to Mr. Victor Ojeah (my sponsor and mentor), to every law student giving their best despite overwhelming challenges, and to books and writings coming out in my name.

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LISTS OF STATUTES

Associated Gas Reinjection Act CAP.A25, LFN 2004

Climate Change Act 2021

Constitution of the Federal Republic of Nigeria (As amended) 1999

Environmental Impact Assessment Act 1992

National Environmental Standard and Regulations Enforcement Agency (Establishment) Act
2007

Petroleum Act 1965 CAP P10, LFN 2021

Petroleum Industry Act 2021

Paris Agreement 2015

United Nations Framework Convention on Climate Change (UNFCCC)

Vienna Convention for the Protection of the Ozone Layer 1985

LIST OF ABBREVIATIONS

CFRN	CONSTITUTION OF THE FEDERAL REPUBLIC OF NIGERIA
LFN	LAWS OF THE FEDERATION OF NIGERIA
NCCC	NATIONAL CLIMATE CHANGE COUNCIL
NESREA	NATIONAL ENVIRONMENTAL STANDARDS AND REGULATIONS ENFORCEMENT AGENCY
NIMET	NATIONAL EEN
PIA	PETROLEUM INDUSTRY ACT
AGRA	ASSOCIATED GAS REINJECTION ACT
COSs	CIVIL SOCIETY ORGANISATIONS
NDC	NATIONALLY DETERMINED CONTRIBUTION
NASPACC	NATIONAL ADAPTATION STRATEGY AND PLAN OF ACTION FOR CLIMATE CHANGE
UNEP	UNITED NATIONS ENVIRONMENTAL PROGRAMME
GCF	GREEN CLIMATE FUND
(UNFCCC)	UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE
WMO	WORLD METEOROLOGICAL ORGANISATION
COP	CONFERENCE OF PARTIES

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ABSTRACT

Climate change is one of the global fastest-growing problems, as it constitutes one of the greatest threats not only to human existence but to substantial human development, and human activities are considered the principal cause not minding the natural cause. Though the negative impacts of climate change is considered a global chaos, its biting effects on the Nigeria economy is overwhelming as it can be felt and seen clearly in the various sectors of the economy such as the agriculture, energy sector, food and health, drug, security, etc. These human activities which emit large amounts of green-house gasses include industrialisation, deforestation, burning of foil fuel, gas flaring, urbanisation and agriculture. The activities bring about increase in mean atmospheric temperature otherwise known as global warming that has the tendency to affect the ozon layer negatively and also deplete the productivity of the people in general. Despite the various laws made by the Nigerian government, the biting effects of climate change is still painfully felt as it is no longer a matter of the environment but that of the people who suffer the pains of the environmental degradation with little response from the policy makers and other stratas of government. To this effect, this work aims at addressing the negative impacts of climate change on the various regions of Nigeria particularly the northern and southern region (Niger Delta). It also considers the impacts of the various domestic and international frameworks for environmental protection and their shortcomings by relying on the doctrinal research methodology. It further addresses the quest for environmental justice and recommends that policy makers should consider the need for environmental justice and work towards setting practical strategies for the liberation of those that suffer the painful effects of climate change in Nigeria. It also calls for engagement of the civil and judicial communities to put all hands on dusk towards promoting environmental justice in Nigeria.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background to the Study

Climate change is one of the fastest-growing problems globally,¹ as it constitutes one of the greatest threats not only to human existence but to substantial human development². It is agreed to be caused by both natural(biological) factors and human (anthropogenic) factors as it entails the earth's changing weather pattern and long-term shift in temperature.

Over the years, while the earth's climate has naturally fluctuated due to biological factors such as volcanic activity, change in solar radiation and shifts of the earth's natural orbit, in recent times, the major cause of climate change is human activities.³ These human activities which emit large amounts of green-house gasses include industrialisation, deforestation, burning of foil fuel, gas flaring, urbanisation and agriculture.

Furthermore, greenhouse gases are gotten mainly from transportation which comes from burning fossil fuels for cars trucks, ships, train, and planes which is primarily gasoline and diesel, electrical power which generate fossil fuels mostly coal and natural gas, agriculture, land use and forestry.⁴ These human activities bring about increase in mean atmospheric temperature otherwise known as global warming that has the tendency to affect the ozon layer negatively.

¹ AO Kehinde, and Abifarin, *A Legal Framework for Combating Climate Change in Nigeria 2022*.

² IK Anthony, *Nigeria and the Question of Climate Change* Ekpoma Review 2022.

³ Quest Oghenerugba Ekugbawa *The Legal Frameworks for Combating Climate Change in Nigeria* (Unpublished LLB Project Faculty of Law University of Benin 2024).

⁴ The United States Environmental Protection Agency <<https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emission>> accessed 28th October 2024

While climate change is evidentially globally, likewise its impacts, its effects are obviously felt at a higher proportion by the developing countries, particularly those in Africa, due to their low level of coping capabilities.⁵ Thus, in Nigeria, the impacts of climate change cannot be overemphasized as it affects not just human existence but substantial human development. It has geographic impacts, sectoral impacts, demographic impacts, and security impacts on the existence and development of the Nigerian economy. Researchers such as Ayuba and others,⁶ Odjugo and others,⁷ etc, have shown that Nigeria is already being plagued with diverse ecological problems, which have been linked to the on-going climate change.

Geographically, the effects of climate change in Nigeria have been felt across the vegetative regions of Nigeria due to high precipitation in parts of the Southwest and Southeast. While the low precipitation in the North can lead to aridity, drought and desertification.⁸ Though global socio-economic development and health interventions have improved the general standard of living in recent times but the resulting deteriorating global environment conditions or factors are now affecting human health.

According to WHO (1996) and McMichael (1996) the major global environment changes significantly affecting health include climate change and ozone depletion produced by photolytic destruction of oxygen caused by greenhouse gases. Also, human health has been affected due to

⁵ JC Nwafor, 'Global Climate Change: the Drivers of Multiple Causes of Flood Intensity in Sub-sahara Africa' (a conference paper presented at the *International Conference on Climate Change and Economic Sustainability* held at Nnamdi Azikiwe University, Enugu, Nigeria, 12-14 June 2007); S. Jagtap, 'Managing vulnerability to extreme weather and climate events: Implications for agriculture and food security in Africa' (A conference proceedings of the *International Conference on Climate Change and Economic Sustainability* held at Nnamdi Azikiwe University, Enugu, Nigeria 12 -14 June 2007).

⁶ HK Ayuba, UM Maryah, and DM Gwary 'Climate Change Impact on Plants Species Composition in six semi-arid rangelands of Northern Nigeria' *Nigerian Geographical Journal*. (2007) 5(2) 35-42.

⁷ PAO Odjugo and AI Ikhuoria, 'The impacts of climate change and Anthropogenic factors on desertification in the semi-arid region of Nigeria' *Global Journal of Environmental Science*, 2(2):118-126

⁸ H Hider, 'Climate Change in Nigeria: Impacts and Responses' *K4D Helpesk Report 695*. Brighton,UK: *Institute of Development Studies* (2019).

shortage of food, spread of infectious diseases, water-borne diseases, air pollution, etc caused by the rapid climate change in Nigeria.

Furthermore, research has shown that natural factors coupled with other human activities is increasingly becoming a major threat to agricultural sector. Over 70% of the country's population engaged in agriculture as their primary occupation and means of livelihood.⁹ However, the climatic change which is implied by unpredictable rainfall variation, drought, desertification, flood, etc, affects agricultural productivity and affects crops yield. These grappling difficulties have in turn affected the economy of the country as there is less productivity leading to gross domestic product. Further, climate change has affected the energy sector of Nigeria particularly the electrical power supply in Nigeria.

The negative impacts of climate change necessitated the quest for environmental justice in Nigeria. This is because the survival of individuals and the collective survival of states in the country depend on the existence of a clean, healthy and safe environment.¹⁰ Considering the high impacts of climate change caused by human activities such as gas flaring, oil explorations in some areas eg Niger Delta, there is need for environmental justice because when land, water, energy and air are indiscreetly treated, for example, it is not only wildlife that suffers, but human life.¹¹

For the sake of the above, environmental justice seeks to redefine the traditional environmental movement by incorporating the concerns of minorities within environmental policy decision-

⁹ V Nkom, 'Climate Change expert/consultant to the Federal Ministry of Environment, Abuja' *Interview granted to The Guardian Newspaper* on 30th of March 2010.

¹⁰ U Udok, E Orie and Ukpong, 'Challenges of Access to Environmental Justice in Nigeria' *Cavendish University Law Journal*, (2023) 1(2) 2.

¹¹ Ayuba and others, 'Climate Change Impact on Plants Species Composition in six semi-arid rangelands of Northern Nigeria', *note 6*.

making, thereby engendering environmental equality as typified by the agitation of the Niger Delta over the region's hazardous, worrisome and pitiable situation and failure of the superficial institutional remedial actions by successive Nigerian government to address their genuine concerns¹². Hence, the main emphasis of environmental justice is a shift in focus from the environment to the people, for it underscores the need for environmental protection not to be planned within a vacuum and for environmental goals to take into account social, political and economic realities in environmentally devastated and dislocated regions like the Nigeria Delta¹³.

Giving consideration to the negative impacts of climate change caused by human activities, it is important to state that the oil and gas industry has a great share to blame. Obviously, environmental degradation has become the bane of the oil and gas industry in Nigeria. When these polluting incidents occur, the victims whose buildings, farmlands, fishing ponds and sources of drinking water are destroyed are left handicapped. Painfully, under the Nigerian constitution, environmental rights, which are considered as duties of the government to maintain, are relegated as non-justiciable¹⁴. These in turn affect the victims.

According to Ojo and Tokunbor¹⁵, access to justice on a national level is another impediment to environmental justice as it is narrowed by weak environmental law, a lack of independent judicial system and lack of political will to enforce compliance of extant legal opinions. The

¹² G Torres, 'Changing the Government Views: Environmental Justice' *Journal of Environmental Science*, (2000)3 (10)1.

¹³ KBO Ejumudo, 'The Democracy/Environmental Justice Challenges in Nigeria's Niger Delta and the Developmental Leadership and Governance Culture Imperative' *Journal of Economics and Sustainable Development* (2014) 5 (15) 113.

¹⁴ Section 20 of the 1999 Constitution of the Federal Republic of Nigeria (As Amended) CAP. 23, LFN 2024

¹⁵ GU Ojo, and N Tokunbor, 'Access to Environmental Justice in Nigeria: The Case for a Global Environmental Court of Justice' *Environmental Rights Action Friends of the Earth Nigeria* (2006)9. <<http://www.fori.org/press/achieve-ny-subject/economic-justice-resisting-neoliberalism-press/foei-celebratesanagreement-on-internationally-legally-binding-rules-to-stop-human-rights-violation-by-transnational-corporations>> accessed 28th October, 2024.

authors, Ojo and Tokunbor, further emphasised that although environmental degradation impacts severally on the people, the lack of access to justice when it comes to locus standi or right to sue ensures that the status quo is maintained.¹⁶ For instance, there are scientific data and some extant laws to curtail such environmental crimes yet these cases barely get to court due to technical juridical hurdles such as high cost of litigation, the problem of locus standi, or non-enforcement of rights within a stipulated period, all tilt to the advantage of the oil companies and to the detriment of the victims. This is because, in Nigeria, for a plaintiff to have the right to sue, the plaintiff must exhibit an interest which is peculiar to the plaintiff and not an interest which he shares in common with general members of the public.

Accordingly, it is trite that the issue of environmental justice is weighty and its weightiest focus is not just the environment but how it affects the people, hence the quest for environmental justice as emphasis has been long given to the environment and not the people. To this effect, this work is intended to address the negative impacts of climate change geographically and socio-economically, while considering the quest for environmental justice and the challenges of attaining environmental justice in Nigeria.

1.2 Statement of Research Problem

In recent years, climate change has become a growing concern in Nigeria. This is evident in natural disasters such as drought, flood, desertification, aridity, etc. Other anthropogenic factors include green-house emission, oil spillage, environmental degradation, deforestation, etc. Despite the enactment of various legal frameworks to regulate the growing concerns of climate change caused by both natural and anthropogenic factors, climate change continues to exacerbate

¹⁶ Ibid.

negative occurrences in vulnerable communities, affecting individuals, businesses, health, and even the economy of the country.

In view of the above, this study seeks to evaluate the negative impacts of climate change in Nigeria. It sheds light on the need for environmental justice while exploring these negative impacts on vulnerable population in Nigeria. This is because, more often than not, the issue of environmental justice is given less consideration while discussing the negative impacts of climate change in Nigeria.

To achieve the above, this study examines some legal frameworks (international and domestic frameworks) with respect to climate change, and analyses the limitations in Nigeria's current climate change and environmental laws in addressing the impacts of climate change on vulnerable population in Nigeria. It further examines the challenges in achieving environmental justice for the affected communities and propose recommendations for achieving and strengthening environmental justice in Nigeria.

1.3 Research Questions

The following are the questions the study tends to examine:

1. What are the impacts of climate change on Nigeria's environment and communities?
2. How does the impacts of climate change affect the various economic sector in Nigeria?
3. How does environmental injustice manifest in Nigeria?
4. What are the existing framework to address environmental justice and climate change in Nigeria?

1.4 Aim and objectives

The aim of this study is to address the negative impacts of climate change and the quest for environmental justice in Nigeria.

The Objectives are:

1. To analyse the impact of climate change on different regions in Nigeria
2. To evaluate the legal and policy framework for addressing climate change and environmental justice in Nigeria.
3. To propose solutions for achieving environmental justice in Nigeria.

1.5 Research methodology

The method that will be adopted in this study is the doctrinal legal research approach. It is a library-based research approach which involves sourcing for materials on the essay, an analysis of the materials and the use of the data obtained in evaluating the topic and making recommendations.

The primary sources used includes domestic statutory and judicial authorities such as the 1999 Constitution of the Federal Republic of Nigeria as amended, the Climate Change Act, etc, and relevant international legislations.

1.6 Scope and Limitations of the Study

The scope of this study is the geographical and thematic focus on Nigeria, particularly climate-affected regions like the Niger Delta and Northern Nigeria, how the impacts of the climate change has affected the various sectors of those areas and the response of the Nigerian government toward their quest for environmental justice.

The limitations of this study would be due to limited data and specific monitoring infrastructure in those affected area. Another limitation would be that the time available to complete this study may not be enough to cover every aspect of the topic as the effect of climate change may be so broad. Further, inadequate access to source materials and inadequate funds for better research may limit the research work too.

1.7 Significance of the Study

The negative effects of climate change cannot be overemphasized in Nigeria. The on-going diverse ecological problems in Nigeria, which have been directly linked to the on-going climate change caused by both natural factors and substantial anthropological (human) factors necessitates a quest for environmental justice which is not just focused on the environment but the people affected by the changes in the environment.

To this effect, this study is significant as it sheds light on the quest for environmental justice based on the negative impacts of climate change in Nigeria. Further, this study is relevant to policy makers, environmentalist, legal scholars, and civil society organisations because it examines the effectiveness of the legal frameworks that pertains to environment and environmental justice. Also, it contributes to existing literature on climate change and environmental justice as its detailed analysis will also help individuals have a deeper understanding of the challenges of climate change and the need for environmental justice that demands the government to consider environmental health a vital duty they owe to the citizens.

1.8 Chapter Analysis

This study is be made up of five chapters. Chapter one provides the general introduction which comprises the background to the study, statement of the research problem, research questions,

aim and objectives of this study, the research methodology, the scope and limitations of the study, the significance of the study and chapter analysis.

Chapter two centers on the conceptual clarification and theoretical framework on climate change such as environmental justice theory and climate change theory. It also reviews literatures on the subject matter and sheds lights on the gaps in the existing literatures.

Chapter three intricately analysed the various legal frameworks on climate change. It paid a robust attention on the international and domestic legal frameworks that are of high impacts to climate change and environmental justice.

Chapter four of this study evaluates the impacts of climate change in Nigeria with specific consideration on environmental and socio-economic consequences on the various affected regions (the northern and the southern Nigeria, Niger Delta specifically). It further shows the efforts made in ensuring environmental justice in Nigeria, and evaluated the challenges in achieving environmental justice in Nigeria such as the non-constitutional recognition of the right to a clean and healthy environment in Nigeria, lack of political will and weak policy implementation, corruption and bureaucratic inefficiencies, etc.

Chapter five is the summary of findings, recommendations, contribution to knowledge, suggested areas for further studies and conclusion.

1.9. Conclusion

In conclusion, the increasing impact of climate change represents a significant challenge to both human existence and development, making it a global priority. While the earth's climate has naturally fluctuated over time due to biological factors, the dominant cause of recent climate change is attributed to human activities. Industrialization, deforestation, the burning of fossil

fuels, gas flaring, urbanization, and agricultural practices have all contributed to the escalation of greenhouse gas emissions, exacerbating the global climate crisis.

The urgent need to address these issues requires comprehensive strategies that not only mitigate environmental harm but also promote sustainable development practices. Hence, this chapter has provided a foundational understanding of the complex relationship between climate change and human activities, setting the stage for deeper exploration of the legal frameworks necessary to confront these challenges, particularly in the context of Nigeria. The subsequent sections will delve into the mechanisms for achieving environmental justice and addressing the negative impacts of climate change in the country.

CHAPTER TWO

CONCEPTUAL, THEORITICAL FRAMEWORK AND LITERATURE REVIEW

2.0. Introduction

Climate change is not merely an environmental concern; but one of the greatest threats to sustainable human development with deep-rooted socio-economic and safety considerations. To address this issue effectively, it is imperative to begin by elucidating the fundamental concepts, theories and various literatures not just on climate change but on environmental justice. Thus, this section is devoted to intricately analyse the concepts embedded in this study by clarifying their meaning and purpose. It is intended that these definitional and theoretical frameworks, will provide a compass for navigating the subsequent expositions in this discourse.

2.1. Conceptual Clarification

The Hallmark of every conceptual clarification is apt, albeit holistic definition of the terms recurrently employed in the study work. According to Prof. Chianu, while highlighting the importance of definitions in his textbook, *Trespass to Land and Nuisance*, 'words are ambivalent in nature and are susceptible to multifarious interpretations depending on the context wherein they are used.'¹ This simply captures the importance of definitions as a crucial framework for understanding the meaning ascribed to words. Hence, in this study, the terminologies warranting proper conceptualisation are as follows: Climate change and environmental Justice.

¹ E Chianu, *Law of Trespass to Land and Nuisance* (3rd edn, Ambik Press, 2014), 81.

