CLIMATE ACTION IN NIGERIA: A REVIEW OF SUSTAINABLE DEVELOPMENT GOAL 13 IMPLEMENTATION AND BARRIERS

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NOVEMBER 2025

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A PROJECT WORK WRITTEN IN, AND SUBMITTED TO THE FACULTY OF LAW, UNIVERSITY OF BENIN, IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF LAWS (LL.M) OF THE UNIVERSITY OF BENIN, BENIN CITY.

NOVEMBER 2025

CERTIFICATION

I, **Ogheneyomega Divine OTOBOR**, with Matriculation Number **PG/LAW0802150**, hereby certify that apart from references made to other people's works as duly acknowledged herein, this entire project is a product of my personal research, and has neither in part nor in whole been presented for another degree elsewhere.

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APPROVAL

We certify that this project work was completed and written by **Ogheneyomega Divine OTOBOR**, with Matriculation Number **PG/LAW0802150**, in partial fulfillment of the requirements for the award of the Master of Laws (LL.M) Degree of the University of Benin.

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DEDICATION

This Project is dedicated to God the father, God the son and God the Holy Spirit in whom I live, and from whom I derive my being; all credits to him for enabling the completion of this work.

ACKNOWLEDGEMENTS

I would like to extend my heartfelt gratitude to:

My parents, Prof Vincent & Mrs Helen Diakpomrere for their unwavering support, constant motivation and consistent assistance during this academic journey. My husband, Engr Dafe Otobor, for his concern and support. My project supervisor, Dr.(Mrs.) Irene Aigbe for her invaluable guidance, expertise and patience culminating in the realization of this work. My siblings- Saint Esq, Engr Ruro, Epiphany, Anointing and Covenant for their encouragement. My children, Dominic and Darlene for their innocent reminders to “go and do my assignment…”. Mrs Glory Obafemi for her exceptional typing skills with minimal errors, and her dedication to produce the work when it was required.

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TABLE OF ACRONYMS AND ABBREVIATIONS

ANCCE	-	Anthony Nyong Climate Centre Of Excellence.
CCA	-	Climate Change Act.
CCAS	-	Climate Change Adaptation Strategies.
CCMS	-	Climate Change Mitigation Strategies.
CCNN	-	Climate Change Network Nigeria.
CCPI	-	Climate Change Performance Index.
CIT	-	Company Income Tax.
COG	-	Centre of Government.
COP	-	Conference of Parties.
CRB	-	Climate Resilient Budgeting.
CSO	-	Civil Society Organization.
DCC	-	Department of Climate Change.
FMBEP	-	Federal Ministry of Budget and Economic Planning.
FME	-	Federal Ministry of Environment.
FMF	-	Federal Ministry of Finance.
FMP	-	Federal Ministry of Power.
FRLP	-	Fund For Responding To Loss and Damage.

GB	-	Green Budgeting.
GDP	-	Gross Domestic Product.
GEF	-	Global Environment Facility.
GHG	-	Green House Gases.
HCDF	-	Host Communities Development Fund
HCT	-	Hydro Carbon Tax.
HFC	-	Hydrofluoro Carbon.
LDCF	-	Least Developed Countries Fund.
IMCCC	-	Inter-Ministerial Committee on Climate Change.
INFF	-	Integrated National Financing Framework.
MDA	-	Ministries, Departments and Agencies.
MDG	-	Millennium Development Goals
MNC	-	Multinational Corporations.
MTEF	-	Medium – Term Expenditure Framework.
NAGGW	-	National Agency For The Great Green Wall.
NAP	-	National Adaptation Plan.
NBS	-	National Bureau Of Statistics.
NCCC	-	National Council on Climate Change.

NCCP	-	National Climate Change Policy.
NDC	-	Nationally Determined Contributions.
NEMA	-	National Emergency Management Agency.
NERC	-	Nigerian Electricity Regulatory Commission.
NESREA	`-	National Environmental Standards & Regulations Enforcement Agency.
NGO	-	Non-Governmental Organization.
NIHSA	-	Nigerian Hydrological Services Agency.
NISER	-	Nigerian Institute for Social and Economic Research.
NMDRA	-	Nigerian Midstream and Downstream Regulatory Authority.
NOSDRA	-	National Oil Spill Detection and Response Agency.
NPDDM	-	National Policy on Drought and Desertification Management.
NREEP	-	National Renewable Energy and Energy Efficiency Policy.
NSGBP	-	Nigerian Sovereign Green Bonds Program.
NUPRC	-	Nigerian Upstream Petroleum Regulatory Commission.
ODS	-	Ozone Depleting Substances.
OECD	-	Organization for Economic Cooperation and Development.
REA	-	Rural Electrification Agency.

SCCF	-	Special Climate Change Fund.
SDG	-	Sustainable Development Goals.
SRENP	-	Scaling Up Renewable Energy Project.
UNDP	-	United Nations Development Program.
UNFCCC	-	United Nations Framework Convention on Climate Change.
WCED	-	World Commission on Environment and Development

ABSTRACT

Climate change and sustainable development are currently topics of global repute. Anthropological activities aimed at achieving socio- economic advancement take a toll on environmental health culminating in climate change and threatening sustainable development. Climate change is possibly the sole glaring challenge confronting sustainable development. It is a problem with a nexus to civilization, industrialization and economic advancement. Hence, calculated action must be taken to address climate change. The 17 Sustainable Development Goals (SDG's) adopted by the United Nations General Assembly in 2015 cum Agenda 2030 represents a ray of hope, envisaging a world where environmental sustainability, equity and prosperity cohabit, in contrast to the current situation where the world wrestles with unprecedented challenges. This paper examines the machinery in place for attaining SDG 13 in Nigeria premised on taking action to combat climate change, progress made and inherent challenges to the actualization of SDG 13. It assesses the state of achievement of SDG 13 targets such as increase in resilience and adaptive capacity to climate related disasters in Nigeria, promotion of education and awareness, strengthening of human and institutional capacity with respect to climate change mitigation and adaptation, early warnings and impact reduction. The research methodology employed is the Doctrinal legal research method, referencing primary and secondary sources of law, online journals as well as online materials inclusive of data obtained from international websites, SDG Progress Reports and dashboards. The study comparatively analyses Nigeria's Climate Change Act 2021 with climate change Acts from Denmark and the United Kingdom. Pursuant to their positive rankings in the Climate Change Performance Index 2025, Nigeria can draw lessons from their climate change action. The paper finds inter alia, that climate change is occasioned by natural as well as anthropological unsustainable practices that exploit the environment; climate change has cross-sectoral impact in Nigeria beyond affecting environmental mediums; Nigeria has a multiplicity of framework to address climate change nationally and internationally; despite the fact that she does not experience a dearth of policies, gaps exist in implementation owing to a number of factors including insufficient funding to engage in impactful climate action, lack of coordination amongst government agencies, limited climate literacy and lack of political will of the government thereby prioritizing economic interests and relegating climate action aspirations to the realm of verbal platitudes. The study recommends inter alia, adequate funding; improved coordination amongst agencies; increased climate literacy; sincerity and political support for climate plans and programmes in order to achieve SDG 13 in Nigeria as well as the prioritization of environmental health by diversifying from extreme reliance on fossil fuel to drive the energy sector.

Keywords

Climate Governance, Adaptation and Mitigation, Finance, Implementation, Barriers.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background to the Study

Climate change is a priority of stakeholders and political decision makers all over the world today. Variations experienced in the behavior of the general climatic atmosphere of the planet are attributable to human actuations and also natural factors. Human or man-made causes stem from usage of fossil fuels like coal, natural gas and oil which process emits greenhouse gases into the atmosphere, other aspects of human interference with the environment such as bush burning, deforestation etc., impact climatic state as can be observed from global warming. Climate change is a problem closely linked to civilization, industrialization and attempts at achieving economic development[1].

Development implies "The ability of a people to apply cultural values to increase their choices". People and societies in general must choose paradigms that are sustainable over long periods of time so as to conserve available resources and spell positive outcomes for environmental health.[2]

The environment is crucial to the continued existence of biodiversity and the planet's survival. Occurrences such as global warming from man-made greenhouse gas emissions

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1 Ali Syed and Urooj Afshan Jabeen, 'Climate Change Impact on Agriculture and Food Security' Handbook of Research on Environmental Policies for Emergency Management and Public Safety (2018) 223 & 224 <https://www.igi-global.com/chapter/climate-change-impact-on-agriculture-and-food-security/195197?camid=4v1> accessed June 26th 2025

2 Ighodalo Bassey Akhakpe, 'Climate Change and Sustainable Development in Nigeria: Limitations and Opportunities ' Handbook of Research on Environmental Policies for Emergency Management and Public Safety (2018) 210 <https://www.igi-global.com/chapter/climate-change-and-sustainable-development-in-Nigeria/195196?camid=4v1 > accessed 25th June 2025.

occasion a pollution of the earth, which in turn threatens the subsistence of humans, biodiversity and indeed the environment at large.[3]

Spanning over the last few decades, climate conditions in Nigeria have experienced erratic changes owing to activities that compromise the atmosphere's quality. Activities like bush burning, deforestation, and emission of gases from vehicles have resulted in deleterious gases emitted beyond safe and permissible levels, causing global warming. These visible impacts of climate change threaten the attainment of sustainable development and its goals in Nigeria.[4]

Nigeria, the most populous country in Africa, with about half of its population experiencing penury, is very vulnerable to climate change. She relies on rainfall to yield agricultural productivity, which when absent or drastically reduced results in poor agricultural yield and desertification especially in areas in the North. Her dependence on fossil fuel in the energy sector and the exposure to rising sea levels facing its economic hub, Lagos, are also indicators of vulnerability.[5]

Climate change greatly affects Nigeria's growth outcomes, the financial sector, fiscal sustainability and retards economic progress. Extreme weather events which are frequent, impact growth, and revenue. Sea level rise would attract grave economic cost for Nigeria

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[3] Godwin Solomon Mmaduabuchi Okeke, 'The Politics of Environmental Pollution in Nigeria: Emerging Trends, Issues and Challenges' Handbook of Research on Environmental Policies for Emergency Management and Public Safety (2018) 300 <https://www.igi-global.com/chapter/the-politics-of-environmental-pollution-in-nigeria/195202?camid=4v1> accessed 2nd July 2024.

[4] S.O Eshiemogie, Joshua Ighalo, Michael Adekanbi, Titilope Banji, S.A Eshiemogie, Raymond Okoh, Chinenye A. Igwegbe, A.G Adeniyi, A.O Adeola and Kanika Dulta, 'Current Effect and Projected Implications of Climate Change on Nigeria's Sustainable Development Plan' (2023) 2 J.C Egbueri et al (ed.s) Climate Change Impacts on Nigeria Springer Climate <https://doi.org/10.1007/978-3-031-21007-5-1> accessed 29th July 2025.

[5] Peter Koblowsky, M.A and Dr. Chinwe Ifejika-Speranza, 'African Developments: Competing Institutional Arrangements for Climate Policy: The case of Nigeria' German Development Institute (2012) 2 <https://www.idos-research.de> accessed 21st July 2025.

sequel to impacting infrastructures in coastal areas like Lagos- the commercial hub. Huge demand would be placed on expenditure in disaster relief, repair of infrastructure and climate action investments which would pressure fiscal status. Increasing temperatures, frequent extreme hot days, constant and intense rainfalls culminate in rampant and severe flooding, necessitating provision for finance on disaster relief. Climate events are forecasted to occasion challenges on the long term for Nigeria. GDP is expected to reduce by 8% by the year 2100; projected sea level rise globally is expected to generate cost from 0.1 and 0.4% of GDP annually for Nigeria. Nigeria is projected to further experience increased temperatures between 1.2 – 1.6 degrees Celsius in 2036 – 2065 and between 1.4 – 3.2 degrees in 2071 and 2100 compared to past figures[6].

Exacerbated and heavy rainfalls climate change and deforestation occasion unprecedented flooding such that areas which were not previously known to be prone to flooding are now flooded. The Nigeria Hydrological services Agency (NIHSA) earlier this year in its 2025 flood outlook, sounded that the nation is experiencing increasing rate of floods which are not minor but rather severe. In the year 2024, according to the National Emergency Management Agency (NEMA), over 1 million people were affected by floods, causing over 300 deaths. Significant flooding that occasions cholera and disease outbreaks, damage to infrastructure, displacement of families, damage to livestock and crops thereby causing food insecurity[7].

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[6] Reginald Darius, Aurelien Billot, Emanuele Massetti and Nate Vernon-Lin, 'Macroeconomic Implications of Climate Challenges: Nigeria' International Monetary Fund Country Report July 2025 No 25/158 2, 3 and 4 <https://www.imf.org/en/Pubications/Selected-Issues-papers/Issues/2025/07/11/Macroeconomic-Implications-of-Climate-Challenges-Nigeria-568586> accessed 1st August 2025.

[7] Vivian Chime, 'Nigeria's deadly flood exposes urgent need for climate adaptation plan' Climate Home News (2025) <https://www.climatechangenews.com/2025/06/06/nigerias-flood-underscores-urgent-need-for-climate-adaptation-plan/ > accessed 1st August 2025

All over the world, with temperatures on the average increasing to 1.5^0C, heat stress caused by climate change is estimated to affect more than 1 billion people, including workers at a figure of about 350 million if the temperature escalates to 2.5^0C above pre-industrial levels. Heat strokes have the potential to affect efficiency and overall behavior of the workforce globally causing mortality[8].

Lastly, the world bank reports that by 2050 more than 143 million could be displaced from their homes due to conflict resulting from water and food insecurity and climate –caused natural disasters. By 2017, almost 20% of the planet is projected to be too hot to be inhabited. An additional 250,000 people are estimated to be likely to die yearly from infectious diseases inclusive of malaria and a warmer climate between 2030 and 2050. Rising temperatures escalate the cost of agricultural production and threaten biodiversity with 1 million species facing extinction which affects livestock, crop growth and fisheries. More persons are expected to be pushed below the poverty line by 2030. Extreme weather occasions $ 520 million in annual consumption losses. Climate change worsens the existing gap between developed and developing countries by 25% since 1960. In Nigeria, climate change impact is glaringly visible evidenced by land degradation, extreme weather events and other unfavorable climate change outcomes affecting global health and economic advancement[9].

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[8] C.C. Okafor, C.N Madu, A.V Nwoye, C.A Nzekwe, F.A Otunomo and C.C Ajaero, 'Research on Climate Change Initiatives in Nigeria: Identifying Trends, Themes and Future Directions' MDPI Energy Sustainability (2025) (17) (9) 3995 <https://www.mdpi.com/2071-1050/17/9/3995> accessed 1st August 2025

[9] B.O Ngebo and J.C. Alegu, 'Nigerian Newspaper Reportage of Climate Change: A Content Analysis of the Punch and the Guardian' International Journal of sub-Saharan African Research (IJSSAR) (2024) (2)(2) 122 <https://www.researchgate.net/publication/381879577_Nigerian_Newspaper_Reportage_of_climate_change_A_content_Analysis_of_the_Punch_and_The_Guardian> accessed 1st August 2025

Against the above background, it is unarguable that it is imperative to actively and effectively confront climate change. Sustainable development goal 13 has as its focus - climate action, with the objective of subduing climate change and its concomitant effects. Unfortunately, these effects persist despite the existence of a multiplicity of policies, and framework –policy and institutional, to address them. This study therefore aims to analyze the state of implementation of SDG 13 in Nigeria ten years after the adoption of the 2030 Agenda, assess the challenges in implementation and opportunities for enhancing climate action policies and initiatives.

1.2 Statement of the Research Problem:

Despite Nigeria's commitment to achieving sustainable Development Goal 13 evidenced by the multiplicity of existing legal frameworks, the country continues to be confronted by significant challenges specifically, climate change impacts. The impacts of climate change such as rising temperatures, heat strokes, fluctuating precipitation patterns, frequency of extreme weather events, flooding, etc., pose as significant threats to Nigeria's development economically, Nigeria's environmental sustainability and human well-being. The country's exposure to climate change impacts affects the most vulnerable populations including the poor, women, girls and children unevenly, worsening existing social and economic inequalities.

The National Emergency Management Agency (NEMA) reports that 129,000 people experienced displacement and 68 people died owing to 2020 flood incidents; Nigeria ranks as the second-highest country globally for climate risk to children, she also ranked as 180th out of 192 countries in 2022 as per climate –response readiness, this report is attributable

to the Nigeria SDG's Progress Report of December 2024. Therefore, it is imperative to assess the state of implementation of SDG 13 in Nigeria.

Research Questions:

The study seeks to answer the following questions:

a. What are the factors contributing to climate change in Nigeria and therefore exacerbating already existing inequalities amongst the vulnerable population?

b. How does climate change impact Nigeria as a country?

c. What mitigation and adaptation strategies and framework have been erected in pursuance of sustainable development goal 13 execution in Nigeria?

d. How effective are Nigeria's frameworks- policy and institutional, in facilitating the implementation of sustainable development goal 13 on climate action and what is the state of implementation of SDG 13 in Nigeria?

e. How does Nigeria's climate change Act 2021 fair when compared to Denmark's and the United Kingdom's climate change Acts in terms of effective climate action towards attaining sustainable development?

1.3 Aim and Objectives of the Study:

The aim of the study is to assess the implementation of Sustainable Development Goal 13 (Thirteen) in Nigeria, with a view to identifying challenges and strategies for enhancing the country's climate action efforts to promote sustainable development. Specifically, the objectives of the study are:

a. To identify climate change causing factors in Nigeria.

b. To appreciate climate change impacts in Nigeria.

c. To examine the domestic and international frameworks developed by Nigeria to address climate change and implement SDG 13.

d. To evaluate the barriers to effective implementation of climate change policies and SDG 13 in Nigeria.

e. To comparatively analyze Nigeria's climate change Act 2021 with climate change laws of Denmark and the United Kingdom, identify strengths, weaknesses and potential areas for improvement in Nigeria's climate governance.

1.4 Scope and Limitations of the Study:

The prevailing insecurity in Nigeria which warranted dependence on existing literature as well as primary and secondary sources of law is a study limitation restricting field work. The study however utilizes available literature and secondary sources of law to meet the research objectives. The study considers the implementation of SDG 13 in Nigeria, and comparatively analyses Nigeria's Climate Change Act 2021 with that of Denmark and the United Kingdom. Assessments are made referencing primary and secondary sources of law and online materials drawn from data reported on international websites and SDG dashboards. However, this assessment is subject to available data flowing from monitoring and evaluation implementation. The Voluntary National Review of the year 2025 for instance, does not reflect an assessment of SDG 13 implementation and performance in Nigeria; it rather focuses on five other 'priority' SDG's. The last Voluntary National Reviews are reported to have been published in the years 2017 and 2020.

1.5 Significance of the Study:

Sustainable development goals are an indication of a commitment to erasing challenges threatening world peace and prosperity. Sustainable development goals are interlinked and are an invitation to tackle threats to socio-economic development, manage scarce resources, promote gender inclusivity and foster economic advancement. Sustainable development goal 13 is crucial in protecting the environment which is threatened by climate change.

Sustainable development goal 13 pictures the ideal situation of a world where there is environmental justice and the observance of global ethics in the conservation of a healthy environment. Climate change places obstacles on the path to achieving sustainable development goal 13, necessitating the need for climate action to strengthen resilience, build adaptive capacity with respect to the effects of climate change and mitigate climate change inducing factors.

Hence, the study aims to evaluate the implementation of SDG 13 in Nigeria, centered on climate action pursuant to SDG's adoption since 2015. By providing insights into the challenges and opportunities for implementing SDG 13 in Nigeria, it is expected that policy makers, civil society organizations, international organizations, government and relevant stakeholders would be better equipped to promote and execute effective climate action, ultimately enhancing Nigeria's progress towards achieving SDG 13.

1.6 Research Methodology:

The study adopts the doctrinal legal research method, considering primary and secondary sources of law as well as existing literature. Primary sources of law such as the Climate Change Act 2021, Petroleum Industry Act 2021 etc., secondary sources such as

international conventions, online peer-reviewed journals, and online materials inclusive of data obtained from international websites and SDG dashboards are considered. Furthermore, the study comparatively analyses the Climate Change Act with climate change Acts in Denmark and the United Kingdom. The justification for choosing both countries is premised on the report of the Climate Change Performance Index (CCPI) released this year 2025. Although no country ranks first to third globally in terms of overall performance, Denmark ranks fourth with a score of 78.73% and the United Kingdom which as at last year's 2024 CCPI report occupied the eleventh position, has ascended to the sixth position with a score of 69.29%. These countries have demonstrated efforts in climate change management which Nigeria can incorporate into her climate action initiatives.

1.7 **Chapters Analysis:**

The study is divided into six chapters. Chapter one features general introduction inclusive of the aim and objectives of the study. Chapter two focused on a review of existing literature relevant to the topic including conceptual clarification and theoretical frameworks. Chapter three highlights climate governance framework featuring domestic and international responses to climate change. Chapter four attempts a comparison between Nigeria's principal climate change law and that of Denmark and the United Kingdom. Chapter five analyses the implementation of SDG 13 in Nigeria following thematic actions and effectiveness of climate adaptation and mitigation strategies. Chapter six is a summary of the study's findings, recommendations, contribution to knowledge, conclusion and area for further studies.