2.1.1 Climate Change

The IPCC² defines climate change as "a change in the state of the climate that can be identified (e.g., using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer."³ The IPCC also specifies that climate change can result from both natural processes and human activities, especially the increase in greenhouse gas emissions.⁴ This definition was supported by Muller who submitted that changes in climate can be due to natural variability or as a result of human activities.⁵

Similarly, the UNFCCC⁶, specifically refers to climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."⁷ This definition underscores the human-induced aspect of climate change, distinguishing it from natural climate variations.

The Nigerian Meteorological Agency (NiMet) defines climate change as "long-term changes in the average weather patterns, which may be due to natural occurrences or human activities, with significant effects on Nigeria's environment, agriculture, and economy."⁸ NiMet underscores the

² IPCC means Intergovernmental Panel on Climate Change

³ IPCC. (2021). *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press. <<https://www.ipcc.ch/report/ar6/wg1/>> accessed November 9th, 2024.

⁴ Ibid.

⁵ B Muller *'The North-South divide and Climate Change divide'* in P. Hayden et al. (eds.) *Debating Environmental Regimes* (New York: Nova Science Publishers, 2003) 37 at 43.

⁶ UNFCCC means United Nations Framework Convention on Climate Change

⁷ Article 1(1) of the United Nations Framework Convention on Climate Change (UNFCCC). (1992). <https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf> accessed 9th of November 2024.

⁸ Nigerian Meteorological Agency (NiMet). (2018). *The Nigerian Climate Review Bulletin, 2018* <<https://www.nimet.gov.ng/publication/annual-climate-review/>> accessed November 9th 2024.

local impacts of climate change in Nigeria, emphasizing the nation's vulnerability to its effects on resources and livelihoods. Thus, while climate change is the long-term alteration of temperature and typical weather patterns in a place, these changes may affect the determinants of health, including clean air, safe drinking water, and food security.⁹

Consequently, climate change is a global concern that requires thorough analysis using reliable, internationally recognized scientific methods to identify effective preventive and corrective measures within specific jurisdictions.¹⁰ Hence, environmental disasters such as intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms, bushfires, earthquakes, tsunamis, declining biodiversity, etc are attributable to climate change.

For a robust clarification of climate change, the following concepts of climate change shall be examined:

a) Greenhouse Gases(GHGs): These are gases, such as carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), that trap heat in the Earth's atmosphere, creating a "greenhouse effect" that leads to warming.¹¹ The greenhouse effect makes the earth warmer, just as a greenhouse is warmer than its surroundings. Human activities, primarily fossil fuel combustion, have significantly increased these GHGs, intensifying global warming, and leading to climate change.

⁹ World Health Organization (WHO). (2021). Climate Change and Health. <<https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>> accessed 9th of November 2024.

¹⁰ SJ Fada, 'An Appraisal of Nigeria's Progress in Achieving the SDG-13 Climate Action Go.' *Journal of Sustainable Development* [2022] (15) (2)74. <<https://doi.org/10.5539/jsd.v15n2p66>> accessed 9th November 2024.

¹¹ IPCC. (2021). Climate Change 2021, *note 3*.

b) Global warming: This is the increase in Earth's average surface temperature due to rising levels of GHGs.¹² Global warming is the primary driver of climate-related changes, such as melting ice caps, sea level rise, and more extreme weather events.

c) Carbon footprint: This is the total amount of greenhouse gases generated by individual, organization, or country's actions, typically measured in CO₂-equivalent. Thus, a reduction in carbon footprints would foster climate change mitigation, as it can help lower overall GHG emissions.

d) Extreme weather events: These are severe weather phenomena, such as hurricanes, floods, droughts, and wildfires, which are increasingly linked to climate change.¹³ Unfortunately, the frequency and intensity of extreme weather events have risen with climate change, leading to significant socio-economic impacts globally.

e) Climate Justice: This is the concept that addresses the ethical dimensions of climate change, recognizing that its impacts disproportionately affect marginalized and low-income communities.¹⁴ It further advocates for equitable solutions, ensuring that vulnerable populations are protected and included in climate action.

¹² National Aeronautics and Space Administration (NASA) 2022. What is Climate Change? <<https://climate.nasa.gov/resources/global-warming-vs-climate-change/>> accessed 9th of November 2024.

¹³ National Oceanic and Atmospheric Administration (NOAA), *National Centers for Environmental Information (NCEI)*. (2020). *Billion-Dollar Weather and Climate Disasters*. <<https://www.ncdc.noaa.gov/billions/>> accessed 9th November 2024.

¹⁴ Mary Robinson Foundation, *Principles of Climate Justice*. (2016) <<https://www.mrfcj.org/principles-of-climate-justice/>> accessed 9th November 2024.

f) Climate Change Mitigation: This refers to efforts to reduce or prevent the emission of GHGs, such as using renewable energy, enhancing energy efficiency, and afforestation.¹⁵ This in turn limits the extent of climate change and reduce future risks; etc.

Climate change in Nigeria is increasingly understood as a significant challenge with widespread impacts on the environment, economy, and communities. Given Nigeria's reliance on climate-sensitive sectors like agriculture, fishing, and forestry, climate change is seen through the lens of vulnerability, adaptation needs, and the pursuit of environmental justice.

2.1.2 Environmental Justice

The term 'environmental justice' otherwise called 'environmental equity' has been a topic in the environmental debate for over three decades. It became apparent in the legal parlance in the 1990's.¹⁶ Though there is no generally accepted definition of the term, environmental justice is can be aptly referred to as having in place, a mechanism, an institutional and legal framework that curtails the excesses of environmental predators who through their harmful activities cause catastrophic environmental hazards.¹⁷

It can also be considered as the principle that all people, regardless of race, ethnicity, income, or geographic location, have the right to a healthy environment and equal protection from environmental hazards.¹⁸ Thus, environmental justice focuses on the fair distribution of

¹⁵ World Meteorological Organization (WMO). (2021). *WMO Statement on the State of the Global Climate in 2021*. <<https://public.wmo.int/en>> accessed 9th November 2024.

¹⁶ R Lazarus, *Pursuing Environmental Justice: The Distributional Effects of Environmental Protection* (Macmillan Publishers, London, 2000). P.17

¹⁷ PA Aidonojie 'Environmental Hazard: The Legal Issues Concerning Environmental Justice in Nigeria', *Journal of Human Rights, Culture and Legal System* (2023) 3(1) pp.18. <<https://doi.org/10.53955/jhcls.v3i1.69>> accessed 20th November 2024.

¹⁸ ET Bristol-Alagbariya, 'Environmental Justice in Nigeria: Spotlight on Activism of Nongovernmental Organisations over Petroleum Development in the OilRich Delta Region' *International Journal of Energy and Environmental Research* (2022) 10(2),15-39. <<https://doi.org/10.53954/jhcls.v2i3.55>> accessed 18th November 2024.

environmental benefits (like clean air, water, and access to natural resources) and burdens (such as pollution, waste sites, and exposure to harmful chemicals) across different communities.¹⁹ In other words, it involves a proper dispensation of justice concerning environmental hazards by the national institutional bodies such as the police, prosecutor, or relevant government agencies and court, by the laid down legal framework.²⁰

Bullard²¹ posited that Environmental Justice is based upon the recognition that environmental costs and benefits are not in a fair and quotable manner and that traditional environmentalism has not been sufficiently concerned with very divergent local situations and the plight of minorities. Pursuant to Bullard's position, Gadgil and Guha opined that, environmental justice is referred to as having in place, a mechanism, an institutional and legal framework that curtails the excesses of environmental hazards as it involves a process of adequately indemnifying or compensating the victim of an environmental hazard.²²

In effect, the concept of Environmental justice is concerned with shifting the focus of environmental protection towards taking into account the needs of the poorer society that have suffered the environmental consequences of industrialization and other environmental hazards more than others.²³ The concept thus seems to redefine the traditional environmental movement by incorporating the concerns of minorities within environmental policy decision-making,

¹⁹ Aidonojie 'Environmental Hazard' note 17.

²⁰ Kingsley Eghoghon Ukhurebor and others, 'Environmental Degradation and Sustainable Peace Dialogue in the Niger Delta Region of Nigeria: A Review', *Journal of Environmental Management* (2021) <<https://doi.org/10.1016/j.jenvman.2021.112872>> accessed 18th November 2024.

²¹ Bullard D, *Confronting Environmental Racism: Voices from the Grassroots* (Free Press, London, 2000). P.45.

²² OC Onwosi and others, 'Cattle Manure as a Sustainable Bioenergy Source: Prospects and Environmental Impacts of Its Utilisation as a Major Feedback in Nigeria,' *Bioresource Technology Reports*, 19.July (2022), 101 <<https://doi.org/10.1016/j.geoforum.2009.11.008>> accessed 18th November, 2024.

²³ G Gadgil and E Guha, 'Ecological Conflicts and the Environmental Movement in India' in D Ghai (ed) *Development and Environment-Sustaining People and Nature* (Macmillan, New Delhi 2004) P.53.

thereby engendering environmental equality. Hence, Dr. David Schlosberg argue that environmental justice is not just about avoiding harm but also ensuring equitable access to environmental goods.²⁴

Essentially, the key components of environmental justice includes, Equity and Inclusion²⁵, which focuses on ensuring that all communities, regardless of race, ethnicity, income, or location, have equal protection under environmental laws and access to decision-making processes; meaningful Participation of communities directly affected by environmental issues in the policy-making process²⁶; fair distribution of environmental benefits and burdens²⁷, which promotes sustainable practices that protect resources and the environment for future communities; the right to a healthy and safe environment, etc.

Environmental justice focuses on the disproportionate sharing of environmental advantages and burdens between different states, institutions, organisations, groups and individuals as it is the case with the Niger Delta that suffers marginalization despite its contribution to the economic growth of Nigeria.²⁸ The concept therefore equally protects the right of victims of environmental injustice to receive adequate compensation and reparations for damages caused as a result of the hazardous use of the environment.

Meanwhile, the link between climate change and environmental justice is very significant. This is on the ground that climate change exacerbates existing social and environmental inequalities. Apart from the inequalities, the impacts of climate change—such as extreme weather events,

²⁴ D Schlosberg, *Defining Environmental Justice: Theories, Movements, and Nature* (Oxford University Press 2007).

²⁵ Onwosi and others, 'Cattle Manure as a Sustainable Bioenergy Source' *note 22*.

²⁶ Ibid

²⁷ Ibid

²⁸ Aidonojie 'Environmental Hazard' *note 17*.

rising sea levels, droughts, and heatwaves—disproportionately affect low-income communities, indigenous groups, and people of color who often have the least resources to adapt and recover.²⁹

2.2 Theoretical frameworks

Considering the fact that the subject matter of climate change and Environmental justice is a very sensitive topic, underlying this study are theoretical frameworks that can be applied to provide a foundation for analyzing the relationship between climate change, environmental justice, and socio-economic impacts in Nigeria. The framework includes environmental justice theory and climate change vulnerability theory. These will be elucidated below:

2.2.1 Environmental Justice Theory

Environmental justice theory addresses the fair distribution of environmental benefits and burdens among different social groups, emphasizing that marginalized communities often bear the brunt of environmental hazards. The formal movement of environmental justice began in the 1980s in the United States, catalyzed by protests against hazardous waste sites in marginalized communities. A landmark event was the 1982 protest in Warren County, North Carolina, where local residents protested the placement of a toxic landfill in a predominantly African American neighborhood, raising awareness of "environmental racism."³⁰

Over time, the movement expanded to address issues like air and water quality, access to green spaces, and climate change impacts on vulnerable communities. Scholars and activists, such as Dr. Robert Bullard,³¹ emphasized that environmental justice involves intersecting issues of race,

²⁹ RD Bullard and BH Wright, *Race, Place, and Environmental Justice After Hurricane Katrina: Struggles to Reclaim, Rebuild, and Revitalize New Orleans and the Gulf Coast*. (Westview Press, 2009).

³⁰ UNC University Libraries, 'We birthed the Movement: The Warren Country PCB Landfill Protests, 1978-1982'

³¹ Ibid.

class, and environmental health . The theory thus seeks to redefine the traditional movement by incorporating the concerns of minorities within environmental policy decision-making, thereby engendering environmental equality or equity.³²

According to McDermott³³ the theory is concerned mainly with the side effects of production activities, such as the siting of waste disposal facilities, the proximity of industrial pollution and workplace exposure to industrial toxins and the socio-economic consequences occasioned by it.

Bullard³⁴ emphasized that environmental costs and benefits are not in a fair and equitable manner and that traditional environmentalism has not been sufficiently concerned with very divergent local situations and the plight of minorities.

By the foregoing, it is clear that the theory is premised on right to a healthy and safe environment, an equitable share or allocation of natural resources, the right not to suffer disproportionately from environmental policies, regulations and laws, and reasonable access to environmental information coalesced with participation and environmental decision making.³⁵ Thus, the core concepts of Environmental justice theory include but not limited to the following:

i. Distributive Justice: this focuses on the fair distribution of environmental benefits (e.g., clean air, water, and green spaces) and burdens (e.g., pollution, toxic waste) across all communities. It highlights how marginalized and low-income groups often bear a disproportionate share of environmental harm while benefiting less from environmental resources. A good example in Nigeria is the highly marginalised and pauperised Niger Delta that is bearing the burden of

³² G Torres, 'Changing the Government Views: Environmental Justice,' *Journal of Environmental Science* (2000) (10) (3)1.

³³ CJ McDermott, 'Balancing the Scales of Environmental Justice' *FORDHAM* (2004) (6) (2) 62.

³⁴ RD Bullard, *Confronting Environmental Racism: Voices from the Grassroots* (Free Press, London 2000) 45.

³⁵ I Udok and others, 'Challenges of Access to Environmental Justice in Nigeria' *CULJ* (2023)2 (1).

generating revenue, yet facing high environmental degradation and socio-economic downside as a result of oil exploration.³⁶

ii. Procedural Justice: this emphasizes the importance of fair and inclusive decision-making processes, noting that all stakeholders, especially marginalized groups, should have a voice and meaningful participation in environmental governance, including policymaking, policy zoning, and impact assessments.

iii. Intersectionality: this recognizes that environmental injustices are not isolated but are often linked to other forms of social inequality, such as race, class, gender, and colonialism. This concept is critical in addressing the compounded effects of multiple layers of discrimination.

iv. Right to Healthy Environment: this advocates for the recognition of a clean, safe, and sustainable environment as a fundamental human right as recognised in international conventions and domestic laws like the Nigerian Constitution,³⁷ the Petroleum Act 1969,³⁸ Petroleum Industry Act 2021, Environmental Impact Assessment Act,³⁹ National Environmental Standard and Regulations Enforcement Agency Establishment Act,⁴⁰ Climate Change Act 2021⁴¹, etc. This concept is also in alliance with international frameworks like the UN Sustainable Development Goals (SDGs).

³⁶ Onwosi and others, 'Cattle Manure as a Sustainable Bioenergy Source' *note 22*.

³⁷ Section 20 of the 1999 Constitution of the Federal Republic of Nigeria (as Amended) has placed a duty on the government to ensure environmental health of the country and necessarily gives Nigerians the right to comp the government to heed to this constitutional mandate where they fail to. However, this section has been declared non-justiciable by virtue of section 6(6)(c) of the Constitution.

³⁸ CAP. P10, Laws of Federal Nigeria (LFN) 2004.

³⁹ Act No.86 of 1992.

⁴⁰ NESREA 2007.

⁴¹ Climate Change Act 2021.

v. Environmental Racism: This is coined by Dr. Robert Bullard and central to understanding the systemic nature of environmental injustice. It explores how racial discrimination influences environmental policy and practices, leading to the disproportionate placement of hazardous facilities in communities of color.

vi. Sustainability and Intergenerational Equity: this advocates for sustainable practices that ensure future generations inherit a healthy environment. Environmental justice is tied to long-term ecological balance and social equity.

Meanwhile, the concept of environmental justice has recently expanded to encompass studies where nature and the environment are leveraged as tools to advance social justice goals.⁴² This shift of concept from the discussions of distribution, participation and recognition to that of a more globalised tool for policy and sustainable development has gained acceptance.⁴³

2.2.2 Climate Change Vulnerability Theory

Climate change has been considered as the defining human development issue of our generation.⁴⁴ Hence, climate Change Vulnerability Theory is indeed a valuable framework, especially when focusing on the disproportionate impacts of climate change on specific populations in Nigeria. The IPCC⁴⁵ Third Assessment Report (TAR) describes vulnerability as “The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity,

⁴² D Schlosberg, 'Theorising Environmental justice: The Expanding Sphere of a Discourse,' *Environmental Politics* (2013) 22(1) 37-55 <<http://doi.org/10.1080/09644016.2013.755387>> accessed 14th November 2024.

⁴³ Torres, 'Changing the Government Views' *note 30*.

⁴⁴ Eunice Odufa Erphagne *The Efficacy of Law in Combating Climate Change in Nigeria (Ambik Press LTD, Benin City, 2021)* 69.

⁴⁵ IPCC, *Climate Change (2021) note 3*.

and its adaptive capacity.” Thus, vulnerability theory in the context of climate change focuses on the degree to which a system (such as a community, population, or ecosystem) is susceptible to, and unable to cope with, adverse climate impacts.

The theory of climate change vulnerability considers three core components which includes, exposure, sensitivity and adaptive capacity.⁴⁶ While exposure pertains to the extent to which a system is exposed to climate-related hazards, such as rising temperatures, sea-level rise, or extreme weather events, sensitivity reflects how affected a system is by exposure. Adaptive capacity on the other hand is the ability of a system to adjust to climate change impacts, moderate potential damages, or exploit beneficial opportunities. Together, these components define the vulnerability of a system or community, and their interplay shapes the magnitude of potential impacts.

Scholars propose two structures of vulnerability in dealing with climate change. They are Biophysical Vulnerability and Social Vulnerability. Brooks⁴⁷ considers biophysical vulnerability as the physical impacts of climate change on natural and human system, typically focusing on quantifiable risks, such as the loss of biodiversity, melting ice caps, or reduced crop yields. While social vulnerability simply examines the socio-economic and political factors that influence how communities experience climate change.⁴⁸ These factors include poverty, inequality, governance, and access to resources.

⁴⁶ These core principles have been developed and discussed by numerous scholars, activists, and organizations. Key contributors include, Robert D. Bullard - Often referred to as the "father of environmental justice," whose work highlights the intersection of environmental issues and social justice, particularly focusing on racial and economic disparities; David Schlosberg - His book *Defining Environmental Justice* explores the theory and practice of environmental justice, emphasizing distribution, recognition, and participation as core principles, etc.

⁴⁷ Nick Brooks, *Vulnerability, risk and adaptation: A conceptual framework*, (Tyndall Centre Working Paper 2003) 38; see also PM Kelly and WN Adger, *Theory and Practice in Assessing Vulnerability to Climate Change and Facilitating Adaptation* (Kluwer Academic Publishers 2000) 325 - 352.

⁴⁸ Ibid

In the context of Nigeria, Climate Change Vulnerability Theory helps analyze why certain regions or populations are more affected by climate impacts. For example, northern Nigeria may experience heightened vulnerability due to drought, desertification, and reliance on rain-fed agriculture. Similarly, coastal communities are vulnerable to sea-level rise and flooding. While some regions like the Niger Delta are vulnerable to the monstrous consequences of petroleum energy and other major resources.⁴⁹

The theory also intersects well with environmental justice principles, highlighting the importance of addressing underlying vulnerabilities in marginalized or resource-limited communities. This further support arguments for targeted adaptation strategies and resources to help these communities build resilience. By identifying specific vulnerabilities, policymakers can prioritize interventions that enhance adaptive capacities for the most vulnerable groups.

Meanwhile, while global climate change originated as an environmental problem, it now impinges on every aspect of human life with implications for international economy, public health, social issues such as migration and loss of livelihood, and ultimately, threatening peace and security.⁵⁰ However, it is said that the vulnerability countries who bear the burden of climate change often created by 'rich countries' are the 'poor countries'.⁵¹ Thus, the climate change vulnerability theory transcends the local and international setting.

⁴⁹ I Gary and TL. Karl, *Bottom of the Barrel: Africa's Oil Boom and the Poor* (Catholic Relief Services, 2003); DA Omoweh, *Shell Petroleum Development Company, The State and Underdevelopment of Nigeria's Niger Delta: A Study in Environmental Degradation* (Africa World Press, 2006); JG Frynas, *Oil in Nigeria: Conflict and Litigation between Oil Companies and Village Communities* (Lit Verlag, 2000); JG. Frynas, *Oil in Nigeria: Community Rights and Corporate Dominance in Conflict* (Lit Verlag, 2000); DC. Korten, *When Corporations Rule the World* (Kumarian Press, 2001).

⁵⁰ United Nations Department of Public Information (2007), 'Security Council holds First-Ever Debate on Impacts of Climate Change on Peace, Security, Heading over 50 speakers, Security Council,' SC/19000, 17 April at <www.UN.Org/News/press/docs/2007/SC 9000.Doc.Htm> accessed 18th November 2024.

⁵¹ Erphagne 'The Efficacy of Law in Combating Climate Change in Nigeria' *note 42*.

2.3 LITERATURE REVIEW

Considering the fact that many the subject matter of climate change is a sensitive one, many academic writers and scholars have written from different perspectives. However, this study shall review some literatures of interest which includes the following:

2.3.1 Climate Change in Nigeria

Elisha et al,⁵² Ebele and Emodi⁵³ and Olaniyi et al,⁵⁴ during their study on climate change in Nigeria, noted that Nigeria's climate has been changing, evident in: increases in temperature; variable rainfall; rise in sea level and flooding; drought and desertification; land degradation; more frequent extreme weather events; affected fresh water resources and loss of biodiversity. And this study agrees with this position was research proves it to be true. Similarly, while Enete I.C⁵⁵ submitted that the durations and intensities of rainfall have increased, producing large runoffs and flooding in many places in Nigeria, Amanchukwu et al,⁵⁶ noted that droughts have

⁵² Elisha and others 'Evidence of Climate Change and Adaptation Strategies among grain Farmers in Sokoto State, Nigeria,' *IOSR Journal of Environmental Science, Toxicology and Food Technology* (2017) 11(3)1-7 <<http://www.iosrjournals.org/iosr-jestft/papers/vol11issue%203/Version-2/A1103020107.pdf>> accessed 18th November 2024.

⁵³ NE Ebele and NV Emodi, 'Climate change and its impact in Nigerian economy.' *Journal of Scientific Research & Reports* (2016) 10(6) 1-13. <<http://www.journaljsrr.com/index.php/JSRR/article/view/21917/40737>> accessed 18th November 2024.

⁵⁴ Olaniyi and others, 'Review of climate change and its effect on Nigeria ecosystem' *International Journal of African and Asian Studies* (2013) 1, 57. <<https://pdfs.semanticscholar.org/f9bd/9c18dfb45724a2a946a3854c756e62ad9f6b.pdf>> accessed 18th November 2024.

⁵⁵ Eneta and others, 'Impacts of climate change on agricultural production in Enugu State, Nigeria' *Journal of Earth Science & Climatic Change*, (2014) 5(9) 234. <<https://www.omicsonline.org/openaccess/impacts-of-climate-change-on-agricultural-production-in-enugu-state-nigeria-21577617.1000234.php?aid=32633>> 18th November 2024.

⁵⁶ Amanchukwu and others 'Climate change education in Nigeria: The role of curriculum review' *Education*, (2015) 5(3): 71-79. <https://www.researchgate.net/profile/Nwachukwu_Prince_Ololube/publication/283081778_Climate_Change_Education_in_Nigeria_The_Role_of_Curriculum_Review/links/56292c5508ae518e347c967b/Climate-Change-Education-in-Nigeria-The-Role-of-Curriculum-Review.pdf> accessed 18th November 2024.

also become a constant in Nigeria, and are expected to continue in Northern Nigeria, arising from a decline in precipitation and rise in temperature. This study agrees with this position as there are proofs of drought in the northern region which has become more constant than before. A good example is the lake Chad drying up.

On the sectoral impacts of Climate change, apart from the drastic impact on agriculture, Abdulkadir et al emphasised that climate change has serious implications on human health in Nigeria, rising from malnutrition due to food shortages; the spread of infectious disease and food-and water-borne illness; increased air pollution; and from higher temperatures correlated with increased cases of meningitis, etc from environmental pollution.⁵⁷ This study agrees with this literature as research shows that flooding and other environmental hazards exacerbates the spread of diseases like cholera and typhoid, malaria, etc.

Other academic writers emphasized on the impact of climate change on the economy, energy, security, transportation, food supply, etc. However, Amobi and Onyishi⁵⁸ noted that not only does climate change affect regions but also affect demographic groups such as income groups, classes, occupation, age and gender in varying ways. Madu⁵⁹ submitted that these individuals and groups may also have fewer resources to cope with the changes and low adaptive capacity, which exacerbates their vulnerability to climate change. In this study, it was discovered that most

⁵⁷ Abdulkadir and others 'Climate change and its implications on human existence in Nigeria: a review' *Bayero Journal of Pure and Applied Sciences*, (2017) 10(2), 152-158. <<https://www.ajol.info/index.php/bajopas/article/viewFile/170772/160195>> accessed 18th November 2024.

⁵⁸ D Amobi and T Onyishi 'Governance and climate change in Nigeria: A public policy perspective' *Journal of Policy and Development Studies* (2015) 9(2) 199-210. <https://www.arabianjbm.com/pdfs/JPDS_VOL_9_2/17.pdf>f

⁵⁹ IA Madu, IA 'Rurality and climate change vulnerability in Nigeria: Assessment towards evidence based even rural development policy' (Paper presented at the 2016 Berlin Conference on Global Environmental Change, 23-24 May 2016 at Freie Universität Berlin.) <https://pdfs.semanticscholar.org/508b/94cab07b84a703b44eca1089326cc98d7495.pdf?_ga=2.154518008.112403230.1572433568-162569160.1557482164> accessed 18th November 2024.

persons affected by these are the women, children and the elderly one who find it hard to cope with the drastic effects due to their inabilities and dependence.

2.3.2 Environmental Justice in Nigeria

To Ejumudo, the main thrust of environmental justice is a shift in focus from the environment to the people, for it underscore the need for environmental protection not to be planned within a vacuum and for environmental goals to take into account social, political and economic realities in environmental devastated and dislocated regions like the Niger Delta.⁶⁰

Udok et al, noted that environmental justice is about positive discrimination because it seems to achieve a redistribution of the costs of environmental justice so as to lower the disproportionately high burden borne by some segments of society like the highly marginalised and pauperised Niger Delta. They further submitted that it is shifting the focus of environmental protection towards taking into account the needs of the poorer sections of society that have suffered the environmental consequences of industrialization more than others.⁶¹

Regarding the impediments to access to environmental justice, Ojo and Tokunbor⁶² noted that access to justice on a national level is narrowed by weak environmental laws, lack of independent judicial institutions and the lack of political will to enforce compliance. In discussing locus standi in Nigeria, the author's state that although environmental degradation

⁶⁰ KBO Ejumudo, 'The Democracy/Environmental Justice Challenges in Nigeria's Niger Delta and the Developmental Leadership and Governance Culture Imperative' *Journal of Economic and Sustainable Development* (2014) 5(15) p.113.

⁶¹ Udok and others, 'Challenges of Access to Environmental Justice in Nigeria' *Cavendish University Law Journal* (2023) Vol.2. <<https://www.researchgate.net/publication/370764095>> accessed 10th October 2024.

⁶² GU Ojo and N Tokunbor, 'Access to Environmental Justice in Nigeria: The Case for a Global Environmental Court of Justice' *Environmental Rights Action Friends of the Earth Nigeria* <<http://www.fori.org/press/achieve-ny-subject/economic-justice-resisting-neoliberalism-press/foei-celebratesanagreement-on-internationally-legally-binding-rules-to-stop-human-rights-violation-by-transnational-corporations>> accessed 20th November 2024.

impacts severally on the people, the lack of access to justice which comes in form of high cost of litigation ensures that the status quo is maintained, thereby impinging the quest for environmental justice.

Ayodeji and Okwechime in their study found out that greed and corruption is also a major challenge militating environmental justice in Nigeria. They stated that though some companies indulging oil pollution had sort to compensate and bring development to the affected communities in Niger Delta, but the greed, insincerity and corrupted stakeholders within the region of the affected communities had truncated the benefit emanating from the multinational companies.⁶³

Similarly, Udok et al, submitted that inhibiting factors like locus standi, poverty, delay in the administration of justice, judicial attitudes to environmental claims, corruption in judiciary, problem of burden of proof, statute of limitation, the non-justiciability of right to environment health, etc, compounds the challenges to environmental justice in Nigeria.⁶⁴

⁶³ Aidonjioje 'Environmental Hazard' *note 17*.

⁶⁴ Udok and others, 'Challenges of Access to Environmental Justice in Nigeria' *note 59*.

2.3.3 Legal and Policy frameworks

The Nigerian Constitution⁶⁵ provides the foundation for environmental governance. Section 20 of the Constitution mandates the state to “protect and improve the environment and safeguard the water, air, and land, forest and wildlife of Nigeria.” However, this provision is non-justiciable under Chapter II, which limits its enforceability.

The Environmental Impact Assessment (EIA) Act (1992) mandates environmental impact assessments for proposed projects. While it emphasizes sustainable development, enforcement has been criticized as weak, particularly in the oil and gas sector. Similarly, NESREA⁶⁶ is tasked with enforcing environmental laws and regulations. Despite its efforts, its jurisdiction excludes the oil and gas sector, which is regulated by the Department of Petroleum Resources (DPR). This limitation hinders a holistic approach to climate change mitigation.

Makinde has noted the absence of a compliant carbon market in Nigeria, as well as the lack of legislation or mandates for monitoring and reporting greenhouse gas emissions in the country. The author noted that the responsibility for addressing climate change issues in Nigeria primarily falls on government departments and agencies, which are often ineffectual. The departments and agencies mentioned are the Department of Climate Change within the Federal Ministry of Environment, the Nigerian Meteorological Agency (NIMET), the National Emergency Management Authority (NEMA), and National Planning Commission (NPC).⁶⁷

⁶⁵ Constitution of the Federal Republic of Nigeria 1999 (as Amended).

⁶⁶ National Environmental Standards and Regulations Enforcement Agency (NESREA) Act (2007).

⁶⁷ O Makinde, ‘Nigeria’ in the International Comparative Legal Guide to Environmental and Climate Change Law 2016.150. <http://www.alukooyebode.com/files/ENVI6_Chapter%2020%20-20%Nigeria.pdf> accessed 18th November 2024.

Oludayp suggested a comprehensive evaluation of the current environmental National Emergency Management Authority. The author argues against the adoption of conventional environmental regulations, such as carbon tax, market permits, and strict legal regulations in Nigeria's climate change legislation. The author's believe that these approaches would ultimately burden the people, leading to a decrease in their standard of living and potentially causing social and economic disruption. The author proposed that Nigeria's climate change legislation should use an incentive-based approach to stimulate investments in initiatives focused on climate change adaptation and mitigation.⁶⁸

2.4 Gaps in the Existing Literature

The deficiency in the current body is literature is apparent. In the first place, many studies on climate change in Nigeria focus on broad or regional impacts but fail to explore how specific communities, particularly marginalized groups, are uniquely affected. Hence, the gap here is lack of comprehensive studies on the differential impacts of climate change across socio-economic classes, ethnic groups, or gender lines in Nigeria.

Also, while some literatures highlight on the environmental and economic effects of climate change, there is insufficient focus on environmental justice, particularly in terms of fairness, equity, and the rights of vulnerable populations. Thus, there limited exploration of the link between environmental degradation caused by climate change and the violation of human rights in Nigeria.

Furthermore, many papers address climate change policies in Nigeria, but few critically analyze their effectiveness, enforcement, and impact on vulnerable populations. Insufficient assessment

⁶⁸ Amokaye Oludayp, 'The Legal and Institutional Framework for the Regulation of Climate Change in Nigeria' *Journal of Private and Property Law* (2004) Vol.24.46-47.

of how Nigerian environmental policies incorporate principles of justice or address systemic inequalities.

Another gap in the existing literatures is inadequate solutions for climate-justice alignment. While several literatures are commendable for emphasizing on the effects of climate change in Nigeria or the issue of attaining environmental justice, very few research evaluated practical solutions that balance environmental sustainability with equity and social justice.

Conclusion

This chapter has provided a thorough analysis of the key concepts, theoretical frameworks, and literature related to climate change and environmental justice. It has established that climate change is not solely an environmental issue but a profound socio-economic and security challenge that impacts sustainable development, particularly in vulnerable regions. By clarifying the meanings and purposes of critical terms such as climate change and environmental justice, the chapter has set the stage for understanding the complex interactions between environmental degradation and human rights.

The theoretical frameworks discussed, including environmental justice theory, have emphasized the importance of addressing the disproportionate effects of climate change on marginalized communities. This foundational understanding is vital for examining the implications of climate change in Nigeria and the pressing need for justice in affected areas. The literature review also highlighted existing gaps in current research and the challenges of effectively addressing climate change impacts, especially within legal and policy frameworks.

In conclusion, this chapter has equipped the study with essential concepts and theories that will guide the subsequent analysis of climate change's effects in Nigeria. It has provided the necessary context to explore the challenges of achieving environmental justice and how the country can better address these issues moving forward.

CHAPTER THREE

LEGAL FRAMEWORKS ON CLIMATE CHANGE AND ENVIRONMENTAL JUSTICE

3.0 Introduction

Climate change is a burning issue on the international scale.¹ Hence, every country in the world at least now has a law or policy addressing climate change concerns. For this reason, the importance of climate change legal and policy framework cannot be over-emphasized as it provides a robust greenhouse gas data management. These frameworks provide countries with nationwide policy coherence, effective government action and a great deal of accountability.²

These frameworks also help in establishing medium to long term stability and vision that policymakers require to tackle climate change and transition to a low carbon economy.³ Thus, this chapter is entirely devoted to intricately analysing the various legal and policy frameworks on climate change. A robust attention will be given to analysing international frameworks that are of high impacts to the subject matter of climate change and then to domestic or national frameworks.

3.1 International Legal and Policy Frameworks

Hereunder, several international legal frameworks will be critically reviews, detailing their historical background, outlining their relevant provisions and critiquing their effect on the combat against climate change, and the safeguard of environmental protection.

¹ Ngozi Chisom Uzoka and others 'Legal Frameworks for Addressing the Impacts of Climate Change on Communities across the Word' *Nnamdi Azikiwe University Awka Journal of Private Property Law* (2024) Vol.1 (2),241.

² Ibid 1

³ J Huang, 'Exploring Climate Framework Laws and the Future of Climate Action', *Pace Environmental Law Review* (2021) 38 (2) 288.

3.1.1 Stockholm Conference 1972

The 1972 United Nations Conference on the Human Environment in Stockholm was the first world conference to make the environment a major issue.⁴ The event took place in Stockholm, Sweden from June 5th to June 16th, 1972. This was the inaugural global meeting dedicated to tackling worldwide environmental issues. Principle 1 asserts that individuals possess an inherent entitlement to freedom, fairness, and a satisfactory level of living within a favourable environment that facilitates a life characterized by respect and posterity.

One of the major results of the Stockholm conference was the creation of the United Nations Environment Programme (UNEP).⁵ The forum discussed the necessity of a collective viewpoint and set of principles to motivate and direct the global population in safeguarding and improving the natural surrounding for humanity. The introductory statement of the Declaration states that both the natural and man-made elements of a person's surroundings are crucial for their overall welfare and the ability to exercise basic human rights, including the right to life.

While the Conference was a landmark event in global environmental governance, it had several limitations. In the first place, the conference largely focused on environmental protection without adequately addressing the link between environmental issues and socio-economic development, particularly for developing countries. Also, participation from some regions was limited. Many countries, particularly from the Global South, were underrepresented or not adequately prepared to engage in the discussions. Consequently, the conference did not result in legally binding commitments or treaties. Instead, it produced non-binding declarations, such as the Stockholm Declaration, which lacked enforcement mechanisms.

⁴ UN Conferences/Environment and Sustainable Development "United Nations Conference on the Human Environment, 5-16 June 1972, Stockholm"
<<https://www.un.org/en/conferences/environment/stockholm1972>> accessed 10th December 2024.

⁵ Ibid.

3.1.2 Vienna Convention for the Protection of the Ozone Layer, 1985

The Vienna Convention is a global treaty primarily aimed at promoting international cooperation regarding depletion of the ozone layer.⁶ The treaty was ratified during the 1985 Vienna Conference and it came into effect in 1988 and functions as a structural basis for global initiatives aimed at safe-guarding the ozone layer. The convention states that all participating countries will take measures to protect human health and the environment from hazardous effects of modifications of the ozone layer.⁷

The goal of the Vienna Convention is that all parties will promote cooperation by means of systematic observations, research, and exchange of information on the effect of human activities on the ozone layer.⁸ Unfortunately, it lacks enforceable reduction targets for the Utilisation of chlorofluorocarbons (CFCs), the primary chemical agent accountable for ozone depletion. The associated Montreal Protocol outlines these provisions.

3.1.3 Montreal Protocol 1987

The Montreal Protocol is the protocol that correspond to the Vienna Convention for the Protection of Ozone Layers, particularly addressing substances that cause ozone depletion. It provided a set of practical, actionable tasks that were universally agreed on.⁹ The stratospheric ozone layers serves as a protective barrier in the atmosphere, shielding life on Earth from the detrimental ultraviolet (UV) radiation emitted by the sun.