CHAPTER TWO

CONCEPTUAL THEORETICAL FRAMEWORKS AND LITERATURE REVIEW

There is a multiplicity of literature on climate change, sustainable development goal 13 and intersecting topics.

2.1 **What is Climate Change**?

Nigeria faces many challenges on the path to development. Despite the fact that these obstacles are not peculiar to her or Africa, her ability to tackle them still remains unperfected. One of the drawbacks she faces is climate change phenomenon. Climate is the

"sum up of weather conditions in many places over periods of time". It varies relatively from one place to another and from one period of time to another. Climate change is the variation of climate indicated by manifestations such as increased and frequent heat levels, rising sea levels etc.[10] Climate change alters temperatures and normal weather patterns. It might occur to certain locations or the entire world making temperatures to be higher or lesser than usual. Natural disasters like storms, droughts and floods become more rampant. The usage of fossil fuels like oil, gas and coal is a major driver of climate change. The combustion of these materials releases greenhouse gases which in combination with the sun‟s rays overheat the atmosphere, elevating temperature globally and culminating in the greenhouse effect.[11] Climate change is the answer of the earth to emission of greenhouse

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[10] Ighodalo Bassey Akhakpe, 'Climate Change and Sustainable Development in Nigeria: Limitations and Opportunities' Handbook of Research on Environmental Policies for Emergency Management and Public Safety (2018) 209 and 210 <https://www.igi-global.com/chapter/climate-change-and-sustainabledevelopment-in-Nigeria/195196?camid=4v1> accessed 25th June 2025

[11] National Geographic 'Climate Change' <https://education.nationalgeographic.org/resource/climatechange/> accessed 1st August 2025

gases in the environment, it is variability that emanates from natural causes and man-made factors; observable over a period of time.[12] According to the United Nations Framework

Convention on Climate Change, climate change means "a change of climate attributable 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"[13].

Climate change is a reality, fluctuations by one or two degrees in the earth's average temperature can result in unprecedented and serious changes to the weather and climate. These observable changes which are physical manifestations of how climate change affects the earth such as violent rainstorms, severe and frequent heat waves, droughts and floods, are referred to as climate change effects.[14]

2.1.1 **Causes of Climate Change:**

Climate change is attributable to anthropogenic actuations as well as natural factors; such as modifications in the earth's orbit and volcanic eruptions. Human actuations – specifically the use of fossil fuels like coal, natural gas and oil which procedure of engagement entails emitting greenhouse gases into the atmosphere. Human interference impacts climatic state as can be deduced from global warming.[15]

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[12] C.J.S. Azoro and A.E. Obidimma, 'Climate Change and Sustainable Development: a Legal Perspective' *African Journal of Law and Human Rights (AJLHR)* (2023) (7)(2) 87 <https://www.journals.ezenwaohaetorc.org> accessed 25th July 2025

[13] Article 1, United Nations Framework Convention on Climate Change (1992) < https:// unfccc.int/resource/docs/convkp/ conveng.pdf> accessed 1st August 2025

[14] Climate Change Indicators: U.S and Global Temperature, US EPA <https://www.epa.gov/climateindicators/climate-change-indicators-us-and-global-temperature> accessed 1st August 2025

[15] Ali Syed and Urooj Afshan Jabeen, 'Climate change Impact on Agriculture and Food Security' Handbook of Research on Environmental Policies for Emergency Management and Public Safety (2018) 223 & 224 <https://www.igi-global.com/chapter/climate-change-impact-on-agriclture-and-food-security/195197?Camid=4v1> accessed June 26th 2025

The Inter-governmental panel on climate change (IPCC) observed that planet earth experiences global warming owing to human infractions via interaction with GHG emissions. Global warming of the environment negatively impacts sea tides and currents, wind, rainfall sequence and temperature of environmental mediums.[16] Anthropological causes such as deforestation, desertification, bush burning, indiscriminate felling of trees and exploitation of resources occasion climate change.[17]

The exploitation of resources for the growth of various sectors in the economy, expansion of industries, consumption purposes, and construction and transportation objectives largely accounts for climate change. Natural occurrences like volcanic eruptions, solar variation and meteorite impact also results in climate change.[18] Demographic growth and industrial technology advancement results in increased need for energy housing and food which needs are closely linked to deforestation. Economic operations wherein fossil fuel is utilized, thereby emitting greenhouse gases culminates in climate change. Nigeria's reliance on fossil fuel for energy emits GHG"s and causes climate change. Unsustainable agricultural practices in some countries such as bush burning in preparation for planting, discharges gases which have deleterious impacts on the environment.[19]

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[16] Mary Uchechi Nnabara, 'A Comparative Review of Climate Change and Sustainable Development in Canada and Nigeria: The Path to a Greener Future' (LL.M Dissertation Western University 2020) 24 <https://www.ir.lib.uwo.ca/llmp/6> accessed 2nd July 2025

[17] Ighodalo Bassey Akhakpe, 'Climate Change and Sustainable Development in Nigeria: Limitations and Opportunities' Handbook of Research on Environmental Policies for Emergency Management and Public safety (2018) 210 <https://www.igi-global.com/chapter/climate-change-and-sustainable-development-inNigeria/195196?Camid =4v1> accessed 25th June 2025

[18] C.J.S. Azoro and A.E. Obidimma 'Climate Change and Sustainable Development: a Legal Perspective' *African Journal of Law and Human Rights (AJLHR)* (2023) (7) (2) 89 <https://www.journals.ezenwaohaetorc.org> accessed 25th July 2025

[19] T.B. Kehinde, Olanrewaju F.O, O.A Ezugwu, Kemi Kehinde, and Segun Kehinde, 'Navigating Climate Action in Nigeria: Assessing Sustainable Development Goal 13 Implementation and Challenges' *Journal of Law and Sustainable Development* (2024) (12) (1) 2 <https://www.researchgate.net/ publication/ 37775646_ Navigating_Climate_Action_in_Nigeria _Assessing_Sustainable_Development _Goal_13_Implemenation_and _Challenges> accessed 16th June 2025

2.1.2 **Impacts of Climate Change:**

Climate change has far-reaching repercussions on the environment cum social and economic life of the populace.

Hence if sustainable development is to be actualized, climate change must be effectively tackled.[20] The effects of climate change cannot be underrated; they cut across socioeconomic disruption, and interference with biological and physical systems[21].

Developed Countries are largely culpable for the emission of greenhouse gases in the environment which impact is experienced world –wide, regardless of the exact contribution of a particular country, whether great or small. The effects of climate change are unevenly experienced and have varying outcomes on different communities, groups or regions. Countries which are not privileged in possessing financial wherewithal to alleviate the results of climate change hazards are unequally affected. Owing to climate change, arid and dry areas increase in hotness and locations that previously experienced great precipitation are confronted by an even greater outpouring of rain[22].

Climate change has the propensity to impact human and natural mediums, threaten human survival and development economically, socially and politically. Climate change impacts individual health, wildlife habitat, vegetation"s ability to thrive and food security[23].

Climate change affects Nigeria in various ways aside from the environmental dimension; it affects the social system, security and demography of Nigeria. Nigeria has over 200 million people with about 70% residing in rural areas and dependent on natural resources

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[20] (n8, page209)
[21] (n7, page 24)
[22] (n10, pages 3 & 9)
[23] (n9, page 89)

for subsistence. Rural residents that depend on sourcing wood to meet their cooking needs, or grow food for financial profit, and source water in order to thrive would be thrown into poverty when natural resources become scarce, depleted or unavailable. The survival of the populace is threatened by climate change effect on health. Food security is threatened leading to loss of lives and animals from hunger. Farmers-headers crisis arise from clashes in areas suffering from desertification owing to low rainfall.[24] This leads to insecurity and hike in food prices from farmers courageous enough to farm despite looming threats to their lives. Eutrophication occurs which means the loss of nutrients on the face of the soil, drying up of land, and land degradation owing to droughts. Climate change affects agriculture which accounts for about 20% of the countries G.D.P, with about 80% or more persons in rural areas depending on it to survive, manifesting in decreased animal productivity and increased animal mortality. Climate change causes a shortfall in rainfall patterns needed to power hydroelectricity which accounts for 20% of Nigeria's generated power and therefore threatens that energy source.[25]

Climate change occasioned by anthropogenic factors and the accumulation of GHG‟s (majorly carbon and methane) in the atmosphere causes rapid rise in global temperatures and affects the quality of air. This is evidenced by respiratory health issues suffered by human beings. Protracted sunny and dry seasons culminate in wildfires which deplete air quality, produce smoke and particulate and reduce oxygen content in the atmosphere.[26]

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[24] S.E Eshiemogie, J.O Ighalo, Michael Adekanbi, Titilope Banji, S.A Eshiemogie, Raymond Okoh, C.A Igwegbe, A.G Adeniyi, A.O Adeola and Kanika Dulta, 'Current Effect and Projected Implications of Climate Change on Nigeria's Sustainable Development Plan' (2023) J.C Egbueri et al (ed.s), Climate Change Impacts on Nigeria, Springer Climate 1&13 <https://www.doi.org/10.1007/978-3-031-21007-5_1> accessed 29th July 2025.

[25] Ibid

[26] Mohammed Yusuf, Huma Warsi Khan, Mukarran Beg, Bernard Chukwuemeka Ekeoma, Afreen Nishat and Amani Lutfi Al-Othman, 'Effect of Climate Change on Air Quality: A Nigeria Perspective' (2023)

Climate change reduces agricultural productivity resulting in low economic returns. Climate change impacts of unpredictable, erratic rainfall patterns, and unstable temperatures, influences crop yield negatively. Inadequate knowledge on climate change severity is a barrier to tackling climate change. This necessitates the need for actions to halt its sources or adapt to its effects, increased awareness on climate change and easily warming signals to tackle it.[27]

2.2 What Is Sustainable Development?

It is the sophisticated and improved means of achieving development without altering the health status of the populace and by extension, the environment. It connotes economic advancement, social inclusivity and environmental accountability. Sustainable development goals are an upgrade on the Millennium Development Goals (M.D.G"s) which spanned from 2000-2015. Nigeria's Road to SDG"s Country Transition Strategy

(2015) states that the SDG"s aim to complete the outstanding targets of the MDG"s, magnify human rights, and achieve equilibrium between the economic, environmental and social spheres of development. Sustainable development seeks to preserve resources by engendering a change in the manner of technology utilization, mitigating carbon emissions and enhancing the quality of life for the present generation and future heritage.[28]

Sustainable Development aspires to achieve socio-economic growth, while exploring resources and the environment in a manner that does not compromise the health of the

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J.C Egbueri et al (ed.s) Climate Change Impacts on Nigeria, Springer Climate 19 < https://www.doi.org/10.1007/978-3031-21007-5_2> accessed 29th July 2025.

[27] E.E Osuji, M.O Olaolu, and A.C Tim-Ashama, 'Impacts of Climate Change on Sustainable Crop Production in Nigeria' (2023) J.C Egbueri et al (ed.s) Climate Change Impacts on Nigeria, Springer Climate 39 <https://doi.org/10.1007/978-3-031-21007-5_3 > accessed 29th July 2025.

[28] Ignatius Nnamdi Aguene, 'An Appraisal of the Implementation of Sustainable Development Goals 2030 in Nigeria' Enugu State University of Science and Technology, Faculty of the Social Sciences Journal of Social Sciences (2021) (6) (2) 200, 201 and 202 <https://www.esutjss.com> accessed June 25th 2025

ecosystem in general. The principle is traceable to the emergence of sustainability concept first espoused by the Stockholm Declaration on the Human Environment in 1972, and it recommends a balance of economic, social and environmental justice concerns in attempting socio-economic development. In 1975, the Governing Council of the United Nations Environment Programme emphasized that the principle implies meeting basic human needs without transgressing the outer limits set by the biosphere to man‟s endeavors. In 1980, the International Union for the Conservation of Nature and Natural Resources designed its World Conservation Strategy which reiterated the incorporation of preservation and development themes to ensure that alterations to the environment do not hamper the survival of the populace. The concept of sustainable development acquired the status of recognition globally owing to the Brundtland report of the World Commission on

Environment and Development (WCED) which popularly defined it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs", the concept has been adopted in many domestic and international instruments.[29]

Essentially, sustainable development goals are the construct of the 70th regular session of the United Nations General Assembly of September 2015 in New York where heads of states and governments adopted the SDG‟s as the 2030 development agenda. The goals are a 15 years vision in a framework consisting of 17 goals, 169 targets and 232 key performance indicators. SDG 1-end poverty globally (2) eradicate hunger, attain food security, ensure improved nutrition and foster sustainable agriculture (3) promote healthy lives and foster well-being for people of all ages (4) create inclusive and gender responsive

[29] (n9,page 87 & 92)

quality education and life-long learning forums for all (5) attain gender equality and empowerment for girls and women (female folk) (6) attain water security and water sanitation for all persons (7) energy security for all globally (8) foster sustainable, decent and inclusive employment for all (9) create resilient and sustainable infrastructure and industries (10) mitigate inequality among countries (11) attain sustainable and safe cities (12) promote sustainable production and consumption patterns (13) Climate action to stem climate change (14) preserve water bodies and sustainably employ them to attain development (15) Tackle desertification, land degradation, biodiversity loss and ensure sustainable use of green ecosystems (16) Encourage inclusive and peaceful societies for sustainable development, provide access to justice, ensure institutions are effective and accountable (17) Emphasize and tighten global collaborations on the sustainable development theme. SDG 13 targets the increase in resilience and adaptive capacity to climate related disasters in all countries; incorporating climate change plans into national policies, increasing climate literacy, implementing the green climate fund etc.[30]

Notably the 2030 Agenda for sustainable development designed by the United Nations member states in 2015 signifies a model of seventeen interlinked goals. The endorsement of the SDG‟s indicates a commitment to promoting a cohesive, sustainable, comprehensive and equitable development paradigm rooting for international collaboration globally.

[30] Ekere Marculey Emah, 'A Mid-term Review of Nigeria's Progress Towards Achieving the Sustainable Development Goals' AKSU Journal of Administration and Corporate Governance (2023) (3) (3) <https://www.aksujacog.org.ng> accessed July 16th 2025.

Beyond the declaration of international commitment, the SDG‟s however require incorporation into related legal framework, inclusive of national constitutions to grant them binding legal force and make governments accountable for their execution.[31]

Ramli avers to the „imperfection‟ of the Sustainable Development Goals as they have been criticized for not offering a concrete mechanism on how they can be achieved, furthermore, the SDG‟s are critiqued for their seeming simultaneous focus on a multiplicity of goals which might affect laudable and meaningful impact.

Lastly, as Ramli puts it, the implementation of the SDG‟s is dependent solely on the political will and genuine commitment of national governments which usually magnify short-term economic growth over long-term environmental interest and equity.[32]

2.3 Sustainable Development Goal 13 Implementation And Challenges:

Tola Kehinde and Co- authors highlight the causes of climate change as well as its effects. They note that advanced and developed countries are largely culpable for the emission of greenhouse gases in the environment, which impact is experienced world–wide; regardless of the exact extent of contribution of a particular country. The authors find that the effects of climate change are unevenly experienced and have varying outcomes on different communities, group and regions. This is especially the case for countries which are not privileged development-wise, and are devoid of sufficient financial wherewithal to alleviate the negative results of climate change. On the premise of existing SDG index

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[31] Oliver C. Ruppel, and Ruda Murray, 'The Future of the SDG's: A Comparative Constitutional Rescue Plan? One does not discover new lands without consenting to lose sight of the shore. Andre Gide' Environmental Policy and Law (2024) (54) (2&3) <https://doi.org/10.3233/EPL-239022 > accessed 29th July 2025.

[32] Z.H Ramli, 'Environmental Sustainability and social Justice: Bridging the Gap in global Policy Frameworks' Journal of International social Research (2024) (17) (118) <https://www.sosyalarastirmalar.com/articles/environmental-sustainability-and-social-justice-bridging-thegap-in-global-policy-frameworks-1102152.html> accessed 14th August 2025.

report, they report that Nigeria is on track with SDG 13 – climate action; however, there remains much to be achieved in order to gain traction on climate action. They observe that motivation to implement climate action plans many times end up as mere ambitions, owing to focus on short term gains, lack of commitment and hesitance in prioritizing the need for climate action. The authors also conjure that motivation to implement climate action is low owing to a capitalist economic model which sees the environment as a medium to be exploited for utmost economic gain and therefore regards the effects of such utilization e.g waste, degradation and pollution as expected and acceptable repercussion flowing therefrom. The article notes that climate action plans are often relegated to verbal platitudes, political in nature with little tangible action or genuine commitment to executing initiatives, such political statements are usually devoid of through execution guidelines. This phenomenon makes it difficult to gather public support and participation in achieving climate change action policies. The authors identify a lack of clear appreciation of climate issues, inclusive of climate change impact, especially the urgency of the challenges it poses as a factor militating against SDG 13 achievement in Nigeria.

They pinpoint Nigeria‟s dependence on fossil fuel for energy, transportation and electricity as the primary driver of Greenhouse gas emissions, coupled by a difficulty in totally transitioning to renewable eco-friendly sources of energy owing to its expensiveness. Amongst other identified factors, capital intensive nature of climate action plans, hackneyed expressions of climate mitigation and adaptation plans and shallow knowledge of climate mitigation and adaptation strategies, inadequate financial appropriation, hinder

SDG 13 implementation in Nigeria. The authors find that Local Governments need to be more invested in climate action plans at grassroots levels, the need for more stakeholder

involvement, private sector engagement and NGO/Civil Society Organizations participation. They conclude that climate change is at variance with the tenets of sustainable development, as such, climate action is pivotal in achieving SDG 13 to encourage economic advancement alongside a sustainable environment.[33]

Aguene defines sustainable development as improved means of achieving development without altering the health status of the populace. Sustainable development connotes economic advancement, social inclusivity. He indicates that sustainable development goals broaden the MDG‟s -Millennium Development goals but more particularly, seek to draw a nexus between the social, environmental and economic aspects of development. The author notes that sustainable development is concerned with the populace, their welfare, equality and equity in their relationships, conservation of the environment amidst ongoing development and improvement of the standard of living of people. He observed that SDG‟s attainment was hampered by a number by factors, inclusive of the Covid 19 pandemic. He opined that while progress had been made in some aspects, yet, even the recorded advancement suffered from a relapse owing to negative intervening factors such as food insecurity, degradation of the environment, inequality, corruption, poverty, climate change etc. He identifies some mechanisms put in place to attain the execution of sustainable development goals during the 2021 administration; the appointment of the office of Special Assistant to the President on SDG‟s, inauguration of committees on SDG‟s at both houses of the legislature, creation of SDG desk officers which liaise

[33] Tola Benjamin Kehinde, Olanrewaju Faith Osasumwe, Olileanya Amuche Ezugwu, Kemi Kehinde, Segun Kehinde, 'Navigating climate Action in Nigeria: Assessing Sustainable Development Goal 13 Implementation and challenges' *Journal of Law and Sustainable development* (2024) (12) (1) <https://www.researchgate.net/publication /377755646_Navigating_Climate_Action_in_Nigeria_Assessing_sustainable_ Developent _Goal_13_Implementation_and_Challenges> accessed 16th June 2025.

between the Federal, State and Local government areas in their respective states to implement the SDG‟s. The author also observes that an analysis of progress made nationally in implementing the SDG‟s is dependent on availability of data, research and experience. Aguene asserts that recognizing Local Government areas as the tier of government cardinal to SDG implementation is crucial to the execution of SDG‟s as it is more suited to monitor progress and have grassroots interaction cum impact. He notes that individual and communal co-operation and participation is essential for achievement of the goals, monitoring progress of the goals. Aguene reiterates that economic advancement must take cognizance of responsible environmental management, and this can only happen when guidelines are developed which bolster management of natural resources and promote sustainable utilization of the environment and other resources. The author emphasizes the thematic vision of the SDG‟s which is to focus on six themes –policies generation, financial appropriation, and communication, assessment of data, institutional capacity, and partnerships. He opines that women and female folk must be given opportunities to generate ideas and provide leadership in the execution of the SDG‟s as gender equality could result in implementation of all other SDG‟s which are largely interconnected; and not just SDG 13 attainment solely, hence the need for more female folk inclusivity in the decision making process, planning and execution of the SDG‟s. The author points out that Nigeria is confronted by lack of good governance, which denotes transparent and accountable utilization of financial, economic and human resources for equitable and sustainable development.[34] Ekere Marculey Emah evaluates Nigeria's progress towards achieving the sustainable development goals, noting the country's slow

[34] Ignatius Nnamdi Aguene, 'An Appraisal of the Implementation of Sustainable Development Goal 13 in Nigeria' Enugu state University of Science and Technology, Faculty of the Social sciences, Journal of Social Sciences (2021) (6) (2) <https:www.esutjss.ccom> accessed June 25th 2025

progress. The author attributes the drag in attainment of the SDG‟s to corruption, poor budgetary allocation, existential poverty, and social inequalities. Emah assesses Nigeria‟s progress as at the time of writing using SDG‟s reports and index rankings exposing the urgency of strengthening existing institutions tailored around implementing sustainable development goals and fine-tuning policies to better execute the goals. The author aids the appreciation of the challenges in implementing SDG‟s in Nigeria, after assessing progress on the basis of various literature, and data gotten from government and inter-governmental reports.