⁶ Vienna Convention – For the protection of the ozone layer" last reviewed 19th February, 2024. <<https://www.naturvardsverket.se/en/international/cooperation/multilateral-agreements/wienkonventionen/>> accessed 10th December 2024.

⁷ Ibid.

⁸ Ibid

⁹ The Montreal Protocol on Substances that Deplete the Ozone Layer, UN Environmental Program, Ozone Secretariat Vienna Convention Montreal Protocol <<https://ozone.unep.org/treaties/montreal-protocol>> Accessed 4th December 2024.

During the 1980s, scientists noticed a reduction in the thickness of the stratospheric ozone layer. Thus, the Montreal Protocol is a global treaty aimed at safeguarding the ozone layer by ceasing the manufacturing of certain compounds that contribute to Ozone depletion. The document was made available for everybody to sign on September 16, 1987, and officially took effect on January 1, 1989. However, it was amended (Kigali Amendment, 2016) to phase down hydrofluorocarbons (HFCs), potent greenhouse gases.¹⁰

The protocol incorporates a distinctive alignment provision that enables the parties to promptly respond to novel scientific data and mutually agree to expedite any necessary reductions in the chemicals already encompassed by the Protocol. Since its first introduction, it has undergone around six distinct modifications, all aimed at ensuring the achievement of the goal. Furthermore, the participants of the protocol convene every year to make a range of decisions to facilitate efficient execution.

Nigeria is a party to the Montreal Protocol and its Kigali Amendment, which aims to phase out hydrofluorocarbons (HFCs) that contribute to global warming. And as a proof of implementation of the Kigali Amendment, Nigeria is transitioning to climate-friendly refrigerants in industrial and domestic applications. Also, the National Environmental Standards and Regulations Enforcement Agency (NESREA) enforces regulations to phase out ozone-depleting substances and HFCs as renowned in the Montreal Protocol.

However, while the Montreal Protocol and its Kigali Amendment are widely regarded as successful international agreements in addressing ozone depletion and climate change (through the control of hydrofluorocarbons, HFCs), they are not without limitations. Basically, the primary objective of the protocol was to protect the ozone layer, not mitigate climate change,

¹⁰ Ibid.

hence, limiting its scope in addressing broader environmental concerns.¹¹ The Kigali Amendment although extends the Protocol's scope to include HFCs (which are potent GHGs), it still does not cover other major climate-relevant emissions.

3.1.4 Intergovernmental Panel on Climate Change (IPCC)

This is a scientific intergovernmental body established in 1988 by the UN Environment Programme (UNEP) and the World Meteorological Organisation (WMO). It is an organ of the United Nation tasked with evaluating the risk of climate change caused by human activity as it provides scientific assessment on climate change to guide policy making.¹² It is a body of over 2000 scientific and technical experts from around the world who collect scientific information about the causes, potential effects, and ways of mitigating climate change.¹³

While IPCC is not a treaty, its reports are actively used by countries to inform its climate change policies and scientific assessments. The body issued its First Assessment Report in 1990. Its latest was the sixth in 2023. The Fifth Assessment in 2014 culminated to the Paris Agreement.¹⁴ According to IPCC, the extent of climate change effects on individual regions will vary overtime and with the ability of different societal and environmental systems to mitigate or adapt to change.

3.1.5 The United Nations Framework Convention on Climate Change (UNFCCC)

¹¹ Ibid

¹² Lawal Badru, 'Climate Change in Nigeria: Causes, Effects and Legal Framework' (2020) *UNILAG LAW REVIEW* 4, (1)196

¹³ UN Environment Programme, *Climate Change International Legal Regime*, UNITAR. <<https://unitar.org/courses/climate-change-international-legal-regime-5955>> accessed 4th December 2024.

¹⁴ Ngozi and others, 'Legal Frameworks for Addressing the Impacts of Climate Change on Communities across the World' (note.1)215.

The UNFCCC was adopted on 9th May, 1992 at the Earth Summit in Rio De Janeiro, New York, and entered into force on 21st March 1994. 198 countries have ratified the Convention giving it a near-universal membership.¹⁵ A fundamental objective of the treaty is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system basically at a level sufficient to allow ecosystem to adapt naturally to climate change so that food production is not threatened, while enabling economic development to proceed in a sustainable.¹⁶

The Convention is guided by key principles outlined in Article 3. These principles includes, Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC), and Intergenerational equity, which focuses on the fact that developed countries should take the lead in combating climate change, reflecting their historical responsibilities and greater capabilities. The precautionary principle emphasizes that lack of full scientific certainty should not delay actions to mitigate climate change impacts. Lastly is sustainable development which connotes that, Climate actions should support sustainable economic growth, especially in developing countries.¹⁷

The parties have general commitments which include: the establishment of national inventories on greenhouse gas emissions and sinks; the formulation and implementation of policies and measures to mitigate and adapt to climate change; the sustainable management of forests, oceans and ecosystem; and the integration of climate change considerations in national social, economic and environmental policies. To monitor progress in implementation, all parties are required to

¹⁵ United Nations Framework Convention on Climate Change (UNFCCC).
<<https://unfccc.int/resource/docs/convkp/conveng.pdf>> accessed 4th December 2024.

¹⁶ Article 2 United Nations Framework Convention on Climate Change (UNFCCC).

¹⁷ Article 3 generally provides for the principles which binds all the parties to the Convention.

submit periodic reports containing an inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases as well as information on measures taken or envisaged to implement the Convention.¹⁸

The Conference of the Parties (COP) is the governing body of the Convention and meets regularly to review the adequacy of commitments, progress in implementation and effectiveness of the Convention.¹⁹ Its last meeting was in November 2024, Baku, Azerbaijan, where it concluded with a new finance goal to help countries to protect their people and economies against climate disasters, and share in the vast benefits of the clean energy boom.²⁰ There were subsequent meetings and agreements of the COP aimed at strengthening the existing provisions and accommodating emerging climate issues. Some of these were The Kyoto Protocol, The Marrakesh Accord, etc.²¹

While the United Nations Framework Convention on Climate Change (UNFCCC) has been a cornerstone of global climate governance, it is not without significant shortcomings. One of the shortcomings is its Non-Binding Commitments. Generally, The UNFCCC primarily relies on voluntary commitments, which lack enforcement mechanisms to ensure compliance. Countries set their own targets without facing penalties for failing to meet them. Also, the UNFCCC does not align effectively with related treaties and initiatives, such as the Convention on Biological

¹⁸ Article 4 (1-4), UNFCCC.

¹⁹ Article 7 (1-7) UNFCCC

²⁰ United Nations Climate Change, 'COP29 UN Climate Conference Agrees to Triple Finance to Developing Countries, Protecting Lives and Livelihoods' *UN climate Change News*. available at <<https://unfccc.int/news/cop29-un-climate-conference-agrees-to-triple-finance-to-developing-countries-protecting-lives-and>> accessed 4th December 2024.

²¹ Ngozi and others, 'Legal Frameworks for Addressing the Impacts of Climate Change on Communities across the World' (note.1).216.

Diversity (CBD) or the Sustainable Development Goals (SDGs). This lack of coordination can lead to fragmented or conflicting policies.

3.1.6 The Paris Agreement

The Paris Agreement is a legally binding international agreement on climate change which was adopted by 196 parties on 12th December 2015, at COP-21 of the UN Framework Convention on Climate Change (UNFCCC) in Paris, and entered into force on 4th November, 2016.²² Its overarching goal is to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels” and pursue efforts “to limit the temperature increase to 1.5°C above pre-industrial levels.”²³ Thus, it aims to combat climate change by limiting global warming and addressing its impacts.

The Paris Agreement works on a five-year cycle of increasingly ambitious climate action which requires countries to submit their national climate action plans, known as nationally determined contributions (NDCs). In their NDCs, countries communicate actions they will take to reduce their greenhouse gas emissions in order to reach the goals of the Paris Agreement.²⁴ Countries also communicate in their NDCs actions they will take to build resilience to adapt to the impacts of climate change.

As part of the key objectives of the agreement, it affirms that developed countries are required to provide financial and technical support to vulnerable and developing nations for mitigation and adaptation efforts, while for the first time also encouraging voluntary contributions by other Parties. It also establishes frameworks to strengthen the ability of countries to adapt to climate

²² The Paris Agreement UNFCCC <<https://unfccc.int/process-and-meetings/the-paris-agreement>> accessed 4th December 2024.

²³ Ibid.

²⁴ Ibid

change impacts and build resilience. With the Paris Agreement, countries established an enhanced transparency framework (ETF).

Nigeria ratified the Paris Agreement in March 2017, pledging to contribute to global climate goals through mitigation and adaptation efforts. Hence, Nigeria is a signatory to the agreement and plays an active role in its implementation, reflecting the country's vulnerability to climate change and its commitment to global efforts to combat it.²⁵

3.1.7 Glasgow COP 26 2021

The UN Climate Change Conference in Glasgow, United Kingdom, COP26, in 2021 brought together 120 world leaders and over 40,000 registered participants to discuss all facets of climate change — the science, the solutions, the political will to act, and clear paths for action. Nations adopted the Glasgow Climate Pact, a package of decisions, including strengthened efforts to build resilience to climate change, to curb greenhouse gas emissions and to provide the necessary financing for both.²⁶

Nigeria in participating in the conference, revised its NDCs to include clean cooking solutions and a commitment to net-zero emissions by 2060. It launched the Energy Transition Plan, which outlined pathways for achieving renewable energy adoption while maintaining economic

²⁵ Vivian Chime 'EXPLAINER: What is Paris Climate Agreement and is Nigeria on Track to Meeting its Target?' *TheCable* (10 May 2024) <<https://www.thecable.ng/explainer-what-is-paris-climate-agreement-and-is-nigeria-on-track-to-meeting-its-targets/>> accessed 4th of December 2024.

²⁶ UN Climate change Conferences <<https://www.un.org/en/climatechange/un-climate-conferences#:~:text=The%20UNFCCC%20is%20a%20multilateral,interference%20with%20the%20climate%20system.%E2%80%9D>> accessed 6th December 2024.

growth.²⁷ Also, Nigeria Secured financial commitments for renewable energy projects .²⁸

3.1.7 Sharm el-Sheikh COP 27 2022

The UN Climate Change Conference in Sharm el-Sheikh, Egypt, COP27, in 2022 concluded with the adoption of the Sharm el-Sheikh Implementation Plan, which established a dedicated fund for loss and damage, maintained a clear intention to keep global warming to no more than 1.5 degrees Celsius above pre-industrial levels, put a focus on accountability for businesses and institutions, created pathways to mobilize more financial support for developing countries, and shifted attention from promises to action.

Nigeria played a key role in advocating for the establishment of the Loss and Damage Fund.²⁹ The country also highlighted the impact of extreme climate events like flooding, which affected over 1.4 million Nigerians in 2022,³⁰ and further sought international support for implementing adaptation projects in vulnerable communities .

3.1.8 Dubai COP 28 2023

The UN Climate Change Conference in Dubai, United Arab Emirates, closed on 13 December 2023 with an agreement that signals the beginning of the end of the fossil fuel era by laying the ground for a swift, just and equitable transition, underpinned by deep emissions cuts and scaled-

²⁷ 'At COP26, President Buhari Pledges Net Zero Emissions by 2060, Says Nigeria will Maintain Gas-Based Energy Transition' <<https://statehouse.gov.ng/news/at-cop26-president-buhari-pledges-net-zero-emissions-by-2060-says-nigeria-will-maintain-gas-based-energy-transition/>> accessed 4th January 2025.

²⁸ Ibid.

²⁹ Una Emole, 'Overview of COP 27 Outcomes and the ESG Implications for Nigeria's Climate Action Ambitions' TEMPLARS (2022) <<https://www.templars-law.com/knowledge-centre/overview-of-cop-27-outcomes-and-the-esg-implications-for-nigerias-climate-action-ambitions/>> accessed 9th January 2025.

³⁰ .Ibid

up finance. Negotiators from nearly 200 countries – in the world’s first ‘global stocktake’ of the Paris Agreement – agreed to ratchet up climate action before the end of the decade, with the overarching aim of keeping global temperature increase to 1.5°C above pre-industrial levels.

Nigeria in demonstrating its participating in the conference, engaged in the Global Stocktake to assess its progress on emissions reductions and adaptation goals, continued advocating for equitable climate finance, especially for energy transition projects and combating desertification, and called for greater cooperation in clean energy investment to meet its 2060 net-zero target .

3.1.9 Baku COP 29 2024

The UN climate conference in Baku, Azerbaijan, concluded on 24 November 2024 with an agreement calling on developed countries to deliver at least \$300 billion per year to developing countries by 2035 to reduce greenhouse gas emissions and protect lives and livelihoods from the worsening impacts of climate change. “I had hoped for a more ambitious outcome – on both finance and mitigation – to meet the great challenge we face,” - UN Secretary-General António Guterres said in his statement on COP29. “But this agreement provides a base on which to build.”³¹

3.2 Domestic or National Legal Frameworks

This rubric is structured in a manner that evaluates the sequential states (past and present) under which the Federal Government of Nigeria has undergone to combat climate change and ensure environmental justice in the country. The legal frameworks to be dealt with includes but not limited to the following:

³¹ Ibid

3.2.1 The Constitution of the Federal Republic of Nigeria

The 1999 Constitution of the Federal Republic of Nigeria (as Amended)³² plays a vital role when it comes to sources of law that relates to the people. It is the supreme law of the state,³³ regulates the processes of government, and has the fundamental rights and obligations of citizens enshrined in it. Section 20 of the Constitution provides that the "state shall protect and improve the environment and safeguard the water, air and land, forest and wide life of Nigeria." The constitution further provides that "... exploitation of human or natural resources in any form whatsoever for reasons, other than the good of the community shall be prevented..."³⁴

The above provisions basically place a clear duty on the Nigerian government to not just protect and preserve the environment but to ensure that the good of the people is considered in any situation where human or natural resources are exploited. Interpreting from the point of climate change, it simply means that the supreme law of Nigeria has placed a duty on the Nigerian government to ensure that Nigeria is not just protected from negative effects of climate change, but also that measures are taken to ensure that Nigeria does not contribute to climate change and that the good of the people should be considered in situations.

The provisions in the constitution should necessarily give Nigerians the right to compel the government to heed to the mandate where they fail to. However, the sections are placed under Chapter 2 of the Constitution which has been declared to be non-justiciable by virtue of section 6(6)(c) of the Constitution which provides that the judicial powers that have been vested in the courts under the Constitution "shall not except as otherwise provided by this constitution, extend

³² CAP. C23 Laws of the Federation of Nigeria (LFN) 2004.

³³ Section 1(1) of CFRN 1999; see also: *General Sanni Abacha v. Chief Ganni Fawehinmi* [2000] 4 SCN 401.

³⁴ Section 17 CFRN 1999

to any issue or question as to whether any act of omission by any authority or person or as to whether any law or any judicial decisions is in conformity with the Fundamental Objectives and Directive Principles of State Policy set out in Chapter 2 of this Constitution."³⁵

The provision of section 6(6)(c) essentially rendered Chapter 2 of the constitution a mere statement of intent, which is ordinarily meant to guide government actions through laws and regulations for the effective management or prevention of misconduct by individuals involved. Also, it renders section 20 toothless in the fight against climate change because it denies the people the very right to approach the courts in order to seek an order that could compel the government to make legislations or policies for the regulation of climate change in particular and the environment in general.³⁶

3.2.2 Petroleum Act 1965³⁷

The Petroleum Act was the erstwhile law regulating oil and gas exploration activities in Nigeria before the enactment of the Petroleum Industry Act.³⁸ The Act gave the petroleum minister the 'power to make regulations providing for matters relating to licenses, including prevention of pollution of the water courses and atmosphere.'³⁹ By virtue of this provision, the Petroleum (Drilling and Production) Regulation 1969⁴⁰ was made by the minister.

The Petroleum (Drilling and Production) Regulation was the first step towards the control of gas flaring through the insertion of the 'utilisation clause.' It can be recalled that a large fraction of

³⁵ Ibid, s. 6(6)(c).

³⁶ Quest Oghenerugba Ekugbawa *The Legal Frameworks for Combating Climate Change in Nigeria* (Unpublished LLB Project Faculty of Law University of Benin 2024).

³⁷ CAP. P10, LFN 2004.

³⁸ The Petroleum Industry Act of 2021.

³⁹ S. 9(1)(b)(iii)

⁴⁰ The new amendment is the Petroleum (Drilling and Production) Regulation 2020.

associated gas produced during the production of crude oil is currently being flared and to reduce the huge waste of valuable resources as well as degradation of the environment, the federal government thus mandated every licensee to submit a proposal for the Utilisation of gas upon five years after the grant of the license.⁴¹

3.3.3. The Petroleum Industry Act (PIA) 2021

The Petroleum Industry Act (PIA) 2021 is a landmark legislation in Nigeria aimed at overhauling the legal, regulatory, and fiscal framework governing the country's petroleum sector.⁴² It establishes key regulatory bodies, including the Nigerian Upstream Petroleum Regulatory Commission (NUPRC) and the Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA), to oversee industry activities. The Act also replaces the Nigerian National Petroleum Corporation (NNPC) with a commercially driven entity, Nigerian National Petroleum Company Limited (NNPC Ltd.), ensuring better corporate governance and profitability.

A major highlight of the PIA is its emphasis on host community development, which mandates oil companies to contribute 3% of their actual operating expenses to a Host Community Development Trust Fund.⁴³ This provision aims to address the long-standing grievances of oil-producing communities by fostering social and economic development. Additionally, the Act

⁴¹ Ibid.

⁴² This Act was Signed into law on August 16, 2021, by President Muhammadu Buhari, the PIA seeks to create a more transparent and efficient oil and gas industry while promoting investment and sustainable development.

⁴³ Section 240(2) PIA.

introduces a revised fiscal regime to attract investment by reducing royalties and taxes on petroleum operations, making Nigeria's oil sector more competitive globally.⁴⁴

However, the implementation of the PIA has faced challenges, including concerns over revenue allocation, environmental sustainability, and inclusivity in decision-making processes. Despite these challenges, the PIA represents a significant step toward reforming Nigeria's petroleum industry and ensuring long-term economic benefits.

3.2.4. Associated Gas Reinjection Act 1977⁴⁵

The Associated Gas Reinjection Act (AGRA) of 1979 is a landmark piece of legislation in Nigeria aimed at addressing the environmental and economic challenges posed by the flaring of associated natural gas during oil extraction. It was enacted by the Nigerian Military Government as an urgent response to the problem of gas flaring. The Act compelled every company producing oil and gas in Nigeria to submit a preliminary programme for gas re-injections and detailed plans for implementation of gas-reinjection not later than 1 October, 1980.⁴⁶

By virtue of section 3 and 5 (ministerial prerogative) of the Act, the Associated Gas Reinjection (continued Flaring of Gas) Regulations 1984 was enacted. This regulation took effect from January 1, 1985, provided exemptions from the prohibition on gas flaring under the 1979 Act.

Section 4 of the Act provides for penalty for the violation of the Act. And it further provides for forfeiture of concession for non-compliance.⁴⁷ The section further provides for the minister to withhold all or part of the entitlements of any offending person towards the cost of completion or

⁴⁴ See section 260 - 302 of PIA.

⁴⁵ CAP. C38, LFN 2004.

⁴⁶ Ibid, s.1.

⁴⁷ Ibid, S. 4(1).

implementation of a desirable re-injection scheme or the repair or restoration of any reservoir in field under good oil particles.⁴⁸

Meanwhile, AGRA was amended in 1985, 1998 to improve the penalties for non-compliance. Also, it can be assumed that the Regulation reversed the original intention of the Act, which was to prohibit gas flaring. Thus, the amended law permits oil companies to continue flaring in particular field(s), subject to payment of such sums as the minister may from time to time prescribe for every 28.317 standard cubic meter (scm) of flared gas.⁴⁹

3.2.5 Environmental Impact Assessment Act 1992

The Environmental Impact Assessment Act was implemented as a military decree in 1992. It outlined general guidelines, protocols, and techniques for considering the environmental impact of certain public and private projects.⁵⁰ The Act restricts both public and private projects without first taking the effects on the environment into account, providing that no projects or activities may be started or authorised by the public or private sectors of the economy without first taking into account, at an early, how they would affect the environment.⁵¹

To ensure that the subject activities are promptly and unmistakably defined, the Act provides that all agencies and institutions - private or public must apply in writing to the Agency before beginning any proposed project, unless they are exempted under the Act.⁵² Also beginning or starting any project or activity required by the provision of the Act, covered by the Agency, or likely to have a serious environmental impact on the Nigerian environment, the relevant

⁴⁸ Ibid, S. 4(2).

⁴⁹ The Associated Gas Re-injection (Amendment) Act of 1998.

⁵⁰ Ibid

⁵¹ Ibid, S.2(1).

⁵² Ibid, S.2(4).

significant environmental issues shall be identified and studied to determine the environmental impact assessment, an environmental assessment will be applied as the activities are being planned.⁵³

By the structured provision of the Act, only projects that have passed environmental impact studies will be monitored and approved by the Federal Environmental Protection Agency. Also, when determining whether or not a project satisfies the requirements of an environmental impact assessment, consideration must be given to their environmental effects⁵⁴.

Notwithstanding the laudable impacts of the Act, it has been considered to be weak in several aspects. In the first place, though the Act prohibits private and public bodies from undertaking or authoring projects without consideration of their effects on the environment, in practice, it is common for development projects to commence without an environmental impact assessment. And even where an assessment is carried out, there may still be violations of the provisions relating to the right information and the participation.⁵⁵ Apart from that, not only are the penalties too low⁵⁶ to compel compliance, they are hardly ever imposed on offenders.⁵⁷

3.2.6 National Environmental Standard and Regulations Enforcement Agency (Establishment) Act, 2007

The National Environmental Standard and Regulations Enforcement Agency (NESREA) which is established under the National Standards and Regulations Enforcement Act is endowed with

⁵³ Ibid, S.2(2)(3).

⁵⁴ Ibid 2(1).

⁵⁵ Synda Obaji, 'Environmental Impact Assessments Don't Work in Nigeria: Here's Why' *The Conversation* (University of Birmingham 1 September, 2024). <<https://theconversation.com/environmental-impact-assessments-dont-work-in-nigeria-heres-why-188796>> accessed 4th December 2024.

⁵⁶ Section 60 of Environmental Impact Assessment Act provides that offending individuals are liable to a fine of #100,000, while firms or corporations can be fined between #50,000 and One Million naira.

⁵⁷ Obaji, 'Environmental Impact Assessments Don't Work in Nigeria' (Note 51)

the responsibility of enforcing environmental protection. The Act repealed the Federal Environmental Protection Agency Act.⁵⁸ As a corporate body, NESREA can sue in its corporate name and has perpetual succession as well as common seal. The Act restricts the agency's ability to enforce environmental protection by omitting activities related to oil and gas, but it nonetheless lists several duties that must be carried out.

Under Section 20, the Agency is authorized to establish rules aimed at protecting and improving the quality of Nigeria's air resources. These rules are intended to promote public health and welfare while supporting the natural development and productivity of the country's human, animal, marine, and plant life.⁵⁹ The provisions include setting minimum air quality standards to safeguard health, controlling air pollution by limiting harmful substances that may cause property damage or degradation, identifying effective methods to prevent and address various types of atmospheric pollution, and implementing measures to reduce emissions to levels that ensure public health and safety.⁶⁰

Following section 20(1) of the Act, a person who violates the regulations commits an offence and, upon conviction, faces a fine of no more than N200,000 (Two hundred thousand Naira), a maximum term of imprisonment of one year, or both. Also, there will be an additional fine of N20,000 (twenty thousand Naira) for each day the offence is committed. If a corporate body violates the subsection, it will be found guilty and face a fine of up to N2,000,000 (Two Million

⁵⁸ CAP. F10, LFN 2004.

⁵⁹ Ibid

⁶⁰ Ibid

Naira) as well as extra N50,000(Fifty thousand Naira) punishment for each day the violation is committed.⁶¹

In addition, section 27 provides that it is illegal to release any hazardous material in such damaging proportions into the air, on Nigerian land or sea, or at nearby shorelines, unless doing so is allowed by Nigerian legislation currently in effect.⁶² When this section is breached, the offender will be guilty of an offence and face a maximum fine of N1,000,000 or a maximum sentence of five years in jail.⁶³

Moreover, if a corporate body commits an offence under this section, any individual responsible for the organization's operations at the time will be deemed guilty and may face legal consequences. However, the section provides an exception: a person will not be held liable if they can prove that the offence occurred without their knowledge or that they took reasonable steps to prevent it.⁶⁴

3.2.7 Climate Change Act 2021

The Climate Change Act 2021 is the principal legislative framework in respect of climate change in Nigeria. The Act provides a framework for achieving low greenhouse gas emissions, inclusive of green growth and sustainable economic development by:⁶⁵

a) ensuring that Nigeria formulates programmes for achieving its long-term goals on climate change mitigation and adaptation strategies;

⁶¹ Ibid

⁶² Ibid

⁶³ Section 27(1) and (2).

⁶⁴ Ibid, Section 27(3).

⁶⁵ Section 1 Climate Change Act 2021.

- b) facilitating the coordination of climate change action needed to achieve long-term climate objectives;
- c) mainstreaming climate change actions in line with national development priorities;
- d) facilitating the mobilization of finance, and other resources necessary to ensure effective action on climate change;
- e) setting a target for year 2050-2070 for the attainment of a net-zero GHG emission, in line with Nigeria's international climate change obligations;
- f) identifying risk and vulnerabilities, building resilient and strengthening existing adaptive capacities to the impact of climate change;
- g) ensuring that climate change policies and actions are integrated with other related policies for promoting socio-economic development and environmental integrity;
- h) implementing mitigation measures that promote low carbon economy and Climate change; and
- I) implementing mitigation measures that promote low carbon economy and sustainable livelihood; and
- i) ensuring that private and public entities comply with stated climate change strategies, targets and National Climate Change Action Plan.

The Act is relevant to the Ministries, Departments, and Agencies (MDAs) of the Nigerian federal government, as well as public and private organisations operating within Nigeria. Its primary purpose is to create mechanisms that encourage the development of a society with reduced

carbon emissions, a focus on environmental sustainability, and increased resilience to climate-related challenges.⁶⁶

The National Council on Climate Change was established to oversee all climate-related policies and decisions in Nigeria.⁶⁷ And section 19 of the Act assigns the Federal Ministry of Environment the task of determining Nigeria's carbon budget regarding gas flaring.⁶⁸ The Act mandates the formulation of a National Climate Change Action Plan every five years⁶⁹, which guides activities to ensure that national emissions align with the carbon budget. The carbon budget represents the allowable amount of greenhouse gas emissions within a specific timeframe.⁷⁰ And its primary goal is to restrict the global temperature increase to 2°C above pre-industrial levels, with an ambitious target of limiting it to 1.5°C.

Moreso, the Act establishes the Climate Change Fund, managed by the Council and financed by appropriations from the National Assembly, donations, grants, international climate funds, fines, carbon taxes, and proceeds from emission trading.⁷¹ The fund is set aside to financing climate change-related initiatives and activities.⁷² The Fund will be used for a variety of climate related initiatives, such as implementing policies, assisting with advocacy, and encouraging both public and private enterprises to speed up their switch to clean energy.

To fulfill the responsibilities mapped out for the Council, Section 17 of the Climate Act grants the Council the authority to seek financial support from various sources, including financial

⁶⁶ Ibid, s.2.

⁶⁷ Ibid, Section 3(1).

⁶⁸ Ibid, section 19(1).

⁶⁹ Ibid, Section 20.

⁷⁰ Ibid, section 35.

⁷¹ Part. IV section 15(1)(a) - (f).

⁷² Ibid.

organisations and institutions. This points to the fact that addressing climate change often requires substantial financial resources beyond what may be allocated through regular budgeting processes.⁷³ It further authorises the council to create regulations that can impose climate change related obligation on public entities and make adjustments or revocations as deemed necessary to address evolving climate challenges.⁷⁴ Additionally, the Act requires private entities with 50 or more employees to implement measures to meet annual carbon emission reduction targets as outlined in the Action Plan and to submit annual reports to the Council's Secretariat.⁷⁵

As a way of ensuring climate change mitigation and adaptation, the Act provides that the secretariat, in collaboration with the Federal Ministry of Environment, Civil Society Organisations (CSOs), women, Youth and others, is tasked with monitoring climate related plans and project, and engaging in climate advocacy, and thereafter provide relevant information, as per the freedom of information Act, to CSOs, Youths, Women and others.

Meanwhile, notwithstanding the laudable impacts of the Act, it has been greeted with some shortcomings. In the first place, the Act does not address the need for government planning toward sustainable low-carbon alternatives, leaving Nigeria's fossil fuel-dependent economy vulnerable to global oil price fluctuations and the shift toward a green economy. It also does not specify the appropriate court for addressing global warming and climate change-related disputes.

Also, according to Sunday Daudu and Stella Idehen, “the Act does not specify specific targets for reaching net-zero emission of greenhouse gases. The Act specifies a target of net-zero emission

⁷³ SO Daudu & SO Idehen, 'A Comparative Analysis of Climate Change Laws in Nigeria with Some Selected Jurisdictions' *Beijing Law Review*, (2024) 15, 1771-1783 <<https://doi.org/10.4236/blr.2024.153101>> accessed 4th December, 2024.

⁷⁴ Ibid, Section 23.

⁷⁵ Ibid, Section 24(a)(b).

by 2050 – 2070, but makes no mention interim targets of sector-specific targets. These goals are not ambitious enough and will not be enough to keep global warming to 1.5 degree Celsius.”⁷⁶ And it is submitted that the policy makers take the shortcomings into consideration.

3.4. Conclusion

In conclusion, legal and policy frameworks on climate change play a crucial role in addressing the challenges posed by global warming and environmental degradation. These frameworks not only enhance data management and accountability but also provide the necessary stability and direction for policymakers to implement effective climate action. Given the far-reaching consequences of climate change, particularly in vulnerable regions like Nigeria, a well-structured legal approach is essential in the quest for environmental justice. By examining both international and domestic legal instruments, this chapter sheds light on the strengths and gaps within existing frameworks, emphasizing the need for stronger enforcement mechanisms and adaptive policies to mitigate the negative impacts of climate change in Nigeria.

⁷⁶ Daudu and another, 'A Comparative Analysis of Climate Change Laws in Nigeria with Some Selected Jurisdictions' (note.61).

CHAPTER FOUR
THE NEGATIVE IMPACTS OF CLIMATE CHANGE AND THE QUEST FOR
ENVIRONMENTAL JUSTICE IN NIGERIA

4.0 Introduction

Climate change is indeed a global “affliction” that cuts across many countries and regions. However, its impacts are felt in varying degrees from one place to another. In Nigeria, the effects or impacts of climate change is like a bizarre as it is increasing in an alarming rate despite the various legal, institutional and even policy frameworks in the country put in place to curtail it. Although Nigeria has a strong economy relative to other countries in sub-saharan Africa, significant part of its population and economy are linked to activities that are climate sensitive, such as gas flaring, rain fed agriculture, inefficient transport system, pollution, etc.¹

Nigeria is particularly vulnerable to the impact of climate change in many fronts considering its geography, climate, vegetation, soils, economic structure, population and settlement, energy demands and agricultural activities.² The ecological effect is seen in the disturbed patterns of rainfall, a decrease in some region and an increase in other regions, sea level rise, leading to flooding, intense thunder-storms and line squalls, drought, etc. Thus, it is not gainsaying to say that the biting effects of climate change in the Nigerian economy cannot be overemphasized.

In view of the above, this chapter is dedicated to addressing the core negative impacts of climate change in Nigeria. In the course of addressing the negative impacts of climate change, attention would be given to the impacts in the northern and southern region of Nigeria. Also, the socio-

¹ E.O. Oladipo, An Introduction of Abrupt Change of Rainfall and its Potential Impact on Energy Development in Nigeria. In: Umolu, J.C (Ed.) *Global Climate Change: Impact on Energy Development*. (Damtech Nigeria Limited, Nigeria).

² D. Adefalolu, Climate Change and Economic Sustainability in Nigeria. Paper presented at the International Conference on Climate Change and Economic Sustainability. Held at Nnamdi Azikiwe University, Akwa, Nigeria, 12 – 14 June, 2007.

economic impacts would be considered categorically. Further, a robust consideration would be given to environmental justice: why there should be environmental justice due to the negative impacts of climate change, the response of the Nigerian government to the quest of environmental justice, the environmental injustice prevalent in the country, and the challenges against environmental justice.

4.1 The Negative Impacts of Climate Change in the Northern Region

Vulnerability analysis demonstrates that the Northern regions of Nigeria, which have higher degrees of rurality, experience higher degrees of climate change.³ This is as a result of the low precipitation in the North which can lead to aridity, drought, and desertification. The combination of rising heat and less rain has hastened desert encroachment, with the loss of the wetlands, and a fast reduction in the amount of surface water, flora, and fauna resources on land.⁴ These climatic conditions have not just led to the loss of land and vegetation and reduced agricultural productivity but have increased forced migration, displacement, and conflict. These impacts shall be detailed below:

1. Environmental and Climatic Changes:

Northern Nigeria is predominantly part of the Sahel region, which is highly susceptible to climate variability. The region has witnessed rising temperatures, erratic rainfall patterns, desertification, drought, etc. The average temperature in the northern regions have increased, intensifying heatwaves and making life difficult for both humans and livestock. The irregular and

³ IA Madu, *Rurality and climate change vulnerability in Nigeria: Assessment towards evidence based even rural development policy*. Paper presented at the 2016 Berlin Conference on Global Environmental Change, 23-24 May 2016 at Freie Universität Berlin.
<https://pdfs.semanticscholar.org/508b/94cab07b84a703b44eca1089326cc98d7495.pdf?_ga=2.154518008.112403230.1572433568-162569160.1557482164> accessed 15th December 2024.

⁴ A Abdulkadir, and others, 'Climate change and its implications on human existence in Nigeria: a review.' *Bayero Journal of Pure and Applied Sciences*, (2017) 10(2), 152-158.
<<https://www.ajol.info/index.php/bajopas/article/viewFile/170772/160195>>. accessed 15th December 2024.

unpredictable rainfall has led to flooding in some areas and prolonged droughts in others. Droughts have also been constant as there has been a 25% decrease in precipitation on average in the last 30 years particularly in the Sahel regions in Nigeria.⁵ The Sahara desert is encroaching southward, consequently increasing land degradation and reducing the availability of arable land. The drying up of lake Chad from around 4000 sq.km to around 3000 sq.km between 1960 and 2007, is attributable to the effect of climate change⁶ which has affected the environment and as such impacted negatively on the people who live in the environment.

2. Reduction in Agricultural Productivity

Research has shown that Over 75% of northern Nigerians subsist on agriculture, making agriculture the backbone of Northern Nigerian's economy.⁷ However, climate change has disrupted this sector through the unpredictable climatic conditions. This has not just affected crop production but has posed a challenge to livestock, and has increased food insecurity. Since 1970s, there has been a successive reduction in crop yield with high mortality in animals due to climate change.⁸ This is traceable to the low precipitation common in the regions and the irregular and unpredictable rainfall needed for healthy production of crop and livestock. Like the entire Sudano-Sahelian zone, Northern Nigeria experiences a markedly seasonal climate and

⁵ RN Amanchukwu, and others, 'Climate change education in Nigeria: The role of curriculum review.' *Education*, (2015) 5(3): 71-79.
<https://www.researchgate.net/profile/Nwachukwu_Prince_Ololube/publication/283081778_Climate_Change_Education_in_Nigeria_The_Role_of_Curriculum_Review/links/56292c5508ae518e347c967b/Climate-Change-Education-in-Nigeria-The-Role-of-Curriculum-Review.pdf> accessed 15 December 2024.

⁶ MO Dioha, and NV Emodi, Energy-climate dilemma in Nigeria: Options for the future. *IAEE Energy Forum*. (2018)
<<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=108&ved=2ahUKEwihv4iA2-7kAhVoc98KHWNKDtw4MhAWMDI6BAgQEAI&url=https%3A%2F%2Fwww.iaee.org%2Fen%2Fpublications%2Fnewsletterdl.aspx%3Fid%3D465&usq=AOvVaw3qHlxFJnRFXox9HBg4d-I>> accessed

⁷ JO Chidiebere, 'Patriarchy and Women Vulnerability to Adverse Climate Change in Nigeria' *SAGE Journals* (2019) <<https://doi.org/10.1177/2158244019825914> SAGE> accessed 6th January 2025.

⁸ MJ Mortimore and WA Adams, 'Farmers Adaptation, Change and Crisis in the Sahel' *Global Environmental Change* (2001) 11:49-57.

ecological regime – a 7 to 8 month dry period, followed by a short wet season which is rarely enough for agricultural product.⁹ This in turn affects some crops like millet, sorghum, and maize. Also, the combined effects of reduced yields and livestock losses have exacerbated hunger and malnutrition in the region.