The author opines that it is crucial for Nigeria as a part of the 193 United Nations member states and the most populated Black Country around the world to successfully execute all sustainable development goals which would impact the African populace and the world generally in a positive light. The author identifies the structure put in place inclusive of the establishment of the office of Senior Special Assistant to the President on SDGs, which office is answerable to the Presidential Advisory Committee on SDGs, to implement the SDGs at the three tiers of government; collaborate with relevant stakeholders in implementation, monitoring, reporting of SDGs and sensitizing the general public on same.

Emah avers to the nature of the SDG‟s document, assented to by the heads of state and government of the 193 United Nations member states inclusive of Nigeria as being of international flavor and of a treaty status. The paper sheds lights on the importance of transparency and accountability, good governance in executing sustainable development,

and the author makes his recommendations to aid sustainable development goals implementation in Nigeria[35].

2.4 Inter-Relationship Between SDG 13 And Other Goals; Energy Justice Theories:

According to Agbaitoro and Oyibo, attaining SDG‟s 7 and 13 – energy justice and action to combat climate change, is dependent on an appreciation of the interactions between sustainable transitions and barriers to accessing energy. They posited that Nigeria has one of the greatest energy access gaps in the world, portending grave outcomes for economic development and the health of the environment. The authors propose an energy justice framework in the attainment of SDG 7 which would have a positive contribution on the achievement of SDG 13 by enhancing climate change action plans. Energy justice in their opinion, takes cognizance of human rights and the framework must integrate distributive, procedural and recognition justice theories in order to enable energy policies be crafted and executed in a just manner. The authors emphasize the formulation of an approach that reduces greenhouse gas emissions, enhances access to affordable, accessible, reliable and renewable/sustainable energy which would rub off positively on SDG 13, by aiding the trajectory of climate action, since majority of Nigeria‟s climate issues accrue from the energy sector. Hence, addressing energy access and climate change effects simultaneously promotes the objectives of sustainable development. The authors recommend incorporating a human rights dimension in designing an energy access framework by ensuring

distributive justice which they define as equitable distribution of the benefits and costs of energy policies and projects; procedural justice which is involving stakeholders and those

[35] Ekere Marculay Emah, 'A Midterm Review of Nigeria's Progress Towards Achieving the Sustainable Development Goals' AKSU Journal of Administration and Corporate Governance (2023) (3) (3) <https://www.aksujacog.org.ng> accessed July 16th 2025.

likely to be affected by the outcome of energy policies and projects in the democratic decision making process; and recognition justice which denotes taking cognizance of the rights and human dignity of all marginalized groups, individuals, indigenous groups and communities to be affected by energy policies and projects. They outline strategies for achieving SDG 13 in Nigeria, inclusive of engaging in diversification from existing sources of energy and fossil fuel reliance to other renewable streams of energy such as solar and wind power. This is in order to reduce dependence on fossil fuel and mitigate climate change. The authors also recommend the employment of energy efficiency methods to reduce the consumption of energy and greenhouse gas emissions. Lastly, they assert that regional cooperation can be factored into addressing energy access and climate change impacts, by collaboration with other countries that may be more advantaged by having fewer impediments to energy access. The strategies outlined above proffer a base for policy makers and shareholders to confront the negative effects of climate change and explore the opportunities associated with the execution of SDG 13 implementation in Nigeria.

By situating energy justice and climate action at the top of priorities, Nigeria can improve energy access, reduce greenhouse gas emissions, and mitigate climate change producing better outcomes for sustainable development.[36]

Eghosa O. Ekhator and Edward O. Okumagba provide an analysis of climate change impacts in Nigeria, highlighting the role of Multi-National corporations (MNC‟s) in worsening the problem through oil spillages, gas flaring etc. The authors assert that climate

[36] Godswill A. Agbaitoro and Kester I Oyibo, 'Realizing the United Nations Sustainable Development Goals 7 and 13 in Sub-saharan Africa by 2030: Synergizing Energy and Climate Justice Perspectives' *The Journal of World Energy Law & Business* (2022) (15) (3) <https://www.academic.oup.com/jwelb/article/15/3/223/6564681> accessed July 14th 2025

change has serious consequences for the environment, human rights and the economy, with the Niger Delta being a very vulnerable region. They debate that climate justice requires a framework for addressing climate change impacts and that MNC‟s are obligated to respect human rights and contribute to mitigate climate change by checkmating their operations.

The article espouses several theories including environmental justice, distributive justice, procedural justice and recognition justice. Distributive justice of climate change frameworks aim to fairly distribute costs and benefits of climate change; procedural justice focuses on the participation of affected persons and communities in decision making processes tailored around climate action; recognition justice hammers on the need for governments and corporations to recognize and respect the rights to life, clean environment, and dignity of marginalized communities; environmental justice emphasizes the need to tackle and address the unequal impacts of environmental degradation and to ensure that vulnerable communities have unrestricted access to all environmental mediums, in its pristine state. The authors highlight the need for greater corporate responsibility of MNC‟s for climate change impacts although, they note that holding

MNC‟s accountable for their actions can be challenging in a locale where regulatory frameworks are weak. The authors note the intersection between climate change and human rights, and the importance of effective climate action to ensure climate justice and sustainable development. The article notes that climate change litigation is growing, and that the trend would most likely continue in Nigeria particularly in the Niger Delta region, to improve access to justice and protect climate change victims in Nigeria. Their analysis of the *Gbemre* case and *SERAC & CESR V Nigeria* case reveals the importance of litigation in promoting climate justice by relaxing the locus stand requirement for seeking

redress for environmental injustices, holding MNC‟s accountable for their actions, promoting climate justice and invariably getting a grip on SDG 13 – climate action.[37] Salamatu Jidda Fada et al posit that Nigeria has made some progress in achieving SDG 13 however challenges remain. They acknowledge that climate change has great impact on Nigeria and highlight the importance of addressing it, as well as maintaining initiatives or efforts at achieving SDG 13. The authors identify government initiatives directed at climate action such as the establishment of the Department of Climate Change, under the Federal Ministry of Environment, and the adoption of policies which pledge to mainstream climate change concerns into all aspects of the economy. The article underscores the importance of the Anthony Nyong Climate Centre of Excellence (ANCCE) in bolstering climate change mitigation and adaptation efforts in the country by proffering a vista for climate change research, capacity building and the development of partnerships with international organizations and universities both locally and internationally. The authors recommend a bottom to top model to attaining climate action, with the involvement of local communities and stakeholders in the crafting and execution stages and deliberate efforts to engender public awareness on climate change matters. The article beams light on the role of education and research institutions in achieving SDG 13 by incorporating climate change education into formal education curriculum, although, that alone may not sufficiently address outreach to individuals who do not have the privilege of formal education.[38]

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[37] Eghosa O. Ekhator and Edward O Okumagba, 'Climate Change and Multinationals in Nigeria: A Case for Climate Justice' Bristol University Press Digital (2024) (11) <https?//www.bristoluniversitypressdigital.com/configurable/content/book$002f97815292289 77$002fch011.xml?t:ac=book%24002f9781529228977% 24002fch011.xml> accessed 11th August 2025.

[38] Salamatu Jidda Fada, Elijah Akintunde, S.S Goyol, N.L Binbol, Bombom Leonard, D.D Dabi, Gideon Baklit and Oche Christian Y, 'An Appraisal of Nigeria's progress in Achieving the SDG-13 Climate

Gbadegesin examines the intersection between climate change, climate change governance and gender equality in the Nigerian context. The author reiterates that climate change causes significant challenges on the pathway of sustainable development and its effects are not gender-neutral. Climate change is sounded severally by this author as well as many others as having the potential of exacerbating inequalities including existing gender inequalities. The author observed that women who are often more vulnerable to climaterelated disasters are exposed and bear a disproportionate burden. Women in Nigeria are confronted by obstacles in accessing resources, opportunities to be involved in decisionmaking processes and economic windows, these further magnify exposure to climaterelated shocks. More particularly, women as primary caregivers especially those residing in rural regions of developing nations face increased vulnerability as their survival is dependent on the access to local natural resources-securing water, food and fuel for cooking, healing, trading etc. Conversely, women are not only susceptible to climate change impacts according to Gbadegesin, women have potentials to actively participate and serve as facilitators for climate action via mitigation and adaptation. The author asserts that women usually possess expertise and knowledge which can be channeled to bolstering resilience and executing climate change adaptation and mitigation strategies in disaster curtailment, but women‟s representation in climate governance in Nigeria is limited. In recognition of the interconnectedness between climate change, gender and climate change governance, Nigeria has legal frameworks which recognize the importance of gender equality and social inclusion in climate governance. One of such is the National Climate Change Policy for Nigeria (2021-2030) promotes climate-resilient and gender-responsive

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Action Goal' *Journal of Sustainable Development* (2022)(15)(2) <https://www.researchgate.net/publication/358396703_An_Appraisal_of_Nigeria's_progress_in_Achieving_the_SDG-13_Climate_Action_Goal> accessed 11th August 2025

development which intends to address the gendered impacts of climate change. Gbadegesin notes that beyond the existence of such frameworks, there remains the need to formulate effective enforcement mechanisms to ensure that women are included in climate governance and not marginalized. Gbadegesin identifies cultural and social barriers, limited access to political and economic resources except for women in elite circles, lack of capacity building, low level of women‟s participation in Nigeria‟s politics and decision making processes as impediments to women‟s representation in climate change governance. The author highlights other factors which contribute to women‟s vulnerability to climate change impacts such as, limited financial resources, lack of relevant infrastructure and dependence on outdated farming techniques. Despite the existence of these limiting factors, the growing recognition of the importance of gender equality in climate action, the existence of legal framework discouraging gender discrimination although requiring enforcement presents opportunities for promoting women‟s inclusion and participation in climate action matters. Gbadegesin recommends interalia, providing capacity building programs for women to enhance their skills and broaden knowledge in respect to climate governance, effective implementation of the existing frameworks for promoting gender equality in climate action by encouraging decision-making processes that involve women in climate governance, conducting further researches and monitoring to understand the challenges and opportunities for promoting women‟s representation in climate governance leading to more sustainable climate action.[39]

2.5 Theory of "Ecological Socialism":

[39] Opeyemi A. Gbadegesin, 'Gendered Implications of climate change: Empowering Women in Climate Law and Policy Making in Nigeria' The Journal of Sustainable Development Law and Policy (2025) (16) (2) <https://www.researchgate.net/publication/390179584_Gendered_Implications_of_Climate_change_Empowering_Women_in_Climate_law_and_Policy_making_in_Nigeria> accessed 9th August 2025

Siming Yu, Muhammad Safidar Sial and co-authors regard the sustainable development goals as an upgrade on the MDG‟s, asserting that the 2030 agenda has as its focus development that is sustainable on a global level. They aver to sustainable development as a non-relatively new concept as it relates to Chinese concepts which are not recent, such as the notion of ecological civilization. Ecological civilization demands that nature needs to be revered and not mindlessly and perpetually exploited for social and economic profits.

That notion is based on the theory of "ecological socialism" which forms the basis for the design of policies and initiatives by the government aimed at protecting the environment. The focus is on natural resources usage in a manner that does not facilitate depletion especially in the light of the existence of non-renewable resources, and without degrading the environment. The authors also highlight the concept of "inter-generational" justice which mandates the present generation to take cognizance that the future generations have a right to use ecological and environmental resources, furthermore, that the present generation must note that future generations would bear the brunt of any mishandling of resources. The study suggests that commitment as at the time of writing was divided, with some SDGs receiving greater priority than others, and highlights the importance of greater commitment to the SDGs, particularly in the aspects of climate action and marine conservation.[40]

2.6 Relationship between Climate Change and Sustainable Development:

[40] Siming Yu, Muhammed Safdar Sial, Dang Khoa Tran, Alina Badulescu, Phung Anh Thu and Mariana Sehleanu, 'Adoption and Implementation of Sustainable Development Goals (SDGs) in China-Agenda 2030' MDPI (2020)(12)(15) <https://www.mdpi.com/2071-1050/12/15/6288> accessed July 18th 2025.

C.J.S Azoro and A.E Obidimma explore the dynamic relationship between climate change and sustainable development, analyzing the causes, effects of climate change and the legal framework for addressing it under domestic and international laws.

The article discusses in details the causes of climate change, highlighting anthropogenic and natural factors. It examines similarly in details the effects of climate change on food security and agriculture, natural vegetation and fauna, respiratory and general health of humanity, animal species survival, water security, underground water PH, conflicts between herdsmen and outspoken farmers, loss of lives and property owing to flooding and polluted air. The concept of sustainable development is discussed, including its definition, history and nexus with climate change. The authors emphasize the two-way relationship existent between climate change and sustainable development wherein undertaking socioeconomic development via unsustainable practices occasions climate change, which in turn is antithetical to the ideals and aspirations of sustainable development principles. In essence, climate variability which aside from natural causes is largely brought about by anthropological operations that do not balance socio-economic aspirations and concerns of environmental health; affects sustainable development vision negatively. Climate change constitutes itself a constraint to sustainable development. The ability of nations to attain sustainable development goals is impacted by climate change.

The authors postulate that climate action which ideally consists of mitigation and adaptation strategies can contribute to the achievement of sustainable development goals. Also, treading the path of sustainable development in the trajectory of development, can spell better outcomes for sustainable development goals. The article discusses not so critically, the various frameworks regulating climate change. The authors note that the

Nigerian Constitution lacks enforceable provisions for environmental protection owing to the provision mandating environmental protection being captured in chapter 2 of the Constitution. Similarly, although she is a signatory to several international environmental agreements, they however require domestication by the National Assembly to become applicable law. Overall, the article proffers a review of climate change and sustainable development in Nigeria, highlighting the importance of policies in addressing this critical issue.[41]

Erimma Gloria Orie examines the effect of climate change on sustainable development in Nigeria. Like the previous author, E.G Orie argues that climate change poses a grave threat to Nigeria's socio-economic advancement and that the strength and effectiveness of climate change policies do not just secure efficient climate governance but ultimately result in sustainable development. The author finds a lack of appreciation of the interconnectedness of sustainable development and climate change by the Nigerian government, hence the insufficient incorporation of long-term strategies in climate change action plans. This finding further lends credence to the postulation that Nigeria's already vulnerable state is even more exposed owing to non-effectiveness of climate action plans resulting in reversal of any economic gains.

The author notes that the over-reliance on combustion of fossil fuel which is a major driver of climate change effects requires diversification of the economy to other revenue generating strategies which are not at the expense of the environment, thereby contrasting the vision of sustainable development. The article provides an analysis of the challenges

[41] Chukwubuikem J.S Azoro and Angela E. Obidimma, 'Climate Change and Sustainable Development: a Legal Perspective' African Journal of Law and Human Rights (AJLHR) (2023)(7)(2) <https://www.journals.ezenwa.ohaetorc.org> accessed 25th July, 2025

caused by climate change in Nigeria; it contributes to the connection between climate change and sustainable development and sheds light on the need for feasible and efficient action to combat climate change effects.[42]

2.7 Typology of Institutional Mechanisms to Achieve SDGS; Earth System Governance Framework (ESGF):

Anita Breur and co discuss the execution of sustainable development goals and the institutional models which government has adopted to achieve the SDGs. The authors propose a typology of four perspectives in order to analyze institutional mechanisms for implementing the SDGs. Four perspectives on institutional designs which encourage the following- a focus on political leadership; incorporation of non-state and societal stakeholders; vertical co-operation and integration across all tiers of government; and lastly, horizontal integration across policy sectors in a country. The authors highlight the importance of generating context-specific approaches to the implementation of the SDGs and more importantly, identifying and executing effective institutional models, noting that a successful execution of sustainable development goals is dependent on effective institutional designs that facilitate policymaking approaches which are whole and integrated. The authors find that many countries assign SDG implementation leadership to the CoG (Centre of Government), setting aside roles of participation to the Ministries of Foreign Affairs and the environment; the Ministry of Exterior or Foreign Affairs because the SDGs have an international appeal. The authors also discovered that countries with higher socio-economic advantage are more likely to readily adopt more integrated

[42] Erimma Gloria Orie, 'Sustainable Development and Climate Change in the Nigerian Experience' NOUN Current Issues in Nigerian Law (2022) (5) <https://www.researchgate.net/publication/358220535_CLIMATE_CHANGE_AND_SUSTAINABLE_DEVELOPMENT_THE_NIGERIAN_LEGAL_EXPERIENCE> accessed 29th July 2025

institutional designs for sustainable development goals implementation; designs which are more likely to reflect horizontal integration of inter-ministerial and cross-sectoral interplay. Generally, the article gives valuable insight into the structures or mechanisms of governance that support the formulation of quality policies and implementation of sustainable development goals. Whilst the socio-economic status of a country might influence the readiness of countries to adopt more integrated institutional designs, the authors note that the effectiveness of new institutions may be influenced by existing institutional arrangement, and the political climate of a country. Over all, the proposed models for crafting institutional mechanisms via involvement of government and non-state actors offers opportunities in strengthening institutional capacity, particularly at local government levels. It emphasizes establishing co-ordination mechanisms through delineating roles and responsibilities which would remove obscurities around performance and facilitate the implementation of sustainable development goals.[43]

Ogunkan highlights the importance of governance in contrast to the terminology "government" in attaining effective environmental management in Nigeria. The author notes that despite the recognition of governance as a tool to achieve sustainable 2025 environmental management and climate management, governance in a true sense of the word remains unattained in Nigeria. The author opines that environmental governance is an important theme in relation to sustainable development especially in the context of developing countries like Nigeria. The author defines environmental governance theoretically as "the processes and institutions that shape human interaction with the

[43] Anita Breur, Julia Leininger, Daniele Malerba and Jale Tosun, 'Integrated Policymaking: Institutional Designs for Implementing the Sustainable Development Goals (SDG's) ' World Development Science Direct (2023) (170) < https://www.sciencedirect.com/science/article/pii/S0305750X23001353> accessed 18th July

environment". The author references the Earth System Governance Framework (ESGF) which hammers on the need for polycentric governance and the involvement of multiple stakeholders in decision-making processes. Hence, Ogunkan explains that governance in the context of climate action on the road to sustainable development implies the corresponding actions and involvement of state and non-state actors in managing environmental resources. The formal structures of governance at all tiers, civil society organizations, international institutions, non-governmental organizations, environmental government agencies e.g. NESREA, the private sector, etc. have varying roles to play in enforcing environmental regulations; in advocating for environmental rights to be upheld and for government to be held accountable for environmental governance; in providing technical and financial support for environmental government initiatives in Nigeria, or ensuring that environmental impact assessments are conducted and sustainable practices are carried out with the environment's health kept in focus. In the context of Nigeria, her environmental governance structure is the interplay of formal and informal institutions. The author affirms that there is an increasing recognition of the importance of governance in effective climate action to address environmental challenges, but more particularly an allusion is made to the argument of sustainability scholars with respect to incorporating environmental, urban, social and economic governance pillars of development as key to attaining sustainable development. Effective governance remains the key to formulate and execute policies addressing environmental challenges whilst ensuring urban, social, economic and environmental development. Environmental outcomes can therefore be traced to the quality of governance wielded by the relevant stakeholders and not only formal structures of government as earlier pointed out. The author suggests that Nigeria's environmental challenges such as pollution, deforestation, land degradation and climate

change warrant efficient and effective governance structures to address these problems. Ogunkan analyses the challenges and prospects of environmental governance in Nigeria, and concludes that is ineffective due to a number of challenges, e.g. corruption which results in non-implementable laws, laws that are unenforceable, laws which have penalties that are not deterrent in nature, uncoordinated institutional framework, and lack of public participation. Ogunkan highlights the need for comprehensive, enforceable policies, the strengthening of institutional frameworks for effective environmental governance, incorporation of public participation to reflect various interests in decision-making processes, adequate budgetary allocations, and trainings to boost capacity etc. Ultimately, effective environmental governance would result in attaining better climate action, efficient management of the environment and sustainable development[44]

2.8 The Right to Development Versus Sustainable Development; Sustainability in International Law Versus Sustainable Development:

Giulia Capitani and Giovanni Comazzetto provide an analysis of the concept of sustainable development, it's evolution from a mere ethical value to a legal concept with European, international and national flavor, now recognized world-wide as a global concept. Sustainable development sues for an interdependence and balance of environmental, social, and economic interests. The authors opine that law plays a vital role in promoting sustainable development by imposing obligations on states and creating a framework that takes cognizance of the inter- relationship between social, economic and environmental dimensions of sustainable development. The authors reference the 1972

[44] David V Ogunkan, 'Achieving Sustainable Environmental Governance in Nigeria: A Review for Policy Consideration' Urban Governance Science Direct (2022) (2) (1) < https://www.sciencedirect .com/science/article/pii/52664328622000213 > accessed August 12th, 2025