3. Forced Migration and Displacement

The climate-induced pressures have forced many residents of Northern Nigeria to migrate and has displaced many. The climatic conditioning in the region leads to rural-urban migration, cross-border migration and even internal displacement. The migration of farmers who are unable to sustain their livelihood to urban areas has led to overcrowding and strain on urban infrastructures. Also, some affected communities have migrated to neighbouring countries, intensifying regional migration challenges. While on the other hand, floods, droughts, and desertification have displaced thousands, creating humanitarian crises in some areas.

4. Insecurity and Conflict

The impacts of climate change have exacerbated conflict and fueled the existing security challenges in northern Nigeria as it has been identified by the United States Institute of Peace¹⁰ in collaboration with the research of Odoh and Chilaka.¹¹ In the first place, the migration for green pastures by herdsmen (Fulani herdsmen) who due to the inadequate green pasture, migrate to other regions and even shepherd their flocks into farmlands has, in most regions, caused farmer-herder conflicts or rivalry. The competition for inadequate resources has fueled violent clashes between farmers and pastoralists, with devastating consequences for local communities

⁹ Eunice Odufa Erhagbe, *The Efficacy of Law in Combating Climate Change in Nigeria* (Ambik Press Ltd.) 86.

¹⁰ United States Institute of Peace (2011). Special report on climate change adaptation and conflict in Nigeria. Gotten from <www.usip.org> accessed 6th January 2025.

¹¹ SI Odoh and FC Chilaka, 'Climate change and conflict in Nigeria: a theoretical and empirical examination of the worsening incidence of conflict between Fulani Herdsmen and farmers in Northern Nigeria.' *Arabian Journal of Business and Management Review*, (2012). pp 113.

which in most cases lead to death. Also, environmental stressors, coupled with poverty and displacement, have provided fertile ground for extremist groups like Boko Haram to recruit vulnerable individuals. These groups with religious bigotry inculcate unhealthy indoctrinations in the vulnerable unemployed youths as armies, making them unleash terror in communities.¹² The north-south migration is cardinal to many reported conflicts in Nigeria as well as the emergence of Bokoharam Sect.¹³

5. Health Challenges

The health implications of climate change in northern Nigeria are significant. The rising temperatures have increased the incidence of heat stress and dehydration, particularly among vulnerable populations. Flooding and poor water management have led to the outbreak of waterborne diseases such as cholera and typhoid. Changes in temperature and rainfall have also expanded vector-borne diseases such as malaria. Thus, the Nigerian Meteorological Service (NiMet) warns about rising temperature, especially in the northern region, which undoubtedly is responsible for the rise in cardiovascular, respiratory, cerebrovascular and diabetes-related diseases and heatstroke. It further mentions that these heat-related diseases lead to an increase in hospital admissions of elderly people, newborns and children.¹⁴

¹² C Onyia, 'Climate Change and Conflict on Nigeria: Boko Haram Challenge' *American International Journal of Social Science* (2015) 4(2)181-190.

¹³ Abdulkadir, and others, 'An appraisal of the Eco-climatic Characteristics in Northern Nigeria' *African Journal of Environmental Science and Technology*, (2013)7(8): 748-757.

¹⁴ 'Addressing Rising Temperatures in Northern Nigeria' – DailyTrust. <<https://dailytrust.com/addressing-rising-temperatures-in-northern-nigeria/>> accessed 6th January 2025.

4.2. The Negative Impacts of Climate Change in the Southern Region (Niger Delta) in Nigeria

Southern Nigeria, characterized by its lush forests, coastal zones, and abundant biodiversity, is facing significant challenges due to climate change. The impacts play a crucial role in Nigerian economy and ecosystem as the region is home to Nigeria's extensive coastline along the Atlantic Ocean. The high precipitation common to the region as well as other anthropogenic activities have caused rising sea levels, coastal erosion, increased flooding, biodiversity loss, agricultural and food insecurity, health challenges, economic disruptions, displacement, cultural and heritage loss, etc. Though there are many regions in the southern Nigeria, specific consideration would be given to the Niger Delta.

The Niger Delta is one of the most ecologically diverse and economically important areas in Nigeria. It is the bedrock of Nigeria's economy and generates over 90% of the nation's revenue through oil production.¹⁵ However, it faces significant climate change challenges particularly caused by anthropogenic factors – oil related activities such as gas flaring, oil spillage, etc, which has caused serious climate and environmental changes with enormous impacts on the livelihood of the people. These negative impacts include but not limited to the following:

1. Coastal erosion and rising sea levels: the Niger delta is a low-lying area, making it specifically vulnerable to rising sea levels.¹⁶ The coastal regions and cities are increasingly at risk of submersion, with some already experiencing significant losses of habitable land. According to the study by Wilox Rogers et al, Niger Delta could lose over

¹⁵ I Etim and A Folarin Alonge 'Niger Delta Region of Nigeria, Climate Change and Way Forward' (2009 Bioenergy Engineering Conference, sponsored by ASABE, October 11-14, 2009) page 2.

¹⁶ A Chidi Ibe, 'The Niger Delta and Sea Level Rise.' In: Milliman, JD, Haq, B.U. (eds) Sea-Level Rise and Coastal Subsidence. Coastal Systems and Continental Margins, Vol.2.Springer, Dordrecht. Available at <https://doi.org/10.1007/978-94-015-8719-8_14> accessed 6th January 2025.

15000 square kilometers of land by the year 2100 with a one meter sea level rise.¹⁷ The erosion of shorelines persistently threatens infrastructures, homes, and businesses in the region.¹⁸ And the rising sea level have caused saltwater to infiltrate freshwater resources, contaminating drinking water supplies and agricultural lands, thereby reducing crop productivity.¹⁹

2. Flooding and wetland degradation: flood is an extreme weather event naturally caused by rising global temperature which results in heavy downpour, thermal expansion of the ocean or sea or river, and glacier melt, which in turn results in rise in sea level, thereby causing salt water inundated coastal lands.²⁰ This occurs in three main forms, via coastal flooding, river flooding, urban flooding.²¹ climate change has intensified flooding events in the Niger Delta, displacing populations and disrupting economic activities. These flooding coupled with other human activities are degrading wetlands, which serve as natural flood buffers, thereby reducing their effectiveness.
3. Threats to agriculture and fisheries: agriculture and fishing are vital livelihoods in the Niger Delta, but both are under threat due to climate change caused by both natural and human activities. The erratic weather patterns and flooding have affected farming activities, reducing yields of crops such as cassava, rice, and plantains. The rising ocean temperature and water pollution have caused declines in fish productions, severally

¹⁷ Wilcox Rogers and others, 'Climate Change and the Niger Delta: Some Socio-economic Implications and Coping Strategies' *International Journal of Social Science and Humanities Review* (2013) Vol.4(1) 179-184.

¹⁸ Chika Ogbonna and others, 'Climate Resilience in Africa Coastal Areas: Scaling Up Institutional Capabilities in the Niger Delta Region' *Handbook of Climate Change Resilience* (2020). <https://doi.org/10.1007/978-3-319-93336_9> accessed 6th January 2025.

¹⁹ Wilcox Rogers and others, 'Climate Change and the Niger Delta' (note.177).

²⁰ ON Adeoye and others, Climate Change and Manence of Flood in Nigerian Cities: Socio-economic implications, *Adv. In Nat. Appl.Sci.*3(3) 369-377,2009.

²¹ Ibid. pg 370.

impacting local fishing communities who depend on the sector for livelihood.²² Also, the saltwater intrusion has rendered large swathes of farmland infertile, forcing many farmers to abandon their lands.

Similarly, human activities such as oil exploration, gas flaring, etc, have significantly affected agriculture and fishery in the region. The frequent oil spills contaminate land and water, destroying aquatic ecosystem and reducing agricultural productivity. Also, the continuous flaring of gas releases large amount of greenhouse gases, contributing to global warming. Methane and carbon dioxide from flaring intensify local air pollution, causing health problems and climate impacts. Furthermore, improper disposal of industrial and domestic waste clogs waterways, increasing the risk of flooding during heavy rains, thereby affecting agricultural productivity and aquatic life in the region.

4. Environmental degradation and Pollution: the Niger Delta is already grappling with severe environmental pollution from oil spills and gas flaring, and climate change has compounded the issue. The definite environmental problems are visible since the inception of oil exploration in the region in the last 50years. Incessant oil spill has damaged the ecosystem destroying plants on land and in water.

The rich mangrove of the coast of the gulf of Guinea is seriously depleted. The flooding that frequently occur in the region exacerbate the spread of oil pollutants and other contaminants across wider areas, further degrading the environment. The rising sea levels and pollution are destroying mangrove forests, which are crucial for coastal protection and carbon sequestration (excess carbon in the atmosphere). Also, the changing weather

²² 'Addressing Rising Temperatures in Northern Nigeria' – DailyTrust (note.14).

patterns and human activities have accelerated the loss of forests reducing biodiversity and contributing to greenhouse gas emissions.

In essence, these environmental impacts can be grouped into three, viz air, water and land. The incessant gas flaring cause air pollution and even constitutes nuisance (excess noise) which make the environment uncomfortable for relaxation of any sort.²³ The industrial wastes released from the various petroleum industries don't just cause land pollution but also cause water pollution making both the land and the water unhealthy for agricultural production and even for consumption.

5. Health Impacts: climate change and pollution in the Niger Delta region of Nigeria have a number of health impacts, including: respiratory illness, birth defects, early menopause, reduced life expectancy, increased risk of conflict, mental health issues, etc.²⁴ According to Henshaw while telling his story of his Niger Delta community's experience with fossil fuel, assessments indicate that more and more people living in the Niger Delta region are suffering respiratory illnesses. But not only that, there are increasing numbers of children born with deformities on account of black soot.²⁵ There are women who go into menopause at the age of 25. And while the average life expectancy in Nigeria is low, life expectancy in the Delta region is only about 46 – about ten years less than the national average.²⁶

²³ Echendu, and others, 'Air Pollution, Climate Change and Ecosystem Health in the Niger Delta' *Social Sciences* (2022) 11: 525. <<https://doi.org/10.3390/socsci11110525>> accessed 7th January 2025.

²⁴ Elaina Ruth Fletcher, 'The Niger Delta's Harsh Lessons: Fossil Fuels' Harm to People and the Planet' *Health Policy Watch: Independent Global Health Reporting* (2022) <<https://healthpolicy-watch.news/fossil-fuels-harms-health-as-well-as-the-planet/#:~:text=Henshaw%20also%20sees%20first%2Dhand,national%20average%2C%E2%80%9D%20he%20related>> accessed 30th December 2024.

²⁵ Ibid

²⁶ Ibid.

It has been noted by experts that fossil fuels are responsible for 65% excess air pollution deaths from avoidable human sources. And this (fossil fuel) is common in the Niger Delta region.²⁷ It has also been shown that black soot from pollution can cause birth defects in children. Very sadly, the average life expectancy in the Niger Delta is about 10 years less than the national average.²⁸ Also, climate change caused by both the natural and anthropogenic factors is reducing the availability of marine resources that many people depend on, thereby leading to malnutrition.

4.3. Socio-Economic Consequences of Climate Change in Nigeria

Climate change poses significant socio-economic challenges to Nigeria, Africa's most populous country. As a developing nation with an economy heavily reliant on agriculture, oil, and natural resources, Nigeria is particularly vulnerable to the adverse effects of changing climate exacerbated by human activities. The challenges shall be discussed below.

1. Impacts on Agriculture and the Economy

Agriculture employs about 70% of Nigeria's population, making it a critical sector in the country's economy.²⁹ Report has it that, between January and March 2021, agriculture contributed to the Nigerian GDP by 22.35%.³⁰ However, this has been drastically affected by climate change. Actually, the Nigeria's climate motivates the variability of crop production across the two regions, Northern and Southern region. The Northern region cultivates more grains such as rice, millet, cowpeas, guinea corn, maize, and yams, while the Southern areas

²⁷ Ibid

²⁸ Ibid

²⁹ Ibid

³⁰ Usman Sambo and Babayo Sule, 'Impacts of Climate Change on Food Security in Northern Nigeria' *Green and Low-Carbon Economy* (2024) Vol.2(1)49-61. DOI: 10.47852/bonviewGLCE3202560.

grow more roots and tubers such as cassava, plantain, yams, and cocoyam in addition to oil palm, maize and rice.³¹ However, this has been contradicted by the report disclosed by President Muhammadu Buhari during the Idel Kabir festival in 2021 while expressing shock at the low productivity due to climatic conditions such as drought, flood, and low level of capacity for enhanced irrigation systems, Nigeria is only able to cultivate 2.5% of its arable land in the Channel Television.³²

Climate change disrupts agricultural productivity through its irregular rainfall patterns, desertification, loss of livelihood. The erratic rainfall has led to droughts in the northern regions and flooding in the south, reducing crop yields and increasing food security.³³ The Sahel region in the northern is experiencing accelerated desertification, which reduces arable land and forces farmers to abandon agricultural practices. When it comes to land, research has it that Nigeria has a total estimated arable land area of about 70.8 million which empowers agricultural productivity.³⁴ About 43 million ha (60.23%) are being cultivated, with a low incidence of irrigation farming.³⁵

However, the event of climate change has turned the tale to the contrary as lands are significantly affected by climate change, making productivity difficult to actualize in the Nigerian economy. This similarly affects smallholder farmers, who form the backbone of Nigeria's agricultural sector. These challenges have stifled agricultural productivity affecting the sector's contribution to the country's GDP as well as increased food imports due to population rise, hence declining

³¹ JC Chika and others, 'Changing Food Consumption Patterns and Land Requirements for Food in the six Geopolitical Zones in Nigeria' *Foods* (2022) 11(2) 150. <<https://doi.org/10.3390/foods11020150>> accessed 2nd January 2025.

³² Ibid.

³³ Ibid

³⁴ Ibid

³⁵ Ibid.

levels of food sufficiency. For instance, between 2016 and 2019, Nigeria's cumulative agricultural imports stood at N3.35 trillion, four times higher than the agricultural export of N803 billion within the same period (Food and Agriculture Organisation of the United Nations, 2022a).³⁶

2. Increased Poverty and Economic Inequality

Climate change exacerbates poverty and deepens economic inequality in Nigeria. The environmental challenges lead to socio-economic repercussions such as increased poverty, hunger, and conflicts over dwindling resources. For instance, flooding in states such as Bayelsa, Rivers, and Lagos has displaced thousands of people, forcing them into poverty as they lose their homes and livelihood. The agricultural sector's decline due to climate change has reduced GDP contributions, directly affecting rural economies. The hardships incurred by climate change have led to unrelenting price rise and cost of living in the affected areas. Wealthier Nigerians can afford climate adaptation measures, such as relocating or building flood-resistant homes, while poorer communities bear the brunt of climate impact. Some researchers such as Ayinde et al. (2011)³⁷, Ughaelu (2017)³⁸ and Ikem (2018)³⁹ have noted that recurring environmental disasters in parts of Nigeria have worsened food productivity and human suffering in the past decade. Roughly 40% of Nigeria's, according to the world Bank estimates, live below the international poverty line of \$2.15 per person per day.⁴⁰ And according to the Nigerian Bureau of Statistics

³⁶ Good and Agriculture Organization of the United Nations, 'Nigeria Agriculture at a Glance' retrieved from <<https://www.fao.org/Nigeria/fao-in-nigeria/nigeria-at-a-glance/en/>> accessed 2nd January 2025.

³⁷ AS Ayinde, and others, 'Sea surface temperature trends and its relationship with precipitation in the Western and Central Equatorial Africa,' *Climate Change*, (2020) Vol. 6 (21) 36-51.

³⁸ CM Ughaelu, 'Contemporary environmental issues respect to food production in Nigeria', *Journal of Environmental Management*, (2017) Vol. 41 (2)80-117.

³⁹ TU Ikem, 'Prospects of food self-reliance in Nigeria', *Farming and Rural System Economics*, (2018) Vol. 56 (1)112-120.

⁴⁰ Millions of Nigerians go Hungry as floods compound hardship

(NBS), over 40% of Nigerians live below the poverty line, a figure that is expected to worsen due to climate change.

3. Food Insecurity

In Nigeria, food insecurity is becoming intensified as a result of climatic factors which have limited agricultural productivity. These factors such as droughts, heavy precipitation, flooding of farmlands; rising temperature, increasing aridity and soil acidity, changes in relative humidity, increase evaporation, increasing CO₂ emission, among others have adverse effect on agricultural productivity and food systems and security in Nigeria.⁴¹ Food security is a term used to refer to the accessibility of individuals, families and communities to eat adequately both qualitatively and quantitatively. And climate change affects food security in four ways: availability, access, utilization, and stability.⁴² And for food security to be actualized, it must be accessed and for food to be accessed, there must be availability and stability. However, this is difficult to attain in some parts of Nigeria because of the drastic effects of climate change which has affected the availability and accessibility of food in Nigeria.

FAO reports that the prevalence of malnourishment in Nigeria exists and increasing from 6% in 2006 to 13.45% in 2018. The Global Hunger Increase (2021) reports 31% of Nigerian households faced food scarcity in 2021. Usman Sambo and Babayo Sule⁴³ in their report noted that the Northeast geopolitical zone is the most affected by hunger and food insecurity; about 8.4 million of the estimated 26 million are in danger of food shortage and nutrition crisis, and in dire

⁴¹ Kelechi Johnmary and others, 'The Impact of Climate Change on Food and Human Security in Nigeria' *IJCCSM* (2021)14(2).

⁴² C Mbow and others, 'Food Security' (2020) .In: V Masson-Delmotte (Eds.), *Climate Change and Land IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystem* (Cambridge University Press)

⁴³ Sambo and others, 'Impacts of Climate Change on Food Security in Northern Nigeria' (note.30)

need of humanitarian intervention to avert the food crisis. Nkem⁴⁴ also noted that increasing atmospheric temperature quickens decomposition process for crops such as yams, potatoes, tomatoes, onions, carrots, pepper, etc. He further noted that over 2000 tons of yams and 2500 tons of vegetable crops are lost annually as a result of decay which has made the Benue state government to construct 200,000 tuber capacity yam storage facility in Zaki Biam, a town popular for yam production.⁴⁵ Yet, this has not stopped the damages that are prevalent in the society.

4. Impacts on Public Health

Climate change has direct and indirect effects on public health in Nigeria. This is majorly championed by the environmental pollution or hazards infiltrated into the environment. Rising temperatures have increased the incidence of heat related illnesses, particularly in northern states such as Borno and Yobe. Flooding exacerbates the spread of diseases like cholera and typhoid by contaminating water supplies. And the changes effected by the climate have expanded the range of disease vectors such as mosquitoes, leading to higher rates of malaria in previously unaffected regions. In coastal eco-zones, windstorms and extreme rainfall, rising sea levels and floods can cause injuries, drowning, death, severe physical and mental trauma, particularly for citizens who live along major river deltas, on islands and in low-lying coastal areas 2015⁴⁶

The public health has also been affected by pollution exacerbated by human activities. And one of the major causes of pollution in Nigeria is the prospecting activities of oil companies.⁴⁷ The prospecting and exploration for crude oil has produced increased environmental hazards thereby

⁴⁴ Ikem, 'Prospects of food self-reliance in Nigeria'(note 39).