Declaration of the United Nations Conference on the Human Environment as creating as significant trail in the evolution of sustainable development by recognizing the right to a quality environment which results in wellbeing and dignity of the human person. The Declaration also acknowledges the duty to protect, conserve, and enhance the environment for present and future generations. The Brundtland report in 1987 created its popular definition which incorporates inter-generational equity (considering the needs of both present and future generations), intra-generational equity (prioritizing the needs of the vulnerable and poor) and taking cognizance of technology's limitations on the environment's ability to meet present and future needs. The authors adjudge progress in the trajectory of attaining sustainable development although challenges subsist. While the Paris Agreement and NDC"s indicate steps taken towards climate action, their effectiveness, as well as that of other climate action policies, the authors note, depends greatly on implementation. The authors highlight the tension that exists between the right to development and the right to promote sustainable development. Developing countries emphasize on the right to development, whilst developed countries emphasize the need for sustainable development. Nonetheless, development which is sustainable and to be coveted must integrate ecological, social and economic perspectives of society.[45]

J.F.C Dimento and Jessica Pierucci aver that the concept of sustainability in international law is a complex and multi-linked one that has been explored in various disciplines- law, politics, economics and environmental science. The authors claim that international law is directed at maintain sustainability in various sectors e.g. business and trade, security, environmental conservation and human rights. To the authors, the concept of sustainability

[45] Giulia Capitani and Giovanni Comazzetto, 'The Concept of Sustainable Development in Global Law: Problems and Perspectives' Athens Journal (2019) < https://www.athensjournal.gr> accessed August 8th

is understood following the context of various disciplines, with some contexts being that of economic trade and development, others being environmental protection and conservation etc. There however exists a distinction between sustainability and sustainable development. The authors distinguish following reference to the United Nations, the differences in meaning of both terminologies. Sustainability is a long term goal of any subject- for it to survive, or continue to thrive and sustainable development denotes the process and pathways to achieve it. The United Nations pinpoints four dimensions of sustainable development: economy, culture, society and the environment, which are interrelated and not separate. The authors assert that some scholars advocate for a „hard" version of sustainable development which would impose restrictions on the concept of 2025 development and others advocate for a „soft" version, which regards sustainable development as a set of goals or roadmaps.[46]

2.9 Relationship between Environmental Sustainability and Social Justice; Sociological and Comparative Theories of Law:

Ramli explores the interconnectedness between environmental sustainability and social justice concepts emphasizing the need for policies which seek to achieve both ecological conservation and social equity simultaneously. The author clarifies environmental sustainability to be "the responsible administration of natural resources to ensure their availability for future generations". Social justice on the other hand denotes the "equitable distribution of opportunities, privileges and wealth in the society". The connection between the two concepts is evidenced by the unsustainable anthropological actions on the

[46] Joseph F.C Dimento and Jessica Pierucci, 'The Concept of Sustainability in International Law: A Research and Policy Bibliography' Southwestern *Journal of International Law* (2023)(XXVIII) (2) <https://www.swlaw.edu> accessed 8th August 2025

environment occasioning environmental degradation, biodiversity loss, climate change and inequalities on the vulnerable populace. The author points out that a concept aligning closely with the themes of environmental sustainability and social justice is environmental justice. This concept evolved in the 1980‟s and recognized the burdens borne by vulnerable and marginalized communities owing to occurrences of resource depletion, environmental degradation and climate change, culminating in economic and social injustices. Therefore, environmental justice advocates for the protection of the ecosystem as well as fair treatment and involvement of all affected by the state of the environment in decision making. Ramli also connects the principle of sustainable development to environmental sustainability and social equity as sustainable development seeks to reconcile economic growth and environmental conservation, in order to spell positive social justice or social equity outcomes. The author seems to suggest that environmental policy frameworks ignore the social effects of environmental degradation particularly on sidelined communities and on the other hand, social justice frameworks prioritize the protection of human rights, poverty alleviation, but do not incorporate the environmental aspects that determine these outcomes. The author however asserts that sustainable environmental policies cannot succeed without tackling the social inequalities arising from environmental challenges, and vice versa. The Author highlights strategies for ensuring that the environment is protected and at the same time, social equity is achieved via policy instrumentation, and implementation frameworks. For instance, the involvement of stakeholders in participatory policy formulation to enable the creation of balanced policies, exerting political will to implement policies that prioritize long-term goals on environmental health rather than economic profit at the expense of the environment, adoption benefit-sharing mechanisms that ensure equitable distribution of benefits from

sustainability programs, especially in side-lined communities and ensuring environmental justice through sustainability policy frameworks that connect social equity and ecological health. Finally, the author opines that the integration of environmental and social policies in the approach towards securing a more just and sustainable future, would engender a more resilient, equitable and sustainable world for the global population.[47]

Olujobi and Odogbo reference the Sociological theory of law formulated by Comte (17981857). This school of thought considers that since law affects members of the society and demands utmost compliance, any laws enacted must therefore reflect and protect the interests of the people whose behavior it seeks to regulate. Hence, where a law that is enacted is inconsistent with the expectations and interests of the people, it cannot be deemed to be people-oriented. Climate change affects society and the response of society to it in effecting behavioral changes in environmental usage can see to its effective management. The authors assert that the theory has in its mix the social dynamics, power structures and cultural values that shape environmental laws, as well as the place of social mobilization or social legitimacy in effecting changes expected from people in order to attain a more sustainable future. The theory highlights the importance of enacted laws acknowledging society's interest content-wise, and engendering collective action and participation through civil society group's involvement, non-governmental organizations collaboration, and advocacy from societal associations. The authors also reference the Comparative theory of law traceable to a British Jurist and Legal Historian, Sir Henry Maine. The theory espouses that developing countries can borrow a leaf from the legal

[47] Z.H Ramli, „Environmental Sustainability and Social Justice: Bridging the Gap in Global Policy Frameworks". The Journal of International Social Research (2024)(17)(118) <https://www.sosylarastirmalar.com/articles/environmental-sustainability-and-socialjustice-bridging-the-gap-in-global-policy-frameworks-1102152.html> accessed August 13th 2025

frameworks, policies, practices, governance structures, institutional set-up, and enforcement mechanisms of developed countries in a bid to address the challenges caused by climate change, maintain effective climate action and attain sustainable development. This replication can be made with cognizance given to varying cultural values and geographical differences. The Comparative theory of law operates by examining the environmental and climate-centered legal frameworks of other developed jurisdictions, identifies feasible and workable mechanisms in different areas for instance, renewable energy models, emissions trading policies etc. This is with a view to revising the lacuna in existing policies as well as implementation patterns in developing countries.[48]

[48] Olusola Joshua Olujobi and Ikiyouleimo Success Odogbo, 'Strategic Evaluation of the 2021 Nigeria Climate Change Act: Surmounting Challenges , Paving the Way for Success, and Envisioning Future Trajectories' Social Sciences & Humanities Open (2024) (10) 3 <https://www.researchgate.net/publication/380371265_Strategic_Evaluation_of_the_2021_Nigeria_Climate_Change_Act_Surmounting_Challenges_Paving_the_way_for_success_and_Envisioning_Future_Trajectories> accessed September 19th 2025

CHAPTER THREE

CLIMATE GOVERNANCE IN NIGERIA

3.1 Conceptual Clarification of Climate Mitigation and Adaptation Strategies in Nigeria:

These are an array of initiatives employed in managing the environment as well as the reactionary formulation of plans to support the environment in withstanding natural disasters. Adaptation involves designing and entrenching institutional, technical and financial ability to brace up to climate change outcomes. Essentially, these strategies reduce vulnerability and the effect of climate change whether occasioned by man-made or natural factors. A component of adaptation is iterative risk management: monitoring, researching, evaluation, learning to cope by future strategies.[49]

Mitigation, on the other side of the divide, is the calculated steps on execution of pertinent nationals plans aimed at reducing the pace at which greenhouse gases (whether fugitive or direct) are emitted from various sectors thereby improving environmental outcomes. This can be done by reducing fossil fuel usage to stem production of GHG‟s that trap heat in the atmosphere or by boosting „sinks‟ for the gases e.g. forests, oceans and soil.[50]

With regards to time factor for reaping the benefits of adaptation plans, the benefits would usually accrue following a period of time, whilst, mitigation tackles the factors resulting in climate change now. Adaptation plans could extend to conserving existing resources e.g.

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[49] Adetotun O. Akinola, A. P. Opoko, E.O. Ibem, H.I. Okagbue, A.O. Afolabi, 'Climate Change Adaptation and Mitigation Strategies in Lagos, Nigeria: Built Environment Professionals' Perspective' International *Journal of Engineering and Advanced Technology* (2020) (9) (3) (1275) <https://www.researchgate.net /publication/339177420_climate_change_Adaptation_and_Mitigation_ Strategies_in_Lagos_Nigeria _Built_Environment_Professionals%27_Perspective> accessed 14th August, 2025.

[50] Ibid

developing dykes to shield communities from flooding, it could fashion previously non-existent resources e.g. making seeds that can grow in saline, less nutrient-rich soil available to farmers, also, adaptation could be executed via government, and the private sector equipping the vulnerable populace with guidelines on better managing their assets.[51]Adaptation strategies might be developed in a manner as to tackle uncertainty, as science may be limited in predicting a precise climate change forecast. Hence, however sophisticated the paradigm, forecast may reflect contradiction or be unreliable. In reality, it is more feasible to tackle conflict after the fact than before the fact or through forecast. Consequently, knowledge gaps are likely to arise irrespective of whatever number of researches the government undertakes, furthermore, some issues may continue to loom out of the control of the government. Adaptation and sometimes mitigation policies might have to be implemented experimentally and financially accommodated with „no-regret" policies which would likely produce good outcomes even though the environment does not reflect expected projections.[52] In conclusion, tackling climate change requires the combination of adaptation and mitigation strategies as a veritable approach to climate change management.

3.2 Institutional Framework for Climate Change Adaptation and Mitigation in Nigeria

This framework creates and commissions relevant institutions to tackle climate-related impacts, oversee the execution of adaptation and mitigation guidelines across the three tiers of government inclusive of states and local governments in climate change governance.

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[51] Aaron Sayne, 'Climate change Adaptation and Conflict in Nigeria' US institute of peace (2011) <https://www.jstor.org/stable/resrep12197.> accessed 14th August, 2025.

[52] (n3, pages 10 and 11)

Commencing the institutional arrangement is the Federal Ministry of Environment created in 1999 to supervise the Nigerian environment, it is also in charge of coordinating and implementing climate-change plans. Sequel to a restructuring of the Federal Ministry of Environment in 2003, a special unit on climate change was created, which was upgraded to Department of Climate Change in 2011[53]. This department executes the protocols of the United Nations Framework Convention on Climate Change (UNFCCC). Furthermore, the Department has four divisions which are supposed to improve Nigeria‟s response to climate change, in addition to supervising the activities of the Inter-Ministerial Committee on climate change.

The Inter-Ministerial Committee on Climate Change (IMCCC) was established by the Federal Ministry of Environment in order to promote cross-sectorial collaboration on climate change matters between the Ministries and other stakeholders. Members of the

IMCCC are constituted from over ten different MDA‟s. The IMCCC is expected to hold quarterly meetings and increase stakeholder involvement[54].

Civil Society Organizations (CSO‟s) are represented in the IMCCC by the Climate Change Network Nigeria (CCNN) which is a conglomeration of over 150 CSO‟s that were established in 2007 to ensure an inclusive approach to climate change discussions through stakeholder engagement. Other members of the IMCCC include national

NGO‟s, and research institutions, however, it does not have state and local government representatives thereby restricting its reach to local contexts.

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[53] Federal Republic of Nigeria (2021) Initial Adaptation Communication to the United Nations Framework Convention on Climate Change. Nigeria's Federal Ministry of Environment, Department of Climate Change page 11 & 12 <https://www.climatechange.gov.ng> accessed 14th August, 2025

[54] Ibid

The State Ministries of Environment coordinate Climate change activities at the subnational level. Some states do so through their departments or desks situated under the State Ministry of Environment, whilst others are yet to make such provisions.[55] Other institutions include the National Environmental Standards Regulations Enforcement

Agency established by the 2007 Act to protect Nigeria‟s environment by enforcing all environmental laws, regulations, and international treaties.[56] Lastly, there is National Council on Climate Change established to make policies and decisions on all matters of climate change and coordinate the execution of the Climate Change Act; design climate change policies, proffer measures for adaptation and mitigation to the legislature *inter alia*.[57]

3.3 International Legal Framework for Climate Change Mitigation and Adaptation in Nigeria:

Recognizing the multi-sectoral perspective of climate change governance, legal policies have been designed to fulfill Nigeria‟s need for climate adaptation and mitigation. Nigeria has been a party to many international climate agreements, inclusive of and not restricted to the United Nations Framework Convention on Climate change (UNFCCC) in 1992, Kyoto Protocol of 2002 and the Paris agreement of 2015.

3.3.1 United Nations Framework Convention on Climate Change (UNFCCC) 1992

The UNFCCC was a response to deliberate on changes in climatic conditions. It was signed in 1992 at the United Nations Conference on Environment and Development and in

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[55] Ibid
[56] <https://www.nesrea.gov.ng> accessed 14th August, 2025
[57] Climate Change Act <https://www.disasterlaw.ifrc.org/media/3529> accessed 14th August, 2025

1995, the Conference of Parties (COP) to the UNFCCC held its first session popularly known as COP1.[58] The first report of the Inter-governmental panel on Climate Change (IPCC) established in 1998 by the World Meteorological Organization and the United Nations Programme in 1990 was what led to the adoption of the United Nations Framework Convention on Climate Change at the United Nations Conference. [59] The sessions have been consistent in a bid to jointly promote measures for intervention with respect to climate change. In December 2015, Parties to the UNFCCC agreed on the Paris agreement and arrived at a voluntary shared objective to decarbonize the world‟s economies through plans espoused in respective countries Nationally Determined Contributions (NDC‟s). The United Nations Framework Convention on Climate Change Conference of Parties at Paris, France (COP 21) is the most recognized international agreement on climate change as it provided an unprecedented forum for climate change intervention.[60]

3.3.2 The Paris Agreement 2015:[61]

It is an international agreement on climate change adopted in 2015 at the United Nations Framework Convention in Climate Change Conference of the Parties (COP 21) in Paris, France. It sets out the framework for countries to activate plans to reduce greenhouse gas emissions and also adapt to the impacts of climate change.

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[58] United Nations Framework Convention on Climate Change 1992 <https://www.unfccc .int/resource/docs/convkp/conveng.pdf> accessed 14th August, 2025.

[59] Ibid

[60] The Paris Agreement often referred to as the Paris Climate Accords is an International treaty in Climate Change. Adopted in 2015, the agreement covers Climate Change Mitigation, Adaptation and Finance.

[61] United Nations Treaty Collection. (2015) <https://www.treaties.un.org/doc/Treaties/2016/02/20160215%2006-03%20PM/ch_XXVII-7-d.pdf> accessed 14th August, 2025

The aim of the agreement is to reduce global average temperature and global warming to below 2^0 celsius above pre-industrial levels with a target of global average temperature to 1.5^0 celsius. Some objectives of the agreement are thus: Increasing adaptation capacity to the adverse impacts of climate change; fostering climate resilience; ensuring low level of greenhouse gas emissions in a manner that does not threaten food security; making finance inflows to be channeled towards climate resilience initiatives and reduced greenhouse gas emissions ultimately promoting sustainable development.[62]

The agreement requires countries to communicate their voluntary emissions reduction targets, called Nationally Determined Contributions (NDC‟s) every five years; targets which are expected to be successively ambitious, revised and regularly updated.[63] The Paris Agreement includes provisions for extending financial and technological support to developing countries from developed countries. Internationally, it binds both categories of countries with a common purpose to reduce greenhouse gas emissions and protect the planet.[64] The agreement mandates parties to improve and upgrade their adaptation efforts through formulation and execution of national adaptation plans.[65] The agreement espouses that it will be implemented to reflect equity and the principle of common but differentiated responsibilities against the backdrop of varying national circumstances.[66] For the purpose of reiteration, the Paris Agreement designs a framework for countries to take measures to mitigate the production of greenhouse gases leading to global warming and also craft adaptation actions to co-exist with the impact of climate change. Parties are further required to engage periodically in taking stock of their implementation effort and evaluate

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62 Article 2
63 Articles 3 and 4
64 Article 9
65 Article 7
66 Article 2(2)

their collective progress towards attaining climate change mitigation and adaptation.[67] The Paris Agreement has been critiqued as a non-binding agreement merely being ambitious in aspirations but not enforceable to the extent of prescribing sanctions and penalties for default in their responsibilities and commitment following the agreement. The NDC‟s requirements to be updated every five years is not enforceable, as there is no structure for sanctioning lack of compliance or even lack of transparency by countries. Section 12 of the 1999 constitution provides for the applicability of international treaties in Nigeria, the

President‟s signature on the treaty does not suffice to make it binding; it must be ratified by the National Assembly through re-enactment. Hence, the UNFCC and Paris Agreement cannot be enforced against the Nigerian government in court where she fails to carry out its obligations.[68]

3.4 Domestic Legal Framework for Climate Change Mitigation and Adaptation in Nigeria:

These are legal regulations enacted towards managing climate change nationally. Components of the legislations incorporate the double edged paradigm of climate change mitigation and adaptation.

3.4.1 The 1999 Constitution:

The constitution is the grundnorm from whence other laws derive validity, any law not consistent with the provisions of the constitution is void to the extent of its inconsistency,

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[67] Article 14

[68] Okara Goodtime Chimnecherem and Ruth Innocent, 'Signed, Sealed, but not Delivered: the Credibility of Nigeria's Climate Change Act 2021 in mitigating and Adapting to climate change in Nigeria' *Chinese Journal of Environmental Law* (2024) (8) (1) 7 <https://www.researchage.net/publication/381963778_signed_sealed_but_t_Delivered_The_Credibilit y_of_Nigeria's_climate _change_Act _2021_In_Mitigating_and_Adapting_to_Climate_Change_In_Nigeri a> accessed 11th September, 2025

pursuant to section 1. Section 20 mandates the government to protect and enhance the human environment and also preserve air, land, water, forest and wildlife of Nigeria. However, this provision falls under chapter 2 of the constitution which provisions are deemed non-justiciable. This implies that Nigerians are constrained with respect to suing the government pursuant to section 20 and therefore, section 20 can merely be regarded as a duty of the government towards her citizens. Section 6(6)(c) of the constitution which makes provisions under chapter 2 nonjusticiable restricts the judicial system in enforcing any environmental obligations on the part of the government. This conflicting provision explains the lack of political will of the government in enforcing its environmental obligations and should be amended.[69]

3.4.2 Updated Nationally Determined Contributions (NDC's) 2021:

Nigeria commits to unconditionally reduce emissions by 20% by the year 2030 relative to 2018 levels, while a 47% reduction away from the previously set 45% in the 2015 NDC, is dependent upon international support. It identifies about six priority sectors for mitigation of the emissions they generate. In order to attain the NDC mitigation targets, the government pledges to inter alia, execute CSA-Climate Smart Agriculture and reforestation, which would tally with the provisions of the UNFCCC and Paris Agreement on the role of parties to create and align with renewable energy channels.

However, the NDC‟s fail to provide measures to confront emissions from the Industrial Processes and Product use (IPPU) and waste sectors. Similarly, it lacks measurable targets

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[69] Olusola Joshua Olujobi and Ikiyouleimo Success Odogbo, 'Strategic Evaluation of the 2021 Nigeria Climate Change Act: Surmounting Challenges, paving the way for success, and envisioning future trajectories' Social Sciences & Humanities (2024) (10)6 <https://www..researchgate.net/publication/380371265_Strategic_Evaluation_of_the_2021_Nigeria_Climate_Change_Act_Surmounting_Challenges_Paving_the_way_for_success_and_Envisioning_Future_Trajectories> accessed 11th September, 2025.

to monitor progress on adaptation, as well as a monitoring and evaluation mechanism to follow up its execution.[70]

3.4.3 Climate Change Act 2021[71]

In 2021, the government enacted the Climate Change Act, it is the principal legislative framework for mitigating greenhouse gas emissions and adapting to climate change impacts. It establishes a National Climate Change Council, which is vested with the responsibility of formulating and executing Nigeria's climate change policies.[72] The Act sets particular targets for reducing greenhouse gas emissions and increasing resilience to climate change.[73]

These targets include:

(a) Ensuring Nigeria crafts strategies in order to attain progress with respect to its aspirations on climate change mitigation and adaptation.

(b) Aligning climate change actions with national development priorities.

(c) Mainstreaming climate change action plans into policies which are already existent to promote socio-economic development and preserve the environment.

(d) Establishing a target for the years 2050-2070 for the achievement of net-zero GHG emissions aligning with Nigeria's climate change obligations internationally.

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[70] Goodtime Chimnecherem Okara and Ruth Innocent, 'Signed, Sealed, but not Delivered: The Credibility of Nigeria's Climate Change Act 2021 in Mitigating and Adapting to Climate Change in Nigeria' *Chinese Journal of Environmental Law* (2024) (8) (1) 7 & 8 <https://www.researchgate.net/publication/381963778_Signed_Sealed_but_Not_Delivered_The_Credibilty_of_Nigeria's_Climate_Change_Act_2021_In_Mitigating_and _Adapting_to_Climate_Change_In_Ni geria> accessed 11th September, 2025.

[71] Climate Change Act, <https://www.disasterlaw.ifrc.org/media/3529> accessed 14th August, 2025.

[72] Section 3

[73] Section 1

(e) Taking cognizance of risks and vulnerability, increasing resilience and reinforcing adaptive ability to climate change impacts.

(f) Executing mitigation action plans to enable low-carbon economy and sustainable means of living.

(g) Enforcing public and private sector compliance with climate change measures and National Climate Change Action Plan.

The Act applies to all MDA‟s-Ministries, Departments and Agencies of Nigeria, similarly, to the private and public sector within Nigeria to execute mechanisms aimed at bolstering a low carbon economy, environmentally resilient and sustainable society.[74] The National Council on climate Change (NCC) has the responsibility to:

(a) Supervise the execution of sectoral targets and road maps for reducing GHG emissions and other man-made causes of climate change.

(b) Endorse and administer the execution of the action plan.

(c) Oversee the climate change fund created pursuant to the Act as well as interface with Nigeria sovereign green bond in meeting NDC‟s.

(d) Design roadmaps to assess risks and vulnerabilities in climate change management, adaptation evaluation, support the provision of technical input in executing and monitoring climate action plans.

(e) Perform other functions needed to carry out the objectives of the Act.[75] The climate change fund established under the Act which comprises funds appropriated by the

[74] Section 2
[75] Section 4(a)-(q)

council, specifically, funding emanating from international organizations, funds to be channeled to Nigeria in order to actualize her Nationally Determined Contributions (NDC‟s), grant, donations, subventions, fines from public and private entities for breach of climate change obligations, fees and charges for services rendered by the National Council on Climate Change (NCCC). The climate change fund is to be directed towards operations of the NCCC- funding climate change projects, evaluating climate change impact on projects and communities, financing laudable climate mitigation and adaptation projects, incentivizing clean energy transition strategies, maintaining GHG emissions mitigation etc.[76] The Act provides for the carbon budget.

The Federal Ministry of Environment in collaboration with the Federal Ministry for Budget and National Planning is vested with the responsibility of pegging a carbon budget for Nigeria, to regulate global average temperature in line with the Paris agreement standard of 2^0C and limit temperature increase ultimately to 1.5^0C above pre-industrial levels. Both ministries ought to earmark a budgetary period and subject it to revision periodically in line with Nigeria‟s NDC‟s.[77] The Climate Change Act provides a forum for holding public and private individuals as well as corporate entities liable for activities that run contrary to mitigation and adaptation plans outlined in it. Where the National Council on Climate Change fails to enforce penalties which are the result of not complying with the climate obligations in the Act, public and private entities can demand compliance.[78] However, the chances of holding the government responsible for protecting the environment pursuant to section 20 of the 1999 constitution are non-existent, following its

[76] Section 15
[77] Section 19
[78] (n, 19, pages 1 and 2)

citation under chapter 2 of the constitution which by virtue of section 6(6) (c) of the constitution are deemed non- justiciable.[79]

The implementation of the Act suffers from institutional shortcomings, workforce deficit, and regulatory overlaps. The NCCC vested with the responsibility to supervise sectoral targets wrestles with extensive functions and the diverse composition of its membership which poses obstacles in decision-making and operational efficiency. The constitution of Federal Ministers within the governing body of the NCCC has the potential of compromising their impartiality with respect to sanctioning errant government Ministries, Departments and Agencies. The Secretariat which is obligated to inter alia, conduct investigations, and punish violators for non-compliance operates within that complex structure. The Act provides for the appointment of state directors and creation of zonal offices without defined transitional guidelines. Meritocracy concerns arise with such rotated appointments, although it is a means to identify with Nigeria‟s diverse ethnic groups. The interplay of the council‟s extensive powers and that of existing regulatory agencies raise possibility of regulatory overlaps and interagency tension.[80] The constitution of the NCCC is filled with members of the executive tier which represent different party interests; none of them is expected to possess climate change expertise except the Director-General. The council's structure poses questions of how independent from the government the council actually is, also accountability and competence concerns.[81]

The Act mandates the Federal Ministry of Environment to designate a carbon budget to regulate the country's emissions and an action plan to be generated every five years subject

[79] (n 19, page 6)
[80] Ibid
[81] (note 20, page 12)

to the endorsement of the NCCC and Federal Executive Council. The Action Plan ought to ensure that adaptation and mitigation plans of the government align with the carbon budget; however, the years are not delineated interval wise. Also, whilst a carbon budget would compel the government to beam the radar on climate change, where it is not complied with, the failure could be deemed to be the fault of the government. The Act compels public and private entities having a minimum of fifty employees to implement mitigation plans, aligning with the action plan, and appoint a climate change officer who is to submit annual reports to the NCCC, which default is punishable by fines; private entities having less than fifty employees appear exempted from executing that obligation.[82]

3.4.4 National Adaptation Plan 2021:

The National Adaptation Plan (NAP) provides sector-specific adaptation strategies and vulnerability evaluation for different sectors e.g. agriculture, water resources and coastal zones. In 2021, the NAP was created to proffer a framework for managing the impacts of climate change in critical areas such as agriculture, coastal zones and water resources. It tows the path set by the United Nations Framework Convention on Climate Change (UNFCCC) and presents guidelines for developing climate resilience, inclusive of adaptation to climate change impacts like rising temperatures, rising sea levels, erratic weather conditions, and fluctuating rainfall patterns. The objectives of the NAP include:

(a) Mitigating risks and vulnerability to climate change cross-sector.

(b) Improving adaptive capability and resilience of ecosystems and communities.

[82] (n 20, page 13)

(c) Incorporating climate change adaptation into national development plans and budget provisions.

(d) Inclusion of stakeholders in the adaptation process. The Act establishes a framework for monitoring progress, evaluating effectiveness, and adopting strategies sequel to experiences and already learnt lessons, as well as, roadmap for securing funding from various sources.[83]

3.4.5 National Climate Change Policy 2021:

In 2012, the Federal Executive Council approved a strategy policy response on climate change, the National Climate Change Policy Response and Strategy (NCCPRS) which overall objective is to foster low carbon, economic advancement, point the country in the direction of climate resilience through the adoption of adaptation and mitigation measures.[84] Since that time, climate governance discourse has evolved, as such there is the National Policy on the Environment 2016, National Adaptation Plan 2021, and National Climate Change Policy 2021 etc.

The purpose of the National Policy on Climate Change 2021-2030 is to provide a framework for dictating the country's response to climate change. It prescribes sectoral and cross-sectoral strategies for managing climate change, across the health, agriculture, forestry, water, transport and other sectors. Its overall goal is to promote a low carbon,

[83] 2021 National Adaptation Plan, <https://www.napglobalnetwork.org/about/pdf.> accessed 14th August, 2025.

[84] Federal Ministry of Environment, Department of Climate Change, National Climate Change Policy for Nigeria 2021 – 2030 <https://www.climatechange.gov.ng> accessed 14th August, 2025

climate resilient, gender-responsive and sustainable socio-economic development. Some expected outcomes of the policy's goal include:

(i). Vulnerability reduction to climate change impacts cross-sectorally.

(ii). Enhanced social, economic, cultural and ecological resilience.

(iii). Reduction of greenhouse gas emissions.

(iv). Increased awareness of climate change impact, adaptation and mitigation measures etc.

The goals of the policy are to be achieved by strategies that:

(a) Execute adaptation and mitigation measures which foster low economic advancement.

(b) Reinforce capacity at the three tiers of government including at institutional and individual levels to execute climate change response.

(c) Foster scientific research, technology and innovations to address the climate change impacts.

(d) Improve national ability to enable resources allocation-whether national, international, technical or financial, for investment in climate change management.[85]

The plan explicitly identifies climate change as one of the major threats to economic growth and food security. The policy espouses targets in the areas of agriculture, energy,

[85] Page 15

health, water etc which vision is to ensure a climate resilient society participating in sustainable development socio-economically. Precise roadmaps are outlined cross-sectorally in order to execute adaption and mitigation strategies such as the promotion of agro-forestry, afforestation, reforestation and community-based forest management and recovery, promotion of climate smart agriculture in a gender-inclusive manner amongst small holder farmers inter alia. In the area of energy, the production and use of renewable energy, energy efficiency with innovative methods, is encouraged, incentivization of the use of renewable sources of energy etc. In the transport sector, strategies include encourage cycling and walking opportunities to curb carbon dioxide emissions, and implementing the polluter pays principle. The policy contains specific enumerated strategies which qualify as mitigation or adaptation strategies cross-sectorally.[86]

3.4.6 National Agency for the Great Green Wall (NAGGW) 2015:

The Great Green Wall project was set up in 2015 by an Act of Parliament to execute the vision of the African Union and its Heads of State and Government to launch and adopt the Great Green Wall in the Sahel and Sahara Initiative (GGWSSI).[87] The objective of the Agency which is a component of the Federal Ministry of Environment is to tackle desertification and degradation of land resource, ensure food security, and entrench a green area across eleven Northern states. The Agency functions as the focal point for the actualization of the African union‟s Great Green Wall of the Sahara and Sahel project. It further aims to stop land degradation, halt the loss of biological diversity, attain ecosystem resilience, ensure human welfare and erase poverty. Its vision is to restore 100 million

[86] Pages 17 - 35
[87] National Agency for the Great Green Wall <https://www.ggwnigeria.gov.ng> accessed 14th August, 2025. [40] Ibid

hectares of degraded land, sequester 250 million tons of carbon and create 10 million green jobs by 2030.[40]

3.4.7 National Policy on Drought and Desertification Management 2015:[88]

The National Policy on Drought and Desertification Management in Nigeria aims to address desertification and drought by encouraging sustainable land usage, water resources management, education, awareness, community-based initiatives, early warning systems to help communities plan towards and respond to extreme weather patterns. Early warning systems are resourceful for warning against heat waves, floods and droughts. EWS improves awareness and preparedness to address disasters. The NPDDM 2015 aims to empower communities by enhancing preparedness to tackle drought occurrence and mitigate land degradation. It espouses strategies such as usage of drought tolerant crops, rainwater harvesting, land rehabilitation, better irrigation plans, and soil fertility management. The policy also aspires to raise public awareness about drought and desertification. The policy proffers a framework confronting economic, environmental and social perspectives, placing emphasis on community based initiatives and participation, climate change management and land degradation neutrality.[89]

3.4.8 National Oil Spill Detection and Response Agency Establishment Act 2006:[90]

The National Oil Spill Detection and Response Agency (NOSDRA) Act creates a national operational organization to ensure a timely, safe, appropriate, and efficient response to grave oil pollution incidents, in order to execute the national spill contingency Plan. It

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88 Federal Ministry of Environment Nigeria, National Drought Plan <https://www.unccd.int> accessed 14th August, 2025

89 Ibid

90 National Oil Spill Detection and Response Agency (NOSDRA) Establishment Act 2006 <https://www.nosdra.gov.ng> accessed 14th August, 2025

fashions measures to direct, assist and monitor responses channeled at saving lives, cleaning up polluted sites and protecting the environment.[91] The Act mandates oil industry players to report oil spills to NOSDRA within 24 hours of its occurrence. Parties that are culprits are obliged to engage clean-up measures quickly and effectively. A breach of the directions attracts fines and penalties, as NOSDRA possesses authority to investigate oil spills, punish offenders and prescribe sanctions. The Act permits individuals and communities affected by oil spills to seek compensation for damages.[92]

3.4.9 Flare Gas (Prevention of Waste and Pollution) Regulations 2018:

The Regulations provide a framework for reducing GHG emissions by minimizing gas flaring and encouraging the commercialization of flared gas. These regulations introduce a framework for accessing and utilizing flared gas through a very competitive bidding process. The regulations provide for the protection of the environment from the impact of gas flaring, preventing waste of natural resources and creating economic profit from gas flare capturing.[93] The Act aspires to have zero routine flaring by 2025 and erase gas flaring totally by 2030, enhance air quality, and minimize health hazards owing to gas flaring by erasing harmful emissions. Routine flaring for new oil and gas facilities (greenfield projects) are prohibited and routine flaring for existing facilities (brownfield projects) are gradually phased out.[94]A competitive and transparent bidding process regulates issuance of permits for "non-routine" flaring[95] under special circumstances and allows qualified applicants to access and utilize flared gas on behalf of the Federal Government. Flaring

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91 Section 5(c) NOSDRA Act
92 (n43)
93 Flare gas (Prevention of Waste and Pollution) S. I. No. 8, Regulations 2018. <https://www.nuprc.gov.ng> accessed 14th August, 2025
94 Regulation 12
95 Regulation 3

which exceeds permitted levels attracts penalties.[96] Gas flaring threatens biodiversity existence, environmental sustainability, and economic progress due to the release of pollutants; it is a challenge for countries which rely heavily on oil and gas production for socio-economic advancement. Many countries have enacted policies towards regulating it but execution is hampered owing to various political structures, and political powers of the fossil fuel industry prioritizing economic interests rather than human health and environmental stability. Nigeria is the largest oil-producing country in Arica, with 37.0 billion barrels of proven crude oil and an even higher 190.4 trillion cubic feet (TcF) of proven natural gas reserves. Fossil fuel provides more than 80% of government revenue, 95% of export receipts, and 90% of foreign exchange inflow. Nigeria ranks amongst the top seven gas flaring countries in the world and is estimated to lose 18.2 million USD daily from flaring. The Federal Government‟s extreme involvement in gas flaring management prioritizes sustaining the status quo and fanning economic gains, hence the gap between policy existence and implementation. This influence results in a deficit in coordinated measures and political will to stop gas flaring. Economic diversification offers a potential for digressing from the status quo; of relevance also is the mustering of political will on the Federal Government‟s part to end gas flaring.[97]

Sections 33 and 34 of the 1999 constitution of Nigeria guarantee the rights to life and dignity of the human person. However, gas flaring undermines these constitutionally guaranteed rights. It occasions significant health consequences and threatens the pristineness of the environment. The judicial decisions in *Gbemre V Shell Petroleum*

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[96] Regulation 13

[97] Godwin Aigbe, Lindsay C. Stringer, and Matthew Cotton, 'Gas Flaring in Nigeria: A Multi-Level Governance and Policy Coherence Analysis' Springer Nature MLM (2023) (2) (1) <https://pmc.ncbi.nlm.nih.gov/articles/PMC9927060/> accessed 12th September, 2025.

Development Company of Nigeria Ltd,[98] similarly *Social and Economic Rights Action Centre (SERAC) and Centre for Economic and Social Rights (CESR) V Nigeria*,[99] affirm the significant effects of gas flaring on humans and the environment. In

Gbemre's case, the court held inter alia, that gas flaring violates the Plaintiff"s right to a healthy environment, and ordered the Defendant to stop it. In *SERAC's* case, the court acknowledged it"s earlier position in *Gbemre's* case that continued gas flaring in the Niger Delta violates the rights of the Ogoni people, and is an infraction on Articles 16 and 24, the rights to health and a clean environment respectively as contained in the

African Charter on Human and People"s Right (ACHPR). Oluyobi et al attribute Nigeria"s experience of routine gas flaring to socio-political dynamics, regulatory enforcement deficit, inadequate technical infrastructure to capture and redirect flared gas, non-stringent penalties, which make erring entities prefer to pay non- deterrent penalties and lack of incentives to encourage the stoppage of gas flaring.[100]

3.4.10 National Park Services Act 2006:[101]

The Act establishes the National Parks Service (NPS), a body responsible for administering and preserving National Parks in Nigeria.[55] Some objectives[102] of the Act include:

(a) The preservation of specific samples of wildlife communities in Nigeria.

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[98] FHC/B/CS/53/05
[99] Communication No. 155/96
[100] Olusola Joshua Olujobi and Nathaniel Tolulope Ape, 'Reforming Legal Frameworks for Combating Gas Flaring In Nigeria: A Comparative legal Analysis and Sustainable Solutions' Science Direct (2025) (109) <https://www.sciencedirect.com/science/article/abs/pii/S0301420725002636> accessed 12th September, 2025
[101] CAP N 65, LFN 2004 <https://www.placng.org> accessed August 14th 2025 [55] Section 1
[102] Section 6

(b) Protection of endangered species of wild plants and animals and their habitat.

(c) Conservation of outstanding scientific, natural, scenic and recreational values at national parks.

(d) Protection and maintenance of wetlands and water catchment areas.

(e) Control of dangerous specifies.

(f) Providing education about wildlife conservation.

(g) Preservation of biological diversity in Nigeria.

The Act empowers the NPS to create and administer a network of national parks across Nigeria.[103] These parks encompass various ecosystems and biodiversity. Every park possesses a management plan which outlines particular conservation objectives and guidelines for visitors. Zones are created within parks in the Act, demarcating areas for different uses like tourism, strict protection and research.[104]Plants and domestic or wild animals are prohibited from being introduced into National Parks.[105]

3.4.11 National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007:[106]

This Act establishes the National Environmental Standards and Regulations Enforcement Agency (NESREA).[107]The Agency is mandated to develop and protect the environment. NESREA is the main regulatory agency charged with the duty of executing Nigeria's

[103] Section 28
[104] Section 46
[105] Sections 32, 33 and 34
[106] <www.nesrea.gov.ng> accessed 14th August, 2025
[107] Section 1 NESREA Act

standards, and policies pertaining to the environment. It is further expected to protect and develop the bulk of natural resources, biodiversity and environment in Nigeria, collaborate with relevant stakeholders on enforcing environmental standards.[108] The Minister is vested with power to make regulations to enable the Agency discharge its functions.[109] Some regulations which may have a link to climate change mitigation are thus:

3.4.11.1 National Environmental (Ozone Layer Protection And Hydrofluoro Carbons Phase Down) Regulations, 2022:[110]

This regulation applies to handlers and operators of ozone depleting substances (ODS), hydro fluorocarbons (HFC‟s)[65] foam, Refrigeration and Air-conditioning (RAC). The Nigerian Customs Service is to curtail the illegal importation and exportation of ODS,

HFC‟s and RAC, ban trade export and import of same between countries that have not endorsed the Montreal Protocol.[111]The handlers of ODS, HFC‟s, are to design an environmental system channeled to protecting the ozone layer and climate.[112] It constitutes an offence to handle ODS after the phase out date for the different substances specified in the 6th schedule to the regulations. By the regulations, no person is to handle ODS refrigerants unless following a permit undertaking certification in an approved technical training pertaining to ODS code of handling.[113] Fines are stipulated for individual or corporate violators for listed offences.

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[108] Section 2
[109] Section 34
[110] S. I. No. 79, 27th April, 2022 Vol. 109 <nesrea.gov.ng> accessed 14th August, 2025 [65]Regulation 1
[111] Regulation 5
[112] Regulation 9
[113] Regulation 34

3.4.11.2 National Environmental (Control of Vehicular Emissions From Petrol and Diesel Engines) Regulations, 2011:[114]

The regulations objective is to improve and maintain good quality of air, get rid of pollutants from vehicular emissions. It recognizes the right of citizens to clean air, aims to improve air quality by regulating production of automobiles with quality, thereby enhancing the pristine state of air condition(s).[115]The regulations restrict for instance, the installation and replacement of engine units which emit pollutants above the standard prescribed in schedule 1, as well as two stoke engines and vehicles which do not possess endorsed reduction technology.[116]Penalties are stipulated for breach of regulations, by persons or body corporate.

3.4.11.3 National Environmental (Desertification Control and Drought Mitigation) Regulations, 2011:[117]

The objectives of the regulations are to:

(i). proffer a regulatory roadmap for sustainable usage of areas impacted by desertification, as well as conservation of vulnerable lands.

(ii). educate the public on the causes and effects of desertification accompanied by land degradation.

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[114] S. I. No. 20, 17th May, 2011 vol. 98 <nesrea.gov.ng> accessed 14th August, 2025.
[115] Regulation 1
[116] Regulation 3
[117] S. I. No. 13, 3rd May, 2011. Vol. 98 <https://www.nesrea.gov.ng> accessed 14th August, 2025

(iii). foster usage of alternate energy sources.

(iv). promote afforestation, reforestation and conservation of areas hit by desertification.

(v). undertake agricultural practices that are sustainable, upgraded animal husbandry, water resources management in areas affected by desertification.