⁴⁵ Ibid

⁴⁶ Abdulkadir, and others, 'Climate change and its implications on human existence in Nigeria (note 4); see also, Amanchukwu, and others, 'Climate change education in Nigeria' (note 5).

⁴⁷ Ibid

endangering public health. According to research, the health implications of pollution in the society are very obvious because environmental pollution destroys the physical, mental, and social wellbeing of man.⁴⁸

5. Impacts on Energy Sector

According to Ebele and Emodi,⁴⁹ climate change is expected to negatively impact the already limited electrical power supply in Nigeria, through impacts on hydroelectric and thermal generation. This type of power generation is sensitive to the amount of, timing and geographical pattern of precipitation; and to temperature. Lower rainfall in the north reduces the availability of trees and biomass for fuel, which affects hydroelectric output.⁵⁰ Reduced river flow and higher temperature also reduces the capability of thermal electric generation as higher temperature reduces transmission capacity. Drought, on the other hand, also leads to higher evapotranspiration that adversely affects water volume, thus reducing hydroelectric capacity (Ebele and Emodi, 2016; Amadi and Udo, 2015; BNRCC, 2011).⁵¹ The Kainji Dam hydropower project in central Nigeria has similarly been affected. For example, the extended drought, has undermined the effectiveness of the dam, thereby resulting in much lower power supply than expected.⁵²

⁴⁸ ibid

⁴⁹ NE Ebele, and NV Emodi, 'Climate change and its impact in Nigerian economy' *Journal of Scientific Research & Reports*, (2016) 10(6), 1-13.
<<http://www.journaljsrr.com/index.php/JSRR/article/view/21917/40737>> accessed 27th December 2024.

⁵⁰ Ibid

⁵¹ SO Amadi and SO Udo, 'Climate change in contemporary Nigeria: An empirical analysis of trends, impacts, challenges and coping strategies.' *IOSR Journal of Applied Physics*, (2015) 7(2), 1-9.
<<http://www.iosrjournals.org/iosr-jap/papers/Vol7-issue2/Version-3/A07230109.pdf>> accessed 22nd December 2024.

⁵² Ebele and another, 'Climate change and its impact in Nigerian economy' (note 48).

In coastal and rainforest zones in the south of Nigeria, increased rainfall intensity stemming from climate change, is also expected to adversely affect power generation. Damage or destruction of transmission lines and substation equipment, due to sea level rise, erosion, flash floods and other extreme weather events, can disrupt service.⁵³ These same effects of climate change, in addition to high winds and heavy storms, can create risk for oil and gas investment in Nigeria's coastal and offshore areas. Also, the use of energy is also affected by climate change. Temperature increases are likely to increase the demand for electric fans and air conditioners, which use a lot of electrical energy (Amadi and Udo, 2015).⁵⁴

4.4. The Quest for Environmental Justice in Nigeria

The grappling and severe environmental and socio-economic impacts of climate change has sparked the growing quest for environmental justice, as affected groups demand equitable policies, accountability, and sustainable solutions. The concept of environmental sustainability and the need for environmental justice for the victim of environmental hazards has been given widespread global recognition.⁵⁵ These are backed up by legal and institutional frameworks carefully intensified to provide environmental justice for victims of the environmental hazards emanating from harmful human activities.⁵⁶

Nigeria being a developing country is striving strenuously to attain sustainable economic growth. This quest has led to series of harmful environmental abuses emanating from harmful human

⁵³ Ibid.

⁵⁴ Amadi and another, 'Climate change in contemporary Nigeria' (note 50).

⁵⁵ Abdul Kadir Jaelani and Muhammad Jihadul Hayat, 'The Proliferation of Regional Regulation Cancellation in Indonesia', *Journal of Human Rights, Culture and Legal System*, 2.2 (2022), 121–38 <<https://doi.org/https://doi.org/10.53955/jhcls.v2i3.55>> accessed 3rd January 2025.

⁵⁶ A Mumeen Yusuf and others, 'Application of Environmental Isotopes in Sustainability Assessment of the Groundwater Resources of Lagos Coastal Basin (LCB), South-West, Nigeria', *Groundwater for Sustainable Development* (2020) <<https://doi.org/10.1016/j.gsd.2021.100721>> accessed 3rd January 2025.

activities. Over the years, several communities have encountered severe environmental hazards such as land and river oil pollution, pollution from industrial waste, flooding, air pollution, indiscriminate dumping of toxic refuse, particularly in the Niger Delta region of Nigeria, etc. Despite the alarming losses caused by environmental hazards occasioned by human activities, the predators seem to be untouched by the wipe or stroke of the laws and institutional bodies in Nigeria as regards environmental sustainability.⁵⁷

These continuous hazards experienced by the vulnerable communities is a mockery of Nigeria's environmental laws and questions Nigeria's international commitments to maintain environmental justice. The exacerbated negative impacts of the environmental hazards leave one to ask whether there is heightened environmental injustice instead of environmental justice. This is because the economic and social inequality, unrestrained industrial activities and environmental degradation, weak governance and enforcement of environmental policies, etc, are obvious drivers of environmental injustice.

Apart from vulnerable regions and communities, vulnerable populations such as farmers, fishers, the elderly, women, children, etc, bear the brunt of environmental injustice due to their low adaptive capacities. The exacerbated negative impacts of climate change continue to affect women more (when it comes to agriculture) because of the cultural division or roles between men and women. A large percentage of women are poor farmers who rely primarily on small scale and rain-fed agriculture. Thus, disruptions in agricultural activities caused by environmental hazards will undermine their livelihood and increase their dependency on the

⁵⁷ Paul Atagamen Aidonjio, 'Environmental Hazard: The Legal Issues Concerning Environmental Justice in Nigeria,' *Journal of Human Rights, Culture and Legal System* (2023) Vol.3(1)17-32. <<https://doi.org/10.53955/jhcls.v3i1.60>> accessed 3rd January 2025.

male counterparts and increase the level of poverty in the society.⁵⁸ Moreso, the vulnerable communities suffer marginalisation as they are neglected despite the blunts they suffer from the environmental hazards exacerbated by the predators who escape the stroke of the law.

Pursuant to the above, the quest for environmental justice thus seeks to redefine the traditional environmental movements by incorporating the concerns of minorities within the environmental policy decision making. Thus, the main thrust of environmental justice in Nigeria is a shift in focus from the environment to the people. It underscores the need for environmental protection not to be planned within a vacuum and for environmental goals to take into account social, political and economic realities in environmentally devastated and dislocated regions like the Niger Delta of Nigeria.⁵⁹ The quest is a call to protect the right of victims of environmental injustice to receive full compensation and reparations for damages as well as quality health care and affirmed the need for urban and rural environmental policies aimed at cleaning up and rebuilding cities and provide fair access for all the full range of resources which is lacking in the case of Nigeria.⁶⁰

4.5. Efforts made to achieve Environmental Justice

Despite the laudable impacts of climate change and environmental hazards, efforts have been made to achieve environmental justice even though they are not weighty. These efforts include but not limited to the following:

⁵⁸ According to Nnadi et al, in Anambra in Southeast Nigeria, for example, women farmers are more vulnerable to the changes in climate than men as they supply most of the labour required on farms, in addition to managing their own. Most of the women in the rural setting who are into food production are also affected with respect to the availability of wood which are affected by flood and erosion.

⁵⁹ KBO Ejumudo, 'The Democracy/Environmental Justice Challenges in Nigeria's Niger Delta and the Developmental Leadership and Governance Culture Imperative' *Journal of Economics and Sustainable Development* (2014) 5 (15)113.

⁶⁰ Ibid

1. Government policies and initiatives.

The Nigerian government has initiated policies and programs aimed at mitigating climate change and promoting environmental justice. These includes the Great Green Wall Initiatives to combat desertification in northern Nigeria⁶¹ and the National Adaption Strategy and Plan of Action for Climate Change (NASPA-CCN), which focuses on reducing vulnerability to climate change. The Act articulates the country's climate change adaptation objectives and principles, guiding resilience-building actions and facilitating the implementation of priority adaptation activities.

Meanwhile, the Government of Nigeria has updated its Nationally Determined Contribution (NDC) in 2021 in support of the United Nations Framework Convention on Climate Change, Paris Agreement, which establishes an unconditional contribution target for reducing greenhouse gas emissions by 20 percent below the business-as-usual emissions scenario by 2030, and a conditional target of 47 percent greenhouse gas emissions reduction below 2018 emissions levels, contingent on international support. The 2021 NDC update included emissions reductions from the waste sector for the first time, covered the water resources sector, and promoted other efforts to reduce emissions from agriculture, forestry, and land use.⁶²

The National Council on Climate Change—established in 2021 by the Nigeria Climate Change Act— mainstreams climate change actions that seek to lower the country's greenhouse gas emissions. The existence of the Petroleum Industry Act of 2021 has been helpful in regulating the petroleum industry. Meanwhile, Nigeria's National Adaptation Plan Framework, adopted a year earlier in 2020, Finally, the Nigeria Energy Transition Plan outlines Nigeria's commitment

⁶¹ The Great Green Wall Experience in Nigeria <<https://gef6.globelegislators.org/nigeria/the-great-green-wall-experience-in-nigeria#:~:text=In%20Nigeria%2C%20the%20GGW%20Initiative,jobs%20created%20for%20the%20inhabitants>> accessed 3rd January 2025.

⁶² Ibid

to carbon neutrality by 2060 across five key sectors—power, cooking, oil and gas, transport, and industry.⁶³

2. Legal Aids and Community Movements

Communities affected by oil pollution and other environmental injustices have sought legal redress through the instrumentality of the court, both domestically and internationally. For instance, the Ogoni people of Rivers State successfully brought attention to oil pollution through the Ogoni Nine Movement and the UNEP Environmental Assessment of Ogoni land.⁶⁴ Also, cases against multinational corporations like shell have been filed, demanding compensation and environmental restoration.⁶⁵

3. Advocacy by Civil Society Organisations or Non-Governmental Organisations

Non-governmental organisations (NGOs) and activists are raising awareness and advocating for policies to address environmental injustices. The Niger Delta has been rife with environmental pollution and armed conflicts. Professor Ikelegbe in his study of civil society in the Niger Delta states that civil groups ‘have reconstructed the [Niger Delta] agitation into a broad, participatory, highly mobilised and coordinated struggle and redirected it into a struggle for self-determination, equity and civil and environmental rights.’⁶⁶ Groups like the Environmental Rights Action (ERA) have been instrumental in pushing for corporate accountability in the Niger Delta.

⁶³ Nigeria Climate change country profile, USAID <https://www.usaid.gov/sites/default/files/2024-10/2024-USAID-Nigeria-Climate-Change-Country-Profile_0.pdf> accessed 4th January 2025.

⁶⁴ ‘Environmental Assessment of Ogoni land’ UN Environmental Program <https://www.unep.org/resources/report/environmental-assessment-ogoniland#:~:text=A%20major%20new%20independent%20scientific,health%20protection%20and%20environmental%20protection>. Accessed 10th January 2025.

⁶⁵ See *Nwadiaro v Shell Petroleum Development Co.Ltd* (1990) 5 NWLR (Pt.445) 657.

⁶⁶ Augustine Ikelegbe, ‘Civil Society, oil and conflict in the Niger Delta region of Nigeria: ramifications of civil society for a regional resource struggle,’ *Journal of Modern African Studies* 39 (3) (2001): 437-469.

NGOs have played major roles in the awakening of the international community to the plight of victims of environmental degradation in Niger Delta region. This was particularly evident in the Ogoni crisis, where an NGO/Community Based Organisation (MOSOP in coalition with both local and international NGOs) brought to the attention of the world, the human rights violations and environmental degradation in that part of Nigeria.⁶⁷ Shell's major multinational corporation operating in Ogoni was affected by MOSOP's⁶⁸ action. Shell revised its code of conduct to include human rights. Shell (and other MNCs – Multinational companies) now regularly organizes training and consultation with stakeholders in the Nigerian oil and gas sector.⁶⁹

Moreso, NGOs influence has been exerted via the use of litigations, publication, lobbying of the MNCs and the State, public awareness campaigns amongst other strategies.⁷⁰ NGOs have been very proactive in litigations especially in areas that concerns oil pollution, environmental degradation and human rights. Two of such NGOs include the Social and Economic Rights Action Centre (SERAC) and the Centre for Economic and Social Rights.⁷¹

4. International support and climate change finance Nigeria has sought international assistance to fund climate mitigation and adaptation projects.⁷² Accessing global climate

⁶⁷ In the case Ogoni people of the Niger Delta, they were alleged to be victimised by the Nigerian government and oil multinational companies operating in the Niger Delta.

⁶⁸ 'MOSOP' means Movement for the Survival of Ogoni People.

⁶⁹ Evaristus Oshionebo, 'Transnational Corporations, Civil Society and social responsibility in Nigeria's oil and gas industry,' *African Journal of International and Comparative Law* 15 (1) (2007): 107-129.

⁷⁰ Evaristus Oshionebo, 'Transnational Corporations, Civil Society and social responsibility in Nigeria's oil and gas industry,' *African Journal of International and Comparative Law* 15 (1) (2007): 107-129. See also, Rhuks Ako and Eghosa O Ekhaton. 'The civil society and the regulation of the extractive industry in Nigeria.' 7 (1) (2016) *Journal of Sustainable Development Law and Policy* 183-203.

⁷¹ Ibid.

⁷² This has been achieved through international entities, such as multilateral development banks (MDBs), donor countries (ODA), and international organisations, to support climate change mitigation and adaptation efforts in developing countries. See UKNIAF (United Kingdom Nigeria Infrastructure Advisory Facility, 'Climate Finance in Nigeria: An introduction' <<https://ukniatf.ng/wp-content/uploads/2024/07/Climate-Finance-in-Nigeria-An-Introduction.pdf>>

finance mechanism like Green Climate Fund (GCF) is critical for implementing large-scale solutions.

4.6 Challenges in Achieving Environmental Justice in Nigeria

It suffices to state that, Nigeria seems to be in the frontline of the pursuit of environmental justice within its territory, and has set up several agencies and institutions to facilitate environmental justice. However, despite the efforts, there are several challenges that militate against its successful implementation of environmental justice. These challenges include but not limited to the following:

1. Non-constitutional recognition of the right to a clean and healthy environment in Nigeria

The Constitution of Nigeria is the *frons et origo*, the grund norm, the life wire of every other law applicable in Nigeria. thus, any law that exists in Nigeria jurisdiction that does not draw its strength from the constitution is declared void by virtue of its inconsistency with the constitution.⁷³ Chapter 4 of the constitution provides for the fundamental rights of citizens in the country which entitles them to institute legal proceedings for enforcement of the right in case of violation. The court which is pride as the last hope of common man ensures the enforcement of the right after adjudication so long it is recognize in the constitution as there can be no violation where there is no prohibition.

Addressing the issue of right to a healthy environment and environmental justice, Paul Atagamen Aidonoji⁷⁴ stated in his study that for there to be environmental justice in every given society, there must be a proper and effective legal framework that deter and punish an individual from polluting or causing an environmental hazard. Nigeria has flourished to an extent in the

⁷³ Section 1(1) of the Constitution.

⁷⁴ Aidonojie, 'Environmental Hazard: The Legal Issues Concerning Environmental Justice in Nigeria,' (note 56).

institutional frameworks, however, when it comes to right to a healthy environment which guarantees environmental justice for victims of environmental hazards, the supreme law of the land (the Constitution)⁷⁵ is silent. This makes a caricature of Nigeria's institutional frameworks and its obligation to the international treaties that recognises environmental justice.

Section 20 of the Nigeria Constitution provides for the right to safe and a healthy environment contained in chapter II of the Nigeria Constitution, however, this has been made a caricature by section 6(6)(C) of the Nigeria Constitution.⁷⁶ The reason for the submission is that, section 20 is contained in chapter 2 classified under the Fundamental Objectives and Directive Principles of State Policy and as such, it is rendered non-justiciable by the provision of section 6(6)(c) of the constitution. The section ousts the jurisdiction of the court to hear or determine any matter flowing from any provision in chapter 2 of the Constitution. This invariably means that no citizen can seek redress under the provision of section 20 of the Constitution.⁷⁷

Due to the lack of express provision of the right to a healthy environment in the constitution, smart legal practitioners in ensuring that there is environmental justice in Nigeria, are taking the advantage of linking the right to a clean and healthy environment to the right to life contained in chapter four of the Nigerian constitution.⁷⁸ One of the cases that mirrors this is the renowned case of *Jonah Gbemre v. Shell Petroleum Development Company of Nigeria Limited*⁷⁹ which is a case of environmental pollution of communities within the Niger Delta region, claiming many lives and livelihood of the community. The trial court had no choice but to succumb to the fact

⁷⁵ See section 1(1) of the 1999 Constitution of the Federal Republic of Nigeria, see also the case of General Sanni Abacha v Chief Ganni Fewehinimi (2000) 4 SCN 401.

⁷⁶ Marta Conde, 'Resistance to Mining: A Review', *Ecological Economics*, 132 (2017), 80–90 <https://doi.org/10.1016/j.ecolecon.2016.08.025>

⁷⁷ Ibid

⁷⁸ Ibid

⁷⁹ (2005) AHRLR 151

that environmental hazard that could lead to taking the life of any individual is condemnable. This is concerning the fact that chapter four of the Nigerian constitution guarantees the right to life.⁸⁰ This commendable decision of the court was reaffirmed in in the case of *Oil Pollution Watch v. NNPC*.⁸¹

It is generally submitted that the concept of environmental justice cannot be better attained in Nigeria if there is no amendment to the Nigeria constitution in removing the gridlock concerning environmental justice.⁸²

2. Lack of political will and weak Policy implementation

It suffice to say that Nigeria has ratified some international treaties as it relate to environmental right and also enacted some environmental laws that assert the right to a clean and healthy environment, however, the implementation of the laws seem to pose challenges to environmental justice in Nigeria.⁸³ For instance, Nigeria has developed policies to address climate change, such as the National Adaptation Strategy and Plan of Action on Climate for Nigeria (NASPA-CCN)⁸⁴, but the weak governance and lack of political will hinders their effective implementation. The absence of political will has also affected the effectiveness of the Climate Change Act through the delay or non-domestication of the Act in various regions despite it being passed in 2021. Also,

⁸⁰ Yusuf Saad Sani and others, 'Economic Growth and Environmental Degradation in Developing World: Evidence from Nigeria (1981–2019)', *Materials Today: Proceedings*, 49 (2020), 3177–80 <https://doi.org/10.1016/j.matpr.2020.11.310>

⁸¹ Also known as *Centre for Oil Pollution Watch V. NNPC* [2019] 5 NWLR (Pt.1666) 518

⁸² Ibid

⁸³ Aliyu Zakari-Jiya and others, 'Pharmaceutical and Personal Care Products as Emerging Environmental Contaminants in Nigeria: A Systematic Review', *Environmental Toxicology and Pharmacology*, 94.June (2022), 103914 <<https://doi.org/10.1016/j.etap.2022.103914>> accessed 5th January 2025.