Areas are demarcated as specially protected areas, e.g. locations with sand dunes accumulation, areas with less than 10% forest presence and 25% grass covering.[118]Operations such as inordinate cutting of trees, non-sustainable use of ground water and excessive grazing are off-limits in semi-arid and arid areas. Frequent assessments of environmental impact are stipulated for desertification-prone areas.[119]

3.4.11.4 National Environmental (Soil Erosion and Flood Control) Regulations, 2011:[120]

These regulations aimed at protecting humanity, biodiversity in general and the environment. It aims to reduce losses owing to flood occurrence, soil erosion, halt pollution of water bodies and courses.[121] The Regulations prohibit the situation of structures in areas cited to be flood-prone. Exemptions, permits to execute building projects, approval for site plans are to be obtained from the necessary authorities before

[118] Regulation 6
[119] Regulation 3
[120] S. I. No. 125, 2nd May 2011, vol. 98 <https://www.nesrea.gov.ng> accessed 14th August, 2025.
[121] Regulation 2

executing structural development in vulnerable areas. Penalties are stipulated for violators of the regulations, be it corporate bodies or persons.[122]

3.4.11.5 National Environmental (Bush, Forest, Fire and Open Burning) Regulations, 2011:[123]

The regulations aim to prevent or reduce the destruction of the ecosystem through fire outbreaks and indiscriminate burning of materials that may cause air pollution.[79] The regulations forbid the burning of bushes, in the process of destroying goods seized by regulatory agencies, plastics, tyres, hunting expeditions, clearing farmlands, activities which emit dense smoke without a permit from the Agency.[124] When a person has applied to the Agency for a permit but was denied, he or she is not to re-apply to any other authority for that same permit. Any occupier of premises is to notify the Agency office closes to him within a space of seven days, about any fire occurrence. The regulations prohibit open burning with exceptions – camp fires, celebratory bonfires, small cooking, outdoor cooking devices e.g barbeque grills, and burning of organic agricultural wastes for agricultural farming (subsistence).[125]

3.4.12 Renewable Energy Initiatives:

The government aims to generate 70% of electricity generation from renewable sources by the year 2030. The Electricity Act 2023[126] mandates electricity-generating companies to generate power from renewable energy sources, purchase power generated from renewable

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[122] Regulation 19
[123] S. I. No. 15, 6th May 2011, 001 98 <nesrea.gov.ng> accessed 14th August, 2025. [79] Regulation 1
[124] Regulations 2 and 3
[125] Regulations 11
[126] Nigerian Electricity Regulatory Commission, <https://nerc.gov.ng> accessed 14th August, 2025

energy or procure instruments representing renewable energy generation. The Act promotes renewable energy use, setting targets for grid integration and employment of various renewable energy channels like hydropower, wind and solar. It provides for feed-in tariffs and tax incentives to court investments.

The NERC (Nigerian Electricity Regulatory Commission issued the regulations on Feed-In Tariff for Renewable Energy sourced Electricity In Nigeria (REFIT). This regulation applies to energy generated and supplied across the national grid and requires NBET(Nigerian Bulk Electricity Trading Limited) and electricity distribution companies to purchase 50% of renewable energy electricity capacity limit established by the regulations. The REFIT Feed-in tariffs were crafted to attract private investors. The tariffs are to be approved by NERC and subject to reviews.[127]

The Federal Executive Council approved the National Renewable Energy and Energy Efficiency Policy (NREEEP) in 2015 which aims to eradicate barriers to renewable energy and energy efficiency as well as proffer a conducive political milieu to encourage investments in the renewable energy sector.[128]

The Scaling Up Renewable Energy in Nigeria Project (SRENP) is another initiative of the World Bank which aims to increase access to clean, affordable and reliable electricity for millions of Nigerians through the employment and distribution of renewable energy sources (DRE). Launched in December 2023, the project is expected to benefit over 17.5 million people by affording them new or better access to electricity.

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[127] Ibid

[128] Federal Ministry of Power, Nigeria <https://www.power.gov.ng> accessed 14th August, 2025.

The project is expected to last for six years and to be implemented by the Rural Electrification Agency (REA) and Federal Ministry of Power (FMP).[129]

Nigeria is however impaired from fully utilizing her renewable energy sources such as biomass, wind, solar, hydro etc owing to technological and technical capacity deficits, which is further complicated by paucity of funds. The NDC takes cognizance of this and states that renewable energy needs capital intensive concentration.[130]

3.4.13 Petroleum Industry Act 2021:[131]

The oil and gas sector is regulated by the Petroleum Industry Act (PIA) 2021. The enactment of the Act indicates a ray of hope for Nigeria's Petroleum Industry, it addresses some of the problems confronting it, at the forefront is the lack of a cohesive legal framework to regulate midstream and downstream sectors of the oil and gas industry. The Act also proffers a platform to update the various laws that the PIA replaces, some of which represented a disparity with current economic realities.[132]

The establishment of the Nigerian Upstream Petroleum Regulatory Commission (NUPRC)[133] is to the end that compliance with all applicable laws and regulations relating to the upstream sector would be guaranteed, similarly, the commission is to promote safe, environmentally acceptable and sustainable upstream petroleum operations, amongst other things.[134] The Act demands strict compliance to a gas flaring plan coupled with gas

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[129] International Renewable Energy Agency, Renewable Energy Roadmap-Nigeria <https://www.irena.org> accessed 14th August, 2025.
[130] (n 20, page 8)
[131] The Petroleum Industry Act 2021,< https://www.pia.gov.ng> accessed August 28 , 2025
[132] PIA 2021 key highlights <https://www.olaniwunajayi.net/blog/the-petroleum-industry-act-2021-keyhighlights/> accessed August 28th, 2025.
[133] Section 4(1)
[134] Section 6(a-k)

utilization plans to be submitted within 12 months of the coming into effect of the law,[135] it provides for environmental management,[136] financial contribution for remediation of environmental damage[137] and penalized gas flaring.[138] The Act also provides that the administration and management of petroleum resources and their derivatives must be conducted in accordance with the Act and principles of good governance, transparency, and sustainable development of Nigeria.[139] Furthermore, the Act also provides that a licensee or a lessee who engages in upstream and midstream petroleum operations shall within 6 months after the grant of the applicable license or lease, submit for approval an environmental management plan in respect of projects which require environmental impact assessment to the commission[140] or authority.[141] The enactment of the Petroleum Industry Act repealed ten previously existing petroleum laws and replaced them as the Principal Law governing Nigeria's oil and gas industry. However, the act possesses flaws such as the recurrent encouragement of gas flaring which has not been confronted by the Act. The Act's implementation continues to be undermined by the comatose state of refineries in the country warranting the importation of petroleum products and makes room for corruption.[142] The allocation of 3% to the Host Communities Development Fund (HCDF) contrary to 10% request and allocation of 30% to NNPC for frontier basins exploration is a criticize provision of the Act, for not taking cognizance of the needs of host communities. While not losing sight of the Niger Delta Development Levy, it has been suggested that

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[135] Section 108
[136] Section 102
[137]Section 103
[138] Section 104 - 106
[139] Section 67
[140] Section 102
[141] Nigerian Midstream and Downstream Regulatory Authority
[142] David Oladeji Ehijie Borha and Olushola Joshua Olujobi, 'An Examination of the Petroleum Industry Act 2021: Prospects, Challenges, and the Way Forward' PubMed Central (2023) (12) <https://www.pmc.ncbi.nlm.nih.gov/articles/PMC10468656/> accessed 13th September, 2025

both levies be aggregated, or one scrapped while the existing one be upgraded. Section 1 vesting ownership and control of petroleum on the Federal government, not acknowledging the other tiers and host communities in order to reduce inter alia, consistent clamor for resource control, reduced pipeline destruction, and crude oil theft has been flawed as well.[143]

Oil companies are required to pay hydrocarbon tax pursuant to Section 260 of the Act and CIT under Section 302 of the Act; these taxes could be deemed as double taxation and discourage investors from investing in Nigeria‟s petroleum industry. The allocation of 30% from the federation account to NNPC for frontier basin exploration is thought to occasion tension in the allocation of resources to all levels of government, thereby coercing the tiers to seek alternative sources to boost internal revenue.[144]

Furthermore, the Act suffers from unclear terms, defying clarity for instance, the terms "frontier basin" and "host community" are not well defined or absent leaving licensees or regulators to fill in the gaps. The implementation of the Act experiences inconsistencies, the NUPRC has been interrogated for its deficit in enforcement capacity. Many host communities are yet to establish trusts, and settlor compliance is weak. While subsidiary laws made following the Act provide for ADR mechanisms, there are no measures for enforcing such mechanisms.[101] Although the Act reflects environmental protection provisions such as penalties for gas flaring, enforcement remains weak. Section 107 of the Act which permits NUPRC or NMDRPA‟s discretion to override gas flaring prohibitions; makes light of environmental accountability.

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[143] Ibid

[144] Ibid 101. Annabel Ovwigho, 'Beyond Three Years of the PIA: Legal and Regulatory Impact on Nigeria's Oil and Gas Sector' Mondaq <https://www.mondaq.com/nigeria/renewable/1655786/beyond-three-years-ofthe-pia-legal-and-regulatory-impact-on-nigerias-oil-and-gas-sector> accessed 13th September, 2025.

Regulatory overlaps are another fault with the Act despite the existence of two separate regulators. Overlapping responsibilities particularly at crude oil terminals exist.[145] Whilst there is a 2023 Presidential directive attempting to address this by assigning the supervision of such terminals exclusively to the NUPRC, this is devoid of necessary legislative support. Lastly, the emphasis of the PIA on fossil fuel expansion via frontier exploration fund is not in alignment with global clean energy trends. Critics argue that the Act would have created the opportunity to allocate revenue to a renewable innovation fund.[146]

[145] Ibid
[146] Ibid

CHAPTER FOUR

COMPARATIVE ANALYSIS OF NIGERIA'S CLIMATE CHANGE ACT 2021 WITH OTHER JURISDICTIONS

4.1 Introduction:

The Climate Change Performance Index 2025 (CCPI) is a tool that promotes transparency in national and international climate politics. It employs a benchmark to contrast the climate performance of 63 countries and the EU, which when combined, are equivalent to over 90% of greenhouse gas emissions worldwide. The climate mitigation performance is evaluated by four categories: GHG emissions, energy use, climate policy, and renewable energy. While no country occupies 1st-3rd in the CCPI 2025, Denmark ranks 4th and the United Kingdom ranks 6th, a positive development from last year when it ranked 11th, Nigeria ranks 26th.[147]

The United Kingdoms' achievement is attributable to inter alia, its shut down of its last coal fired power plant, while fossil fuel production continues, it is not granting any new licenses; the lifting up of the ban on onshore wind projects and plans to invest in public transport while prohibiting the sale of newly produced fossil fuel powered cars in the future. Although, the U.K's climate policies have not totally aligned it with the 1.5^0C target, this modification in operations, enhanced its rank to the position it currently occupies.[148]

[147] CCPI 2025: Ranking and Results <https://www.ccpi.org > accessed 15th September 2025
[148] Ibid

4.2 United Kingdom Climate Change Act 2008 – Amended in 2019:[149] The Climate Change Act 2008 makes the United Kingdom the First Country to establish long-term binding framework to cut emissions and operates as a basis for the U.K's measures to address climate change. It provides for the mitigation of carbon dioxide and other greenhouse gas emissions as well as adaptation to climate change risk factors. Furthermore, it erects the mechanisms to attain these objectives and make effectual the UK's commitment to combating climate change. Many other countries tailored their laws around it.[150]

The Act vests the Secretary of State in the UK with the responsibility of ensuring that by the year 2050, the country's net carbon account by the year 2050 is at least 100% lower than the 1990 baseline.[151] The 1990 baseline implies the combination of the amount of net UK emissions of carbon dioxide for the year 1900 and net UK emissions for other targeted greenhouse gases for the year that is pegged as the base year for that gas.[152] The Secretary of State is obligated to pinpoint a carbon budget for every five year period commencing from 2008 – 2012 and ensure that the carbon emissions for the specified period do not exceed the indicated carbon budget.[153] The Secretary of States duty revolves around supervising and mitigating the U.K's carbon emissions. The carbon budget for each five year period must be indicated before specified deadlines: before June 1, 2009 for the years 2008 – 2012, 2013 – 2017, and 2018 – 2022, not later than June 30th in the 12th year

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[149] Climate Change Act 2008 <https://www.legislation.gov.uk/ukpga/2008/27/contents > accessed 15th September 2025

[150] Climate Action – Climate Change Committee <https://www.theccc.org.uk/climate-Action/ > accessed 15th September, 2025

[151] Section 1 (1) as amended on 27/6/2019 by the Climate Change Act 2008 (2050 Target Amendment) order 2019 (S. I. 2019/1056) <https://www.legislation.gov.uk/ukpga/2008/27/section/1> accessed 15th September, 2025

[152] Section 1(2), (a) (b) UK Climate Change Act

[153] Section 4(1) (a) and (b) UK Climate Change Act

preceding the start of any subsequent period.[154] The Secretary of State is required to designate the carbon budget for a period via an official order.[155] The carbon budget per period must align with the aim of achieving net emissions reduction by at least 100% by the year 2050.[156] The Act provides that the

Secretary of State must determine the maximum allowable amount of carbon units that can be credited to the UK's carbon account during a period and the removal of or addition to any carbon units pertaining to the carbon account during any given period.[157] The Act provides that the Secretary of State is mandated to submit to parliament a report after determining the carbon budget for a budgetary period. The report ought to reflect an estimated yearly range for the net UK carbon account pertaining to each year.[158] Before presenting a report to parliament, the Secretary of State is obliged to consult with other national authorities as regards the estimated yearly ranges in his report.[159] A yearly range connotes a range of figures that the Secretary of State envisages the net UK carbon account for a particular year to fall within.[160] The Secretary of State has a duty to report to parliament on proposals, plans, with timelines for meeting the country's carbon budget for current and future budgetary periods, the report must inter alia, explain how the proposal affects different sectors of the country, and must be issued in consultation with the relevant national authority.[161]

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[154] Section 4(2) (a) and (b)
[155] Section 8 (1)
[156] Section 8(2) (a)
[157] Section 11 (2) (a) and (b)
[158] Section 12(1)
[159] Section 12(3)
[160] Section 12(2)
[161] Section 14(1) (2) (a) & (b), (3) – (6)

The Act provides that the secretary of state in executing his duties related to the 2050 target must consider the exigency of implementing domestic actions within the UK to address climate change. These domestic efforts imply actions or measures that culminate in reducing emissions of specific greenhouse gases or enhancing the removal of these gases, or a combination of both.[162] The Act provides that the Secretary of State is obligated to annually furnish parliament with a statement commencing from the year 2008. The statement ought to include details as regards the amount of gases emitted, removed and the net emissions for the UK in that year; the methods used to measure or calculate these amounts; whether these amounts have increased or decreased compared to the equivalent figures from the preceding year.[163] Section 19 of the Act states that where the net UK carbon account exceeds the carbon budget for a period, the Secretary of State must promptly provide parliament with a report that details proposals to make up for the excess emissions in future periods, and must be prepared in consultation with the relevant national authority.[164]

The UK carbon account for a period is calculated by subtracting the amount of net UK emissions of targeted greenhouse gases for that period from the number of carbon units credited to the account as per regulations. Additionally, it is increased by the number of carbon units debited from the account according to the regulations. It states that the total carbon units added to the UK carbon account for a budgetary period should not exceed the limit in section 11, which constrains the usage of carbon units for that specified period.[165] The Act provides for a Committee known as the Committee on

[162] Section 15(1)(a) (b) and (2)
[163] Section 16 (1) and (2)
[164] Section 19(1) (2)
[165] Section 27(1) and (2)

Climate Change.[166] The Committee is entrusted with the responsibility of advising the Secretary of State on whether the percentage mentioned in section 1(1)-the 2050 target, should be modified and if necessary, what the new percentage should be.[167] The Committee is vested with the duty of advising the Secretary of State on matters touching each budgetary period, including the appropriate level of carbon budget for that period; the plan for achieving the carbon budget, which entails reducing net emissions of specified greenhouse gases and applying carbon units which comply with the regulations.[168] The Committee has a duty to proffer advice to the Secretary of State concerning the implications of categorizing emissions of specific greenhouse gases from international aviation and international shipping as if they were emissions from sources in the United Kingdom.[169]

The Act provides that the Committee is responsible for presenting a yearly report to the UK parliament and devolved legislatures. The report should feature the advancement made in achieving the carbon budget and advancement towards the 2050 target; the additional measures needed to actualize the budget and target; and an assessment of the likelihood of achieving the budget and 2050 target.[170] The Act provides that the Secretary of State is obliged to present reports to parliament which should include an assessment of the potential risks posed to the United Kingdom by the existing and anticipated repercussions of climate change.[171]

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[166] Section 32
[167] Section 33(1) (a) and (b)
[168] Section 34(1) (a) and (b)
[169] Section 35(1) (a) and (b)
[170] Section 36
[171] Section 56(1)

4.3 Denmark Climate Change Act 2020:[172]

In June 2020, the parliament in Denmark enacted a climate law with the aim of cutting greenhouse gases emissions to 70% below 1990 levels by the year 2030 and attain netzero emissions by 2050. However, in 2021, the Act was amended with a new emission reduction target for 2025 to the values of 50 – 54%.[173] The Act sets a rolling five years target, 10 years in advance. The UN accounting rules are employed to calculate greenhouse gas emissions and reductions against the target. The Climate Council is strengthened and expanded, its funds doubled, and its independence bolstered by selfelection of a new chairman and members. The Act creates a series of reporting obligations on government, inclusive of a yearly parliamentary examination of the government's actions towards attaining the emissions reduction target.[174]

The Act provides that the Minister of Climate, Energy and Utilities is required to establish a national climate target every five years, with a ten year perspective making sure it is as ambitious the previous one.[175] The Act provides that the Minister must once every five years, publish a climate action plan with a 10 year perspective.[176] The Act provides that the Minister of Climate, Energy and Utilities receives impartial guidance from the Danish Council on Climate Change. The Council supports the Minister in designating national climate targets.[177] The Danish Council is an independent advisory body which consists of expert and highly knowledgeable personnel in various fields, relevant to climate, including construction, environment, economics, transportation, agriculture, climate science, energy

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[172] <https://www.en.kefm.dk> accessed 18 September, 2025
[173] The Climate Act, <https://www.Climate-laws.org/document/the-climate act_dae7?q =Denmark +climate+change+act> accessed 18th September, 2025.
[174] Ibid
[175] (n 25, Article 2(1))
[176] (n 25, Article 2(2))
[177] (25, Article 3(1) & (2))

and behavioral research.[178]The Act provides that the Danish Council on Climate Change is required to provide annual recommendations to the Minister for Climate, Energy, and Utilities concerning climate initiatives. The recommendations must tally with the guiding principles in the Act, in Article 1(3).[179] The Danish Council on Climate Change must reflect in its recommendations an assessment on whether the Government's climate actions have the potential to result in attainment of the climate targets.[180] The Danish Council on Climate Change is required to offer an update on Denmark's international targets as part of its recommendations.[181] The Act provides that yearly, the Minister for Climate, Energy and Utilities must compile a climate report that is indicative of historical greenhouse gas emissions (both total and by sector), future projections of greenhouse gas emissions (total and by sector), and an overview of how Denmark's Climate efforts impact the global environment.[182]

The Act provides that the Minister for Climate, Energy and Utilities must present an annual climate programme to the Danish parliament, which includes a status report on the fulfillment of national climate targets and details on planned climate initiatives, measures and their expected short and long-term effects.[183] The Act provides that

Denmark's pursuit of climate targets should prioritize cost-effectiveness, considering the long-term shift towards sustainability, fiscal responsibility, sustainable economic growth, Danish competitiveness and employment.[184]And the Act provides that Denmark must

[178] (n 25, Article 10)
[179] (n 25, Article 4(1))
[180] (n 25, Article 4(2))
[181] (n 25, Article 4(3))
[182] (n 25, Article 6)
[183] (n 25, Article 7(1) (2))
[184] (n 25, Article 1(3) (2))

exhibit that it can attain a green transition while upholding a robust welfare society that maintains social cohesion and balance.[185]

4.4 Lessons For Nigeria:

In order to bolster the trajectory to a sustainable future, Nigeria can imbibe best practices from the other jurisdictions highlighted above and adopt legislation similar to those of the UK and Denmark.

The United Kingdom and Denmark have pegged ambitious targets for mitigating emissions. The UK has earmarked a target of reduction of emissions by at least 100% by the year 2050 lower than the 1990 baselines and achieving net-zero emissions. Denmark set a target of a 50% - 54% reduction in emissions by 2025 and climate neutrality with net-zero emissions by 2050. Whereas the Climate Change Act of Nigeria merely stipulates that Nigeria's climate change actions must be consistent with the aspirations of the Nationally Determined Contributions (NDC); it does not pinpoint long-term emission reduction targets which could encourage consistent efforts to combat climate change.[186]

Were concrete, measurable and time-sensitive targets to be set, Nigeria would have a binding target issuing directly from the legislature. Embedding specific emission reduction targets into the Act would demonstrate Nigeria's commitment to climate action, improve its credibility domestically and intentionally, provide a framework for policy makers, and civil society to align their activities to national climate goals. Furthermore, it would drive proactive measures to reduce emissions, improve Nigeria's resilience to climate change

[185] (n 25, Article 1 (3) (3))
[186] Sunday Omokhudu Daudu and Stella Oloaigbe Idehen, 'A Comparative Analysis of Climate Change Laws in Nigeria with some selected Jurisdictions' Beijing Law Review (2024) (15) (3) 1781 <https://doi.org/10.4236/blr.2024.153101> accessed 19th September 2025.

impacts, and contribute to global climate goals pursuant to the Paris agreement thereby charting the course for sustainable development.[187]

The Nigerian Climate Change Act does not reflect emissions from international shipping and aviation in its targets, although the UK Act does so. Nigeria could imbibe the stance of the UK and incorporate emissions from international shipping and aviation in its targets and budgets. International shipping and aviation emissions greatly contribute to greenhouse gas emissions and regulating them can help mitigate climate change.[42] It is noteworthy that Nigeria has clamored for a just and equitable transition in global shipping, insisting on the need for climate vulnerable nations to benefit from revenue generated through new global emission reduction measures in the shipping sector. Nigeria also hosted the African Strategic Summit on Shipping De-carbonization and pushed for concessional financing measures within the International Maritime Organization Net-Zero fund of 10 billion USD annually starting in 2018.[188]

The Danish Council on Climate Change comprises highly knowledgeable experts in various fields, relevant to climate issues. It is an independent advisory board fielding a wide range of professionals. Nigeria can take a cue from this in the constitution of the National Council on Climate Change by incorporating multidisciplinary professionals in order for government to have access to a myriad of perspectives on climate change and arrive at nuanced decisions concerning its climate change policies.[189] This is in contrast to Nigeria's Climate Change Council ensuing from the Climate Change Act which is composed of high-ranking officials such as the President, Vice President, Federal Ministers

[187] Ibid 42 (n39, page 1782)
[188] Abbas Nazil, 'Nigeria urges Equity in Global Shipping Carbon Tax as Climate Talks Intensify' Nature News (2025) <https://www.naturenews.africa/nigeria-urges-equity-in-global-shipping-carbon-tax-asclimate-talks-intensify/> accessed 19th September, 2025.
[189] (n39, page 1782)

and representatives from various sectors. This composition creates hitches in balanced decision making and operational efficacy. This is attributable to the political interests that hinder the efficiency of the council, the partiality likely to accompany the sanction of government Ministries, Departments and Agencies owing to the interference of the executive who double as members. The rotational appointment of State and Zonal Directors without transitional guidelines, leaves a lacuna and undermines the factors of meritocracy which should precede appointments rather than just geographical quota satisfaction.[190] Similarly, the UK Committee on climate change is endowed with experts fielding expertise in climate science, emissions trading, energy production, finance, technology development, climate policy and other related matters proffering insights into enacting robust climate change policy.[46]

Essentially, the constitution of the NCCC by 'politicians' who possess proclivity to represent varied party interests, face non-autonomy from government, interrogates the competence of the NCCC and its accountability. The structure can pose drawbacks such as political interference, lack of co-ordination, capacity constraints, institutional bottlenecks and inefficacious monitoring and evaluation of climate change policies.[191] On monitoring and evaluation, the Danish Climate Change Act mandates the Minister to appear before parliament yearly to present an assessment of GHG climate action responses; the

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[190] Olusola Joshua Olujobi, 'Strategic Evaluation of the 2021 Nigeria Climate Change Act: Surmounting Challenges, Paving the Way for Success, and Envisioning Future Trajectories' Social Sciences & Humanities (2024) (10) 6 available at <https://www.researchgate.net/publication/380371265_Strategic_Evaluation_of_the_2021_Nigeria_Climate_Change_Act_Surmounting_Challenges_Paving_the_way_for_success_and_Envisioning_Future_Trajectories> accessed 19th September, 2025. [46] (n 43, page 8)

[191] Okara Goodtime Chimnecherem and Ruth Innocent, 'Signed, Sealed, But Not Delivered: The Credibility of Nigeria's Climate Change Act 2021 in Mitigating and Adapting to Climate Change in Nigeria' *Chinese Journal of Environmental Law*(2024)(8)(1)12 <https://www.researchgate.net/publication/381963778_Signed_Sealed_but_Not_Delivered_The_Credibility_of_Nigeria's_Climate_Change_Act_2021_in_Mitigating_and_Adapting_to_Climate_Change_in_Nigeria> accessed 21st September, 2025

parliament is to function as the final arbiter of the adequacy of the government's actions. This helps to timely monitor GHG emissions yearly in order to align with the target. Nigeria can take a cue from this rather than an assessment done at every five years interval.[192] The mandate of the Nigerian Climate Change Act on the

National Council for Climate Change is for the Council to report every five years to the

National Assembly on the country's progress on the action plan, also the extent to which the mitigation profile is aligned with the carbon budget, evaluating risks and managing vulnerabilities. This is a contrasting provision with the Danish Act which provides for yearly reporting, similar to the UK's Climate Change Committee that is obliged to generate an annual report on the progress made in attaining the carbon budget; evaluating urgent action to be undertaken to meet the target, inclusive of a biannual adaptation progress report. Annual reporting offers the opportunity to remedy any lapses by way of emission increments where emissions reduction performance for one year in a five year cycle presents higher than envisaged.[193]

The Climate Change Act of Nigeria mandates the Federal Ministry of Environment to produce an action plan every five years interval subject to the approval of the NCCC, in order to keep track of mitigation and adaptation efforts ensuring that they are in line with attaining the carbon budget. However, it fails to designate the start and end dates of the different five year cycles unlike the UK Climate Change Act which specifies the periods 2008 – 2012, 2013 – 2017, 2018 – 2022 and for later periods. Carbon budget gives shape

[192] (n 43, page 7)
[193] (n 45 pages 13 and 14)

to government climate action and a failure to meet it may be construed as a failure of the government.[194]

[194] (n 45, page 13)

CHAPTER FIVE

ANALYSIS OF SDG 13 IMPLEMENTATION IN NGERIA FOLLOWING THEMATIC ACTIONS

5.1 Introduction:

The implementation of the SDG's began in 2016 taking over the millennium Development Goals. Since that time, the country has made progress in some areas; conversely, some other areas have not experienced notable improvement or may have experienced a regression where there was erstwhile progress.[195] The Sustainable Development Report scores Nigeria at 54.68/100 equivalent to percentage score and ranks her 147th out of 167 UN member countries with respect to the total progress made towards achieving all 17 SDG's. Climate action – SDG 13 is reported by the SDG dashboards and indicators to still experience challenges in the area of carbon dioxide emissions deriving from fossil fuel exports. [196]

The SDG's are designed to be executed in three phases, phase 1 between the years 2016 – 2020; phase 2 between the years 2020 – 2026; and phase 3 between the years 2026 to 2030. The SDG's are also to focus on six thematic areas – policies, institutions, data management, partnerships, finance and communication.[197][198]

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[195] Nigeria's SDG Progress Report pdf, December 2024, Page 9 <https://www.ngfrepository.org.ng:8443/jspui/handle/123456789/6374> accessed 29th August 2025

[196] Country Profiles, Sustainable Development Report 2025 <https://dashboards.sdgindex.org/profiles/nigeria> accessed 24th August 2025

[197] Ignatius Nnamdi Aguene, 'An Appraisal of the Implementation of Sustainable Development Goals

[198] In Nigeria' Enugu State University of Science and Technology, Faculty of the Social Sciences, *Journal of Social Science* (2021) (6) (2) 212 <https://www.esutjss.com> accessed June 25th 2025 [4] (n 1, page 9)

The draw date, year 2030 apparently draws closer, hence Nigeria requires reviews of her progress towards the SDG's and the execution of mechanisms to facilitate achievement of the SDG's, in this case SDG 13.[4] An attempt would be made to analyze

SDG 13 implementation in Nigeria using the various thematic actions as roadmaps.

5.2 Policy and Institutions:

The analysis aims to highlight policy coherence, and the effectiveness of regulatory institutions. The country has various national policies and institutional framework for implementing SDG 13. The OECD-Organization for Economic Co-operation and

Development recommends that in order to achieve the SDG's; government needs to strengthen capacity, both human and institutional, and erect strong governance frameworks to improve policy coherence for sustainable development. All SDG's are inter-connected, and the implementation of a policy is likely to spell positive outcomes for other goals. Hence, there is the need to integrate the social, economic and environmental dimensions of development in policy making to achieve policy coherence and sustainable development.[199] The three pillars of the SDG's-economic, environmental and social have been incorporated into national and sub-national government schemes. Hence, core topics concerning agriculture, food security, industry etc., are integrated into various policies and development plans.[6]

Policy coherence for development is a principle of international development which seeks to balance the trade-offs in domestic and international policies to achieve sustainable

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[199] OECD Sustainable Development Goals (SDG's) <https://www.oecd.org/en/topics/policyissues/sustainable-development-goals-sdgs.html > accessed 7th September 2025 [6] (n1, page 9)

development objectives. Sustainable Development Goals requires institutional structures, processes and capacity to make complex decision and direct the government on the path to executing development.[200] Nigeria's framework, both institutional and policy wise have been highlighted in chapter three, likewise observations on some of the policies which affect their efficacy were brought to the fore. Institutional arrangements outline which government institutions (Departments, Ministries and Agencies) should be obligated to implement and supervise the actualization of targets by execution of measures.[201]

Policy coherence connotes the synergy and consistency between goals, policy existence, their sufficiency, and execution cum outcomes. Coherence facilitates alignment between policies in order to achieve objectives and record expected measurable outcomes.[202] Effective policy execution determines climate resilience, adaptive capacity and successful sustainable development goals execution. Policy and legislative frameworks are tools to confront climate change by encouraging sustainable resource management, emissions reduction, and climate adaptation measures. Many scholars attest to the existence and sufficiency of climate change policies in Nigeria. Policy frameworks exist but are poorly implemented. Success is dependent on effective implementation backed up by political will, adequate funding, institutional coordination and other factors. The reality is that, many

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[200] (n 5)

[201] Okara Goodtime Chimnecherem and Ruth Innocent, 'Signed , Sealed and Delivered: The Credibility of Nigeria's Climate Change Act 2021 in Mitigating and Adapting to Climate Change in Nigeria' Chinese *Journal of Environmental Law* (2024) (8) 11 <https://www.researchgate.net/publicaton/381963778_Signed_Sealed_but_Not_Delivered_The_Credi bility_of_Nigeria's_Climate_Change_Act_2021_In_Mitigating_and_Adapting_to_Climate_Change_in_Ni geria > accessed 18th September, 2025

[202] Godwin O. Aigbe, Lindsay C. Stringer and Matthew Cotton, 'Gas Flaring in Nigeria: A Multi-level Governance and Policy Coherence Analysis' Springer Nature NLM (2023) (2) (1) <https://pmc.ncbi.nlm.nih.gov/articles/pmc9927060/> accessed 12th September 2025.

factors listed hereunder hinder the implementation of policies in Nigeria and undermine policy efficacy:[203]

Nigeria's core dependence on fossil fuel for its energy and electricity needs constitutes a challenge in implementing SDG 13. The energy sector remains the primary driver of GHG emissions. Patronizing available and non-renewable sources of energy actuates harm on the environment. Renewable energy and innovative climate management technology is capital intensive thereby depriving majority of the populace of access to it and undermining energy security. The economic lifestyle of majority of the populace geared towards human survival with each individual making contribution to the emission of greenhouse gases militates against successful execution of SDG 13 in Nigeria. Actions such as bush burning, deforestation, fossil fuel usage for transportation, and electricity needs militate against SDG 13 implementation in Nigeria.[204] A lack of appreciation of the interconnectedness of sustainable development and climate change, in that climate change poses a huge challenge to sustainable development, hence the insufficient attention to strategies that can operate on a longterm. Many existing policies are aimed at short-term disaster response rather than focusing on achievement of resilience and management of risks on a long-term.[205] Climate illiteracy which is the lack of understanding of the severity of climate change or how to adapt to it and build resilience and adaptive capacity is a barrier to implementing SDG 13

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[203] Akinlabi Akinwale John and Ikwuoma Sunday Udochukwu, 'The Role of Environmental Policy in Nigeria's Climate Resilience: Evaluating the Impact of Political will and Policy Implementation' International Journal of Innovative Research in Social Sciences and Strategic Management Techniques (IJRSS – SMT) (2025) (11) (1) 195 <https://www.internationalpolicybrief.org> accessed 18th September, 2025.

[204] Godswill A. Agbaitoro and Kester I Oyibo, 'Realizing the United Nations Sustainable Development Goals 7 and 13 in Sub-Saharan Africa by 2030: Synergizing Energy and Climate Justice Perspectives' *The Journal of World Energy Law and Business* (2022) (15) (3) <https://www.academic.oup.com/jwelb/article/15/3/223/6564681> accessed July 14th 2025

[205] Erimma Gloria Orie, 'Sustainable Development and Climate Change: The Nigerian Experience' NOUN Current Issues in Nigerian Law (2022) (5) <https://www.researchgate.net/publication/358220535_CLIMATE_CHANGE_AND_SUSTAINABLE_DEVELOPMENT_THE_NIGERIAN_LEGAL_EXPERIENCE > accessed 29th July, 2025.

in Nigeria.[206] An analysis of national curriculum frameworks in 100 countries reveals that nearly half (47%) do not mention climate change. Efforts to increase climate literacy and effect behavioral adjustments through education are still inchoate. Lack of awareness makes it difficult to track progress on education and capacity-building objectives. There is a need to reinforce efforts to engender climate literacy in formal and informal education settings.[207] Relevant institutional frameworks

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to aid SDG implementation at national and sub-national levels have been erected.[208] Weak regulatory enforcement traceable to the lack of autonomy and bureaucratic inefficiencies, agencies lack capacity to enforce compliance with climate change policies. Fragmented governance, the result being lack of collaboration and coordination between Federal, State and Local government levels hinders policy coherence. Disjointed activities of agencies that are not in synergy with climate objectives operate as a barrier.[209]

The insufficient involvement of local governments and ultimately 'grassroots' in climate action plans is a barrier to SDG 13 implementation coupled with poor institutional capacity at that level. Hence, the need for strategies involving climate change risk reduction,

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[206] Nonye Benedeth Ezeaka, Gloria Eberechukwu Nwodu, and Chinenye Evelyn Bartholomew, 'Climate Change Mitigation and Adaptation Strategies for Nigerian Farmers: A Communication Approach' International Research in Material and Environment (2025) (5) (1) <https://www.doi.org/10.52589/IRME-6KQ28M2E> accessed 29th September, 2025.

[207] Hurriyet Babacan, 'From Crisis to Policy Action: Tackling Climate Change Through SDG 13' *The International Journal of Community and Social Development* (2025) (7) (2) <https://www.journals.sagepub.com/doi/10.1177/25166026251351370?int.sj-full-text.similar-articles.2 > accessed 1st October, 2025

[208] (n1, page 13)

[209] Akinlabi Akinwale John and Iwuoma Sunday Udochukwu, 'The Role of Environmental Policy in Nigeria's Climate Resilience: Evaluating the Impact of Political will and Policy Implementation ' International Journal of Innovative Research in Social Sciences and Strategic Management Techniques (IJRSS-SMT) (2025) (11) (1) 197 & 198 <https://www.internationalpolicybrief.org> accessed 18th September, 2025

building adaptation and resilience at grassroots levels which are more vulnerable to climate change impacts.[210] The lack of political will, commitment and support on the part of the government owing to competing economic, and political interest compounded by the absence of accountability mechanisms militates against SDG 13 implementation in Nigeria. Climate action plans are often relegated to the realm of verbal platitudes, merely political in nature without sincere commitment to executing initiatives. The absence of political support on the part of the government trickles into inadequate financial appropriation necessary to combat climate change. Similarly, it explains the reason why states lag behind in implementing climate action plans encompassing climate change mitigation and adaptation in their government policies.[211]

Public funding is limited whereas private sector investment is restricted by weak policy incentives and underdeveloped financial instruments. Challenges also exist in the areas of tracking domestic public finance and private sector contributions in developing countries underscoring the need for improved transparency, consistently evaluated methodologies to actuate effective climate action.[212]

Away from analysis of barriers to SDG 13 policy implementation, the effectiveness of climate change mitigation and adaptation coping mechanisms or strategies needs to be evaluated. Nigeria is the most populous African country vulnerable to climate change impacts. The Notre Dame Global Adaptation Initiative (ND – GAINS) ranked Nigeria's vulnerability to climate hazards and its adaptive capacity at 161 out of 182 countries.

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[210] Tola Benjamin Kehinde, Olanrewaju Faith Osasumwe, Olileanya Amuche Ezugwu, Kemi Kehinde, and Segun Kehinde, 'Navigating Climate Action in Nigeria: Assessing Sustainable Development Goal 13 Implementation and Challenges' Journal of Law and Sustainable Development (2024) (12) (1) 15 <https://www.researchgate.net/publication/377755646_Navigating_Climate_Action_in_Nigeria_Assessing_Sustainable_Development_Goal_13_Implementation_and_Challenges> accessed 16th June 2025

[211] (n 17, page 13)

[212] (n 14)

Nigeria's current strategies to cope with climate change effects and mitigate its sources should be assessed in order to incorporate sustainable initiatives.[213] The Intergovernmental Panel on Climate Change (IPCC) categorizes adaptation strategies as structural or physical, social or behavioral and institutional (policies, laws). A study conducted revealed that a great percentage- about 90% of research pagers by academics are dedicated to adaptation while mitigation strategies account for only about 10%; similarly, adaptation research revolves around social or behavioral adaptation.[214] Adaptation measures take the form of independent initiatives from local communities, international organizations and government agencies. Locally – led adaptation which focuses on a bottom-top approach holds promise for building resilience and adaptive capacity at local levels where such initiatives are required. It is championed by local communities on the basis of principles like inclusivity of local stakeholders, marginalized groups, impactful funding and collaboration.[215]

Several research papers have investigated the content of adaptation strategies in order to cope anticipatorily or reactively to climate change impacts. Coping mechanisms like, deploying innovative technology such as genetically improved seedlings, drought resistant seedlings, water system, adjusting farming methods, conserving water, moving out of areas that are susceptible to flooding, setting up early warning systems via timely and reliable

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[213] Hemen Mark Butu, Chukwueloka U. Okeke and Chukwumerije Okereke, 'Climate Change Adaptation in Nigeria: Strategies, Initiatives and Practices' *Africa Policy Research Institute* (APRI) 2022 <https://www.afripoli.org/climate-change-adaptation-in-nigeria-strategies-initiatives-and-practices > accessed 29th September 2025.

[214] Chukwuebuka C. Okafor, Charles C. Ajaero, Christian N. Madu, Chinelo A. Nzekwe, Festus A. Otunomo and Nduji N. Nixon, 'Climate Change Mitigation and Adaptation in Nigeria: A Review' MDPI Sustainability (2024) (16) (16) < https://www.doi.org/10.3390/su16167048 > accessed September 29th 2025

[215] (n 20)

weather projections.[216] Climate –Resilient Agriculture is a model which combines adaptive strategies, traditional mechanisms and resource conservation to generate a more tolerable environment that can cope with climate change impacts. It can improve food security, increase the resilience of farming systems and reduce cost of livestock or crop importation. Climate resilient infrastructure, a component of adaptation entails paying attention to engineering designs of buildings, in such a way that they would withstand climate change effects.[217]

In adapting to climate change, it is important to implement practicable measures against the occurrences of water scarcity, and reduced soil output in agriculture by engaging in water pumping, compost making and application, animal manure application, crop rotation, pesticide and herbicide usage, and adjustment of planting and harvesting calendar to before the start of the rainy season.[218] Planting cover trees, agrodiversification (engagement in off-farming by combining crop and livestock farming) to minimize losses, use of improved varieties of seedlings and livestock such as the West African Dwarf goats and sheep that are more resilient to climate change induced extreme weather although with smaller bodies, use of 'Fadama' which is perennially waterlogged land (taking advantage of high water tables). Many adaptive strategies combine exploring a mix of traditional or indigenous

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[216] Nonye Benedeth Ezeaka, Gloria Eberechukwu Nwodu, and Chinenye Evelyn Bartholomew, 'Climate Change Mitigation and Adaptation Strategies for Nigerian Farmers: A Communication Approach' *International Research in Material and Environment* (2025) (5) (1) 2 & 3 <https://www.doi.org/10.52589/IRME-6KQ28M2E> accessed 29th September 2025

[217] Popoola Olusegun Victor, Adebayo Adeyinka Victor, Oyetunde Christian Oyedeji and Mubarak A. Moronkunbi, 'Climate Change Effect in Nigeria Mitigation, Adaptation, Strategies and Way Forward in the Internet of Things' *International Journal of Innovative Science and Research Technology* (2024) (9) (4) 2633 & 2634 < https://www.doi.org/10.38124/ijisrt/IJISRT24APR1096> accessed 27th September, 2025

[218] Nnadi Onyinyechi I, Ogbodo Francisca N., Ohagwu Amara V, Onyia Chukwuemeka C, Nnadi Uchenna V, and Ozioko Remigius I, 'Effectiveness of Climate Change Adaptation Measures used by Women Garden Egg Farmers in Enugu State, Nigeria' *Journal of Agricultural Extension* (2021) (25) (4) 52 <https://www.dx.doi.org/10.4314/jae.v25i4.6> accessed 1st October, 2025

knowledge and current technologies.[219] Mitigation strategies aim to reduce or eliminate carbon footprint by cutting off GHG emission sources or increasing carbon absorption channels such as the use of electric transportation, afforestation, reforestation, improving energy efficiency in buildings and industries, carbon capture and storage technologies (CCS).[220] Strategies such as a total ban on gas flaring, the usage of cleaner cooking fuels, alternative electricity sources, away from fossil fuel powered generators, the conversion of animal waste and municipal solid waste into biofuel or biogas through

thermochemical processes are potential mitigation tactics. The substitution of livestock feeds with diets that do not encourage methane emissions from livestock, the conversion of crop residues to fuels for feeds rather than burning it in open fields would reduce emissions. The redeployment of 4R's in the waste sector – Recovery, Reduction, Reuse and Recycling with the support of public-private partnership is instrumental in reducing GHG emissions. Similarly, the disposal in sanitized landfills would assist energy recovery in climate change mitigation strategies as Landfill-Gas-To-Energy (LFGTE).[221]

However, the potential of effectively implementing these coping strategies – Climate Change Mitigation Strategies (CCMS) and Climate Change Adaptation Strategies (CCAS) are hindered by a number of factors. Mitigation strategies such as solar powered lighting, carbon tax, renewable energy sources are capital intensive nevertheless they are perceived to be more favorable to the government which is subject to tenure duration. This is because adaptation initiatives are long-term corrective initiatives, which result may not be observable during the tenure of a government but rather in the future. Federal legislator's

[219] (n 21)
[220] (n 23, page 4)
[221] (n 21)

constituency projects revolve around mitigation measures which effect is attainable in the short run, measurable and capable of being designated as landmarks of an administration.[222] Adaptation measures are limited by barriers; the ability of societies to adapt is dynamic and depends on a variety of factors including social networks, governance, human capital institutions, technology, finance etc.[223] Lack of implementation of government policies on adaptation account for lack of infrastructure to adapt to climate change and hamper effective climate adaptation in developing countries. Unpredictable and unstable weather, unavailability of modern harvesting techniques and poor access to equipment, inaccurate weather reports to aid early warning measures are constraints to adaptation strategies in Nigeria.[224]

One of the ways to succeed in developing climate change strategies is information. Timely, credible and reliable information on the current state of the climate and efficacy of various strategies employed in order to subject them to continuous evaluation and actuate effective climate action.[225] However, the chances of effectively implementing adaptation strategies are marred by inadequate information or awareness. Climate literacy and awareness of CCAS and CCMS determines the adoption of CCMS or CCAS as it provides the platform to 'obtain, analyze and interpret' climate change mitigation and adaptation strategies.[226] Indigenous and traditional knowledge may not be effective in passing information when technology is affecting how quickly information is passed.[227]

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[222] Ibid
[223] Onafeso Olumide David, Cornelius Akanni and Adegbayi Hassan, 'Appraisal of Climate Change Adaptation Strategies in Nigeria' (2017) 10 <https://www.researchgate.net/publication/325253869_Appraisal_of_Climate_Change_Adaptation_in_Nigeria> accessed 6th October, 2025
[224] (n 25, pages 56 & 57)
[225] (n 24, page 2635)
[226] (n 21)
[227] (n 32, page 2)

Although the older the farmer, the less tech-savvy he or she is likely to be or less interested in adopting technology based methods. Education, age, state of farmland, access to extension and veterinary services, membership of a cooperative association, influence the awareness of and implementation of adaptation strategies. Access to loans and credit facilities greatly determine the adoption of CCAS.[228] CCMS and CCAS require extensive funding which can get in the way of farmers implementing CCAS and CCMS, therefore diluting any effectiveness the strategies would have had.[229] Nigeria is dependent on foreign loans, grants, aids, fiscal support from international organizations and multilateral finance institutions to finance its climate adaptation and mitigation initiatives as finance from the Nigeria government and private financial sector is yet to align and bridge the financial gas associated with building adaptive capacity and resilience.[230]

The limited political will to effect climate adaptation as a national issue accounts for the shortfall in finance of such endeavors, and impacts effectiveness of strategies. Efficient adaptation can save governments already limited fiscal resources, help in building resilience and adaptive capacity to climate change, invariably resulting in sustainable development.[231] Lack of institutional capacity and weak co-ordination amongst government agencies, NGO's, and community based organizations militate against effective CMS and CCAS.[232] Gender affects the adoption of CCAS as females are more susceptible to climate change impact, yet are unable to be involved in opportunities for building their capacity for adoption of CCAS due to traditional gender demarcations. Females might be likely to engage in off-farming activities but less likely to earn more

[228] (n 21)
[229] (n 23, page 5)
[230] (n 20)
[231] Ibid
[232] (n23, page 5)

than their male counterparts. Females are likely to be affected in their quest for access to land in settings where only men are entitled to own lands.[233]

Women can make contributions to the agricultural sector in developing counties. About 43% of the labor force in the agricultural sector consists of women, and in least developed countries, two in three women are engaged in farming. Gender disparities oust women from participating in implementing adaptive measures to confront climate change.[234] Advanced IOT – internet of things can autonomously monitor multiple parameters in real time, aiding informed decision-making on evaluating effectiveness of strategies. However, effective climate adaptation requires access to extensive data, and executing IOT for adaptation faces technological hitches such as developing new sensors or sensors network, improving decision-support systems, and enhancing the accuracy of climate monitoring.[235] The recommendation is for a balance between mitigation and adaptation programs because it is reported that even if global emissions were to suddenly stop, it would still take thousands of years for the temperature of the atmosphere to revert to pre-industrial levels.[236]

5.3 Finance and Partnerships:

Nigeria is confronted by acute climate risks and is a party to international instruments such as the Paris Agreement. The investments and financial inputs made on climate finance would determine success in climate action.[237]

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[233] (n 21)
[234] (n 25, pages 51 & 52)
[235] (n 24, page 26 36)
[236] (n 21)
[237] Ebipere K. Clark, 'Moving from Plans to Action: Mainstreaming Climate Action into Nigeria's Budget and Economic Planning' Africa Policy Research Institute (2025) <https://www.afripoli.org/movingfrom-

The Paris Agreement takes cognizance of the need for developing countries to be assisted in attaining their NDC targets, its requires developed countries to extend assistance to developing countries in the areas of finance, technology transfer and capacity building. 136 out of 168 countries pegged their NDC's achievement as conditional upon receiving one or more kinds of support from international entities. However, many developed countries do not regard extending financial or other forms of support to developing countries as a priority. The unfulfilled pledge by developed countries to pool 110 billion USD yearly in climate finance by 2020 and channel it to low and middle-income countries is an indicator. Most of the time, finance offered is in the form of loans thereby increasing the debt profile of those developing countries, and the $110 billion USD will only be made available to countries hit by disasters through Special Drawing Rights (SDR).[238]

Other financial structures have been developed after the Paris Agreement to assist climate action such as the Green Climate Fund (GCF), Climate Bonds Initiative, Sustainable Development Goal (SDG) bonds, and the Glasgow Financial Alliance For Net – Zero (GFANZ) which was launched in April 2021. The GFANZ seeks to increase renewable energy investments in emerging markets and developing economies (EM & DE) so as to mobilize private capital into EM & DE through public –private synergy. However, private

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plans-to-action-mainstreaming-climate-action-into-nigeria's-budget-and-economic-planning> accessed 25th September, 2025

[238] Okara Goodtime Chimnecherem and Ruth Innocent, 'Signed, Sealed But not Delivered: The Credibility of Nigeria's Climate Change Act 2021 in Mitigating and Adapting to Climate Change in Nigeria' Chinese Journal of Environmental Law (2024)(8)(1)5<https://www.researchgate.net/publication/381963778_Signed_Sealed_but_Not_Delivered_The_Credibility_of_Nigeria's-Climate_Change_Act_2021_in-Mitigating_and_Adapting_to_Climate_Change_in_Nigeria> accessed 25th September, 2025.

finance cannot substitute for public finance, and it cannot flow in the absence of public policies that support the creation of investment -worthy and bankable projects.[239]

Incorporating climate action into budgetary and economic planning is essential to foster economic progress and facilitate sustainable development. The restructuring of Nigeria's Federal Ministry of Budget and Economic Planning (FMBEP) as an entity separate from the Federal Ministry of Finance (FMF) in 2023 offers a window to mainstream climate objectives within national economic and financial plans. However, where roles are not clearly demarcated, thereby promoting coordination across Ministries, it could result in duplication of functions and bureaucratic bottlenecks, in addition to resources allocation problems.[240]

CPI's landscape of climate finance in Nigeria, which was a subset of data presented in the 2024 edition of landscape of climate finance in Africa, provides a baseline on climate finance flows in Nigeria- Nigerian Climate Finance experienced incremental growth in 2021/2022, the third highest by total in Africa. However, the finance flows are a shortfall from projected needs. It records that 2.5 billion USD of public and private finance derived from domestic and international sources were channeled to climate action in Nigeria, increased by 32% from 1.9 billion USD in in 2019/2020. Juxtaposing flows against estimated needs, reveals a yearly climate finance deficit of 27.2 billion USD. The 2.5 billion in tracked climate finance is reported to be small compared to the monies spent on fossil fuels subsidies or loss and damage from floods in the year 2022; and indeed almost equal to money on debt servicing. Public actors inclusive of Multilateral Development Finance Institutions (DFI's) provided 70% of Nigeria's climate finance. Mitigation

[239] (n 44, pages 5 & 6)
[240] (n 43)

received more flows of about 1.2 billion USD, largely owing to investments in solar PV, low-carbon transport initiatives away from other mitigation sectors which received little to no finance, such as industry and waste sectors.[241] Despite this, there still exist barriers in securing energy access for Nigeria and facilitating sustainable development. Adaptation received 0.74 billion USD which is less than one-third of Nigeria's climate finance, covering only 6% of the country's projected adaptation finance requirements, amidst increase climate risks. International public climate finance to Nigeria which makes up the majority of flows was largely channeled as debt, concessional (54%) and non-concessional (35%). The dependence on debt-based climate investment is worrisome as the country possesses a huge debt profile. The government expends over 80% of its income on debt servicing, with 20% of available income directed at provision of social services and executing development projects.[242]

The primary means of allocating climate or green funds is the Nigerian Sovereign Green Bond Program (NSGBP), commenced in 2017. It expanded through favorable regulations and issuer diversification, catalyzing funds for renewable energy, energy efficiency and climate resilience projects. However, the market is confronted by obstacles such as the lack of standardized impact assessment and reporting structures; transparency and accountability issues due to the lack of independent verification and lastly, limited accessibility and awareness amongst the investing public. Addressing these challenges will be instrumental to the effectiveness of the NGSBP.[243]

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[241] Sean Stout, Ishrita Gupta, Anna Balm and Chavi Meattle, 'Landscape of Climate Finance in Nigeria 2025' Climate Policy Initiative (2025) <https://www.climatepolicyinitiative.org/publication/landscapeof-climate-finance-in-Nigeria-2025> accessed 24th September 2025

[242] Ibid

[243] (n 43)

Green Finance denotes funding climate mitigation and adaptation activities, such as renewable energy projects, pollution control and waste management through issuing instruments such as green bonds, carbon credits, green mortgages, green loans and sustainable agriculture loans in order to position financial flows with climate-resilient and low emission - reduction strategies. Green bonds refer to fixed-income financial instruments created to facilitate climate-related projects.[244] Carbon credits on the other hand operate as tradable instruments in the form of virtual certificates which direct financial flows towards climate-friendly projects by signifying GHG's avoided or actively removed from the atmosphere. It compensates emission reduction measures achieved through initiatives such as afforestation or renewable energy etc.[245] While green bonds may operate to mitigate greenhouse gas emissions and alter the carbon footprint positively in Nigeria, the proceeds may not be channeled to environmentally beneficial projects with measureable outcomes owing to weak governance, corruption, insufficient project selection pre-requisites and poor oversight structures. This highlights the need for strict regulatory mechanisms and transparent monitoring structures to ensure the funds are directed to genuine green projects.[246]

Carbon credits are essentially designed to incentivize GHG emissions reductions however, their practical execution in Nigeria experienced drawbacks such as low market participation, underdeveloped market structures and weak enforcement of carbon pricing systems. These factors undermine the effectiveness of green bonds and carbon credits as

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[244] Yahaya Tanko, Magaji Sule and Ibrahim Musa, 'Effect of Green Finance on Climate Change Mitigation in Nigeria' *Journal of Islamic Economics Perspectives* (2025) (19) (7) 4 <https://www.researchgate .net/publication/393231280_Effect_of_Green_Finance_on_Climate_Change_Mitigation_in_Nigeria> accessed 24th September, 2025

[245] (n50, page 5)

[246] (n 50, page 17)

instruments for climate change mitigation in Nigeria, warranting policy reforms, capacity building and the creation of robust carbon market infrastructures to boost efficacy.[247]

There is also the Integrated National Financing Framework (INFF) 2022 which focuses on integrating the SDG's into budgetary planning and implementation. It aims to do this via mechanisms such as data collection on SDG financing, participatory budgeting, SDG tagging, SDG audits, SDG-aligned budget performance reports, parliamentary oversight on SDG alignment etc. Climate Resilient Budgeting (CRB) and Green Budgeting (GB) methodologies such as SDG tagging are present in the INFF. SDG 13, climate change action is identified in section 7. 2. 2 of INFF 2022 as a cross-cutting theme, awaiting decision as to whether it should be mainstreamed independently or as one of the SDG's within the INFF.[248]

CRB and GB are emerging tools which encourage the incorporation of climate perspectives into Public Finance Management (PFM). Whilst CRB dwells on appropriating resources to adapt to the impacts of climate change and strengthen resilience, GB connotes mitigation initiatives integrated into budget frameworks. CRB requires an analysis of public expenditure and its relationship to climate change; assess accountability of public finance systems; tag climate budget by tracking budget expenditure connected to adaptation and mitigation; and assess the implications of climate change for program performance. GB requires the identification and tracking of expenditures with impact on the environment, the evaluation of climate change impacts on government finance by

[247] Ibid
[248] (n 43)

analyzing hazards, vulnerabilities and potential costs; assessment of the economic and fiscal implications of climate mitigation policies.[249]

The INFF was designed in line with the government's commitment to the 2021 – 2025. National Development Plan with support from the United Nations Development Program (UNDP) in order to boost SDG financing without accumulating public debt. The strategy builds on earlier exploration of financing sources and proffers recommendations on measures to increase development funding via strategic reforms spanning across public and private finance. It designs a framework that aligns policies with sustainable development and creates an enabling environment for domestic, international, public and private parties to respond to national needs. It is backed by a clear action plan and monitoring framework on government coordination mechanism to ensure success and Medium-Term Revenue Strategy as well as a Medium-Term Expenditure Framework.[250]

The Medium Term Expenditure Framework (MTEF) operates as a planning instrument defining the government's medium term spending priorities, inclusive of allocations for national initiatives. It takes cognizance of current and emerging needs and aligns expenditure with national objectives. Its effectiveness is dependent on accurate revenue projection, fiscal discipline, and thorough monitoring and evaluation structures.[251] Lastly, there is the Special Climate Change Fund (SCCF) meant to finance projects relating to adaptation, technology transfer, capacity building, energy, forestry, waste management, economic diversification etc. It is meant to complement other funding strategies for the execution of the UNFCC and is operated by the GEF. The GEF stands for Global

[249] Ibid
[250] Nigeria Integrated National Financing Framework: Financing Strategy <https://www.inff.org/resource/nigeria-integrated-national-financing-framework> accessed September 28th 2025
[251] (n 43)

Environment Facility which serves as operating entity of the existing financial mechanisms under the UNFCCC. The Least Developed Countries Fund (LDCF) was created to assist parties that are least developed countries to inter alia, execute preparation and implementation of National Adaptation Programmes of action (NAPA's) and is operated by the GEF.[252] The Adaptation Fund was originated in 2001 to finance concrete adaptation projects in developing countries which are party to the

Kyoto Protocol and vulnerable to climate change effects. The Fund for Responding to Loss and Damage (FRLD) was created to address loss and damage to assist developing countries that are particularly vulnerable to the adverse effects of climate change in responding to economic and non-economic loss and damage associated with climate change impacts.[253]

With respect to partnerships, the challenges ravaging the country are global and interconnected. No country irrespective of wealth or capacity can address climate change, or confront the pandemic in isolation. The 2030 Agenda represents a collective recognition that destinies are interconnected and that SDG's are a mutually shared endeavor that benefit all.[254] The UN collaborates with its partners in Nigeria, such as the United Nations Environment Program, the International Fund For Agricultural

Development, the United Nations office for Disaster Risk Reduction, Food and Agriculture Organization of the United Nations, International Labor Organization etc., towards achieving sustainable development goals. It does this by extending and increasing technical

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[252] Funds and Financial Entities <https://www.unfccc.int/process-and-meetings/bodies/funds-andfinancial-entities> accessed 1st October, 2025.
[253] Ibid
[254] Country Profiles, Sustainable Development Report 2025 page 3 <https://dashboards .sdgindex.org/profiles/nigeria> accessed 24th August, 2025

support to the office of the Senior Special Adviser to the President on SDG's (OSSAP–SDG's) and relevant ministries to ensure that planning and budgeting towards development in the country is aligned within the SDG framework.

The UN works closely with the Nigerian government and other partners to ensure that SDG's are effectively executed and resources generated are channeled to various sectors of the economy to benefit the poor and vulnerable in Nigeria.[255]

One notable product of partnership between the Federal government, United Nations Development Program and the European Union is the design of the Nigeria's Integrated National Financing Framework (INFF) for sustainable development as one of the outcomes of the 77th session of the United Nations General Assembly in September 2022. The Ministries of Finance, as well as Budget and Economic Planning are to see to its implementation with the OSSAP-SDG's as secretariat.[256]

5.4 Data Management and Communication:

The SDG progress report for December 2024 notes the phenomenon of poor data reporting and record keeping at community and LGA tiers of government impacting quality and availability of service data, necessitating the State Bureau of Statistics to be empowered to produce credible data on the SDG's into the National Statistical System (NSS). This would ensure effectual management of data to facilitate monitoring and evaluation objectives to aid decision making.[64] Nigeria experiences significant gaps in data infrastructure, which

[255] United Nations Nigeria, Sustainable Development Goal 13 Climate Action <https://nigeria.un.org/en/sdgs/13 > accessed September 6th, 2025

[256] Nigeria's SDG Progress Report pdf, December 2024, page 9 <https://www.ngfrepository.org.ng:8443/jspui/handle/123456789/6374> accessed August 29th 2025 [64] (n 62, page 12)

poses as a hindrance to tracking climate-related expenditures, activities, and outcomes.[257] These deficits in data accumulation obscure the follow-up on progress, challenges and priorities for climate action in Nigeria.[258]

On communication, Nigeria created and published the Voluntary National Reviews (VNR) at the United Nations High-Level Political Forum (UNHLPF) held in July 2017 and 2020, highlighting institutional, policy, and regulatory frameworks for creating an enabling environment to mainstream SDG into national plans.[259] The OSSAP-SDG's has a mandate on monitoring, evaluation, documentation and reporting on SDG's in Nigeria. The office shuttles between preparing Voluntary National Reviews (VNR) and SDG's Progress Report (SPR). The SPR is a product of field work and various integrated methods of obtaining data in order to report on the status of SDG implementation at national and sub-national levels.[260]

[257] (n 43)
[258] (n 47)
[259] (n 62, page 9)
[260] (n 62, page 15

CHAPTER SIX

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

6.1 Summary of Findings:

The study finds that climate change is a pressing global issue characterized by floods, droughts, rising temperatures, extreme weather events, etc. It has associated impacts on the environment, human health, animal survival, biodiversity at large, economy and security. Human activities, particularly greenhouse gas emissions from burning fossil fuels, deforestation, and industrial processes significantly contribute to climate change. Climate change is also triggered by natural causes. Essentially, the consequences are far-reaching as seen in the study. Sustainable development is crucial in addressing climate change as it seeks to balance economic, social and environmental needs. The implementation of Sustainable Development Goals 13 (SDG 13) aims to combat climate change and its impacts. However, achieving SDG 13 requires a comprehensive approach that includes effective mitigation and adaptation legal frameworks, institutions and coping mechanisms or strategies.

Successful implementation of SDG 13 would involve strengthening resilience and adaptive capacity to climate-related hazards; integrating climate change measures into national policies and strategies; improving awareness, education, and institutional capacity on climate change. The study undertakes a review of literature connected to the topic as well as theoretical frameworks. The study also finds that Nigeria has a plethora of frameworks and policies domestic and international, aimed at addressing climate change, incorporating economic, social and environmental dimensions of development. These frameworks

include the Climate Change Act, Petroleum Industry Act, amongst others. However, despite the existence of these policies, they have not been effective in curbing climate change impacts in Nigeria. The impacts of climate change which are glaringly visible attest to their ineffectiveness; similarly, statistics proffered which evidence Nigeria's vulnerability as well as projections of the effect of an untamed climate. Mitigation and adaptation strategies or mechanisms also experience drawbacks affecting their efficacy. The study reveals that while Nigeria has a robust legal framework, the implementation and enforcement of these laws are hindered by various challenges. Specifically, this study examined the Petroleum Industry Act, Climate Change Act and Flare Gas Regulations amongst others and identified areas that could be the subject of reforms to improve policy coherence. For instance, despite the existence of the Flare Gas regulations, gas flaring remains a significant problem in Nigeria, underscoring the need for stricter enforcement and more effective implementation mechanisms.

Several factors contribute to the ineffectiveness of Nigeria's Climate Change policies and coping mechanisms or strategies including lack of policy coherence and coordination amongst government agencies and institutions; limited institutional capacity, and technical expertise; weak regulatory enforcement traceable to lack of autonomy and bureaucratic inefficiencies; over-reliance on fossil fuels and limited investment in renewable energy technology although capital intensive; inadequate funding and resources allocation for climate change initiatives thereby increasing debt profile owing to loan taking; lack of transparency in the implementation of climate policies, absence of political will and support on the part of the government in implementing climate change policies and facilitating sustainable development. The lack of political will is traceable to competing

economic and political interests. Climate change illiteracy as well as limited awareness of climate change effects and how to cope with it; inadequate data banks in recording climate change initiatives and progress towards SDG is implementation at all levels, so as to aid evaluation