⁸⁴ This was published by the Federal Ministry of Environment in June 2020 and it articulates a framework for different sectors of economy to work together to address Nigeria's climate change challenges. It proposes a sectoral governance approach and defines specific roles and responsibilities for private sector, civil society, and national subnational government. It also seeks to align other existing economic, national development, and climate resilience policies with the country's climate goals.

often times, political actors priorities short-term economic gains over environmental sustainability. This lack of prioritization is exacerbated by the influence of vested interests, including those with fossil fuel industry, which resist policies that may impact their profits or operation.

3. Corruption and bureaucratic inefficiencies:

Corruption, bureaucratic inefficiencies and lack of enforcement mechanisms contribute to the continued marginalization of vulnerable populations and delay progress towards environmental justice. This position was further confirmed by Ayodeji and Okwechime, who in their study found that there is incidence of oil induced pollution emanating from multinational oil companies. They further stated that though some of these companies indulging in oil pollution had sort to compensate and bring development to the affected communities in Niger delta, the greed, insincerity and corrupted stakeholders within the region of the affected communities had truncated the benefit emanating from the multinational oil companies.⁸⁵

4. Inadequate climate change adaption and mitigation strategies

It suffice to say that Nigeria's adaption strategies to climate change are often underfunded and poorly coordinated. These inadequate funding poses a significant barrier to the effective achievement of environmental justice in the vulnerable regions and the country in general. Nigeria's limited budget allocations for environmental initiatives constrain the government's ability to fulfill its obligation to guarantee environmental justice as priority is mostly given to infrastructure development, healthcare, and education.

Also, the country relies heavily on fossil fuels, which hampers efforts to transition to renewable energy and low-carbon development. Though Nigeria has met the requirements for participating

⁸⁵ Sijie Zhu and others, 'Soil Pollution Studies of Takum, Nigeria: The Use of Environmental Magnetic Properties, Elemental Analysis and Geostatistical Tools', *Building and Environment*, Ii, 2022, 109181 <<https://doi.org/10.1016/j.pce.2023.103377>> accessed 4th January 2025.

in Clean Development Mechanism (CDM) which enhances the transition to renewable energy and low-carbon development and has been making efforts towards achieving it. However, there is still the problem of incapacity to ensure the achievement of the targets on green renewable energy.⁸⁶ Moreover, communities most affected by climate change – such as farmers, fishers, and indigenous groups- are rarely included in the design or implementation of adaptation programs, limiting their effectiveness and inclusivity.

5. Challenge of access to environment justice – *locus standi*

It is trite that access to justice includes both the power of courts to review government actions and omissions and the right of citizen to appeal to the courts for this review. This enables individuals and NGOs to enforce domestic environmental law and may help them shape domestic environmental policy⁸⁷ since the court is considered as a vital institution to achieving environmental justice. However, this access has been restrained by the inhibition of *locus standi*⁸⁸ which in most cases is rooted in technicalities and deprives the victim of justice particularly in environmental cases of public nuisance and trespass which gives the right to sue to the Attorney General and proof of actual physical interference and damage respectively. A private individual with respect to nuisance thus does not have the *locus standi* to sue in public

⁸⁶ NC Ole, 'The Paris agreement 2015 as a primer for developing Nigerian off-grid solar electricity' *African. J. Int. Comp. Law.* 26. 3. pp. 426-451, 2016.

⁸⁷ MT Ladan, *Trend in Environmental Law and Access to Justice in Nigeria*, LAP LAMBERT Academic Publishing (2012)P. 35

⁸⁸ Locus standi is considered to be the right of a party to an action to be heard in a litigation before a court of law or tribunal or the legal capacity of instituting or commencing an action in a competent court of law or tribunal without any inhibition, obstruction or hindrance. See *Alhaji Adetoro Lawal v Bello Salami and Another* (2002) 2 NWLR Pt. 752 P. 687 see also *Babatunde Adenuga and 5 others v J. K. Odumeru and 7 others* (2003) 8 NWLR Pt. 821 P. 163. *A G Akwalbom State and Another v O. G. Essien* (2004) 7 NWLR Pt. 872 P. 288

nuisance unless the interference with the public right is such that some private right of his, is at the same time interfered with in a way that is over that suffered by the public.⁸⁹

In *Amos and 4 others v Shell B.P Nig. Ltd.*,⁹⁰ the Plaintiff claimed damages from the defendant (amongst others) for public nuisance. They alleged that the defendant made a large earth dam across their creek during oil mining operations. They also alleged that this resulted in the flooding of the upstream, while downstream was dry. Consequently, the plaintiffs were put at a disadvantage with respect to the use of waterways for navigating barges, rivers crafts, canoes, disruption of commercial activities, use of water for drinking and other commercial purpose. The trial court and Supreme Court found that the conduct of the defendant amounted to public nuisance. However, there was no evidence from the plaintiffs showing that they suffered damages over and above those suffered by the general public. The action was therefore dismissed. This over reliance on locus standi by the court has inhibited victims of environmental injustice.

6. Poverty

Poverty is perhaps one of the most important socio-economic factors constituting a hindrance to achieving environmental justice in Nigeria. This is glanced both from lack of adequate funds by the government to implement climate change adaptation policies and that of the citizens inability to command basic necessity of life that can help them adapt better. This has also affected environmental litigation cases in Nigeria as most victims finds it difficult to pay for the services of a legal practitioner in order to pursue his case. Poverty has also affected most persons in coping with the adaption strategies to climate change such as transition to renewable energy and other adaption facilities.

⁸⁹ *Dumez (Nig) Ltd v Ogboli* (1972) ALL NLR P. 241

⁹⁰ (1977) 6 S. C. P. 109

7. Inappropriate attitude of the judiciary to environmental claims

The inappropriate attitude of the judiciary is evident in the indiscriminate delay in the administration of justice⁹¹, award of damages which are mostly in general character, and in some corrupt practices. The case of *shell Petroleum Development Co. Ltd v Teibo*⁹² is illustrative of the court's attitude when it comes to award of damages to victims. In the case, the plaintiff claimed the sum of N64 million as general damages from the defendant for oil spillage into nun river which serve as a source of drinking water, fishing and desecration of their juju. Despite the fact that the plaintiff was able to prove the damage alleged by calling experience and knowledgeable expert witnesses, the court awarded a paltry sum of N6 million to the community. These shelter in technical rule of procedure by the judiciary has sacrificed substantial justice on the altar of their inadequacies. And unfortunately, Nigerian judiciary often glorifies monetary value emanating from multinational oil companies over the safety of the Nigerian environment.⁹³

8. Lack of environmental awareness and education

Lack of awareness and education of environmental justice and climate change among citizens and policymakers impedes the quest for environmental justice. The lack of comprehensive understanding of most Nigerians of their right to a healthy environment has made achieving environmental justice difficult to attain. This has similarly affected most policymakers whose ignorance of the concept of environmental justice and the indiscriminate environmental injustices in the country stifles the chances of environmental justice. It is, hence, important to note that without widespread understanding of these issues that pertains to the environment,

⁹¹ A good case that illustrates this is the case of *Nwadiaro v shell Petroleum Development Co. Ltd* (1990) 5 NWLR Pt. 150 P. 322 which experienced delay from 1966 to 1988.

⁹² (1996) 4 NWLR Pt. 445 P. 657

⁹³ Kigho Moses Oghenejoboh and others, 'Value Added Cassava Waste Management and Environmental Sustainability in Nigeria: A Review', *Environmental Challenges*, 4.April (2021), 100127 [tps://doi.org/10.1016/j.envc.2021.100127](https://doi.org/10.1016/j.envc.2021.100127)>. accessed 4th January, 2025.

grassroots advocacy and public pressure on governments and corporations to address environmental injustices remains limited.

4.7 Conclusion

In summary, the negative impacts of climate change in Nigeria are profound and far-reaching, affecting various aspects of the environment, economy, and society. Despite the existence of legal, institutional, and policy frameworks, climate change continues to worsen at an alarming rate, exacerbating vulnerabilities across different regions of the country. The environmental challenges disproportionately affect marginalized communities, further deepening socio-economic inequalities and raising critical concerns about environmental justice.

This chapter has explored the diverse ways in which climate change negatively impacts Nigeria, with a particular focus on regional variations and socio-economic consequences. It has also examined the pressing need for environmental justice, the government's response, and the persistent challenges hindering equitable climate action. Addressing these issues requires not only stronger enforcement of environmental policies but also a commitment to inclusive and sustainable development strategies that prioritize the well-being of vulnerable populations. The need for a just and effective climate response in Nigeria has never been more urgent.

CHAPTER FIVE

CONCLUSION:

SUMMARY OF FINDINGS, RECOMMENDATIONS, CONTRIBUTION TO TO KNOWLEDGE, AND CONCLUSION

5.1. Summary of Findings

In the exploration of the multifaceted impacts of climate change and the quest for environmental justice in Nigeria, this study found out the following:

1. Climate change is one of the fastest-growing global problems as it constitutes one of the greatest threats not only to human existence but to substantial human development¹, as it is regarded as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable periods."²
2. The concept of Environmental justice is concerned with shifting the focus of environmental protection towards taking into account the needs of the poorer society that have suffered the environmental consequences of industrialization and other environmental hazards more than others.³
3. Nigeria like many other countries, faces significant challenges of climate change and in achieving environmental justice. However, unlike other developed countries that are

¹ IK Anthony, *Nigeria and the Question of Climate Change* Ekpoma Review 2022

² Article 1(1) of the United Nations Framework Convention on Climate Change (UNFCCC). (1992). <https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.p> accessed 9th of November 2024.

³ G Gadgil, E and Guha, "Ecological Conflicts and the Environmental Movement in India" in D. Ghai (ed) *Development and Environment-Sustaining People and Nature* (Macmillan, New Delhi 2004) P.53.

coping with the negative impacts of climate change, Nigeria is at great risk in diverse spheres particularly considering that it lacks sufficient infrastructures for climate change adaptation. Although Nigeria has a strong economy relative to other countries in Sub-Saharan Africa, a significant part of its population and economy are linked to climate-sensitive activities, such as gas flaring, rain-fed agriculture, inefficient transport systems, etc.⁴

4. There are extant legal frameworks, international and domestic, for addressing climate change. This included the international frameworks: Stockholm Conference 1972, Vienna Convention for the Protection of the Ozone Layer 1985, Montreal Protocol 1987, UNFCCC, Paris Agreement, etc; and the Domestic frameworks: the Constitution of the Federal Republic of Nigeria, Petroleum Act, Associated Gas Reinjection Act, Climate Change Act, etc. And it was discovered that they had a general challenge of enforcement and compliance.
5. Environmental degradation, reduction in agricultural productivity and economic inequality, food insecurity, forced migration and displacement, insecurity and conflict, public health challenge, flooding, etc, were vital negative impacts of climate change which has led to the quest for environmental justice for the vulnerable population particularly in the northern region and the southern region (the Niger Delta in particular).
6. Nigerian government and citizens made efforts to achieve environmental justice, such as the institution of government policies and initiatives, legal aids and community movements through the instrumentality of the court, advocacy by civil society organisations, international support and climate change finance, etc. However, despite the

⁴ EO Oladipo, 'An Indication of Abrupt Change of Rainfall and its Potential Impact on Energy in Nigeria.' c In: Umolu, JC (Ed.) *Global Climate Change: Impact on Energy Development*. (Damtech Nigeria Limited, Nigeria).

efforts made, there have been challenges to achieving environmental justice such as the non-constitutional recognition of the right to a clean and healthy environment in Nigeria, weak governance and policy implementation, poverty, inappropriate attitude of the court in the quest for justice, illiteracy, etc.

7. There is an urgency of comprehensively addressing the multifaceted challenges and negative impacts of climate change and the quest for environmental justice in Nigeria. this issue extends beyond environmental concerns, encompassing economic and safety considerations.

The above insights serve as a critical backdrop for the recommendations that will be provided in this chapter, which will seek to mitigate the negative impacts of climate change and encourage environmental justice in Nigeria for a more sustainable and environmentally conscious future.

5.2 Recommendations

1. The Nigeria's constitution should be reviewed to make environmental rights and protection provided chapter II justiciable. The government should consider environmental health as a vital responsibility which they owe to the citizens that brought them to power. This will furthermore be enhance access to environmental justice and remove the clog that comes with *locus standi* and having to use other alternative methods before the environmental predators can be brought under the stroke of the law.
2. Environmental pollution should be considered as a strict liability offence: the Nigerian legislation should endeavor to review the various legal frameworks on the environment to capture any form of environmental pollution as a strict liability to dispense with the requirements of burden of proof which more often than not poses a challenge to achieving environmental justice through the instrumentality of the court.

3. Change of judicial attitudes to environmental cases: Judges ought to change the present realities of environmental litigation by adopting functional approaches devoid of bureaucratic technicalities. This is to ensure quick dispensation of justice. Hence, Nigeria's judiciary must ensure to give credence to the substance of every given environmental case over technicalities
4. Strengthen environmental policies and enforcement: as a way of strengthening environmental policies, environmental regulations such as the Environmental Impact Assessment (EIA) Act should be updated to align with international best practices. Also, agencies like the National Environmental Standards and Regulations Enforcement Agency (NESREA) should be empowered with funding and autonomy to ensure compliance. And there should be accountability mechanisms set in place to hold corporations and individuals accountable for environmental violations, especially in the oil and gas sector.
5. Promote renewable energy and green technology: there should be investment in renewable energy such as solar, wind, and hydroelectric projects to reduce reliance on fossil fuels and provide sustainable energy solutions. There should also be incentives for businesses and households to adopt green technologies, such as panels and energy-efficient appliances. And most importantly, communities should be provided with off-grid renewable energy solutions, enhancing access to electricity and reducing deforestation.
6. Strengthen climate change adaptation and mitigation strategies: Nigeria's climate adaption strategies should be updated to include region-specific responses like drought-resistant crops in the north, flood defenses in the south, etc. There should likewise be an

investment in resilient infrastructure to withstand climate-related disasters in the country. And afforestation and reforestation programs should be expanded.

7. Foster community engagement and participation: Indigenous and rural communities should be involved in climate action planning and decision-making. Nationwide campaigns to educate citizens on climate change impacts and how they can contribute to solutions should be launched. Similarly, support for vulnerable groups like women, children, and marginalized communities should be prioritized.
8. Leverage international cooperation and funding: Although Nigeria has made efforts to utilize international corporations. It should, however, take it more seriously by partnering with global organisations like UNEP, and the World Bank, and collaborating with neighbouring countries to address transboundary climate challenges like the dying Lake Chad.
9. Build institutional capacity and transparent schemes: training programs for government officials and local leaders on climate adaptation and environmental management should be offered to build their capacity. Also, the inter-agency coordination should be improved to implement climate policies effectively. And very importantly, transparent schemes should be created to reduce corruption in environmental and climate-related programs.

5.3 Contribution to knowledge

Considering the peculiar nature of climate change and its negative impact, this study bridges the gap between climate change and environmental justice. It highlights the disproportionate effects of climate change on marginalized and vulnerable populations, offering a localized framework for understanding environmental inequalities

Also, unlike many global studies, this study focuses specifically on Nigeria, showcasing how climate change manifests in various regions like the north, the south, and the oil pollution in the Niger Delta. It thus contributes to localizing data and insights that can guide tailored adaptation and mitigation strategies.

Moreso, this study highlights policy and implementation gaps. By critically evaluating existing environmental policies, the study identifies gaps in Nigeria's legal frameworks, emphasising the need for stronger enforcement and integration of environmental justice principles. It provides comprehensible recommendations for policymakers, making it a practical resource for improving governance in climate adaptation and mitigation.,

Furthermore, the study amplifies the voices of communities most affected by climate change and advocates for their inclusion in the decision-making process. It is an inspiring research piece as it identifies critical areas for further research.

Most importantly, this study recommends the Nigeria's constitution should be reviewed to make environmental rights and protection provided in chapter II justiciable. The government should consider environmental health as a vital responsibility which they owe to the citizens that brought them to power.

5.5 Conclusion

The issue of climate change is a multifaceted challenge with deep-rooted negative implications on the environment, the socio-economy, public health, and public safety. It is a global challenge that is mostly felt by developing countries as a result of inadequate infrastructures for climate change adaptation strategies. Thus, our exploration of this complex issue has shed light on several critical findings that necessitate urgent attention and action.

Climate change, which is a change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable periods, is not merely an environmental concern; but one of the greatest threats to sustainable human development with deep-rooted socio-economic and safety considerations. Its effects have persisted in Nigeria due to the country's inadequate coping strategies and its activities that are climate change sensitive such as gas flaring, deforestation, oil exploration, etc. These effects exacerbate environmental injustice on vulnerable populations who suffer the brunt of the biting negative impacts.

The legal and regulatory frameworks in place to address the impacts of climate change have shown significant shortcomings. As they fail to efficiently combat the environmental injustices suffered by the vulnerable population. Though efforts have been made to achieve substantial environmental justice in Nigeria. However, there have been hurdles of challenges to so doing such as the non-constitutional recognition of the right to a clean and healthy environment in the country, lack of political will and weak policy implementation, greed and corruption within the various sectors that regulate climate change, discouraging attitude of the court towards environmental cases, etc.

In light of these findings, a comprehensive set of recommendations has been formulated to address the challenges posed by climate change to achieve substantial environmental justice in Nigeria. These recommendations emphasize the constitutional recognition of the right to a clean and healthy environment in Nigeria, consideration of environmental pollution as a strict liability offense, resuscitation and strengthening of environmental policies and enforcement, promotion of renewable energy and green technology, strengthening of climate change adaption and mitigation strategies, encouragement of community participation in decision making, etc.

In conclusion, addressing the negative impacts of climate change and analyzing the quest for environmental justice in Nigeria requires a holistic approach that takes into account the intricate interplay of not just the environment but also the people affected by the exacerbated impacts of climate change. By implementing these recommendations, Nigeria can move towards a more sustainable human-conscious future, mitigating the adverse effects of climate change and the recurring environmental injustices in the country, and fostering responsible resource management.

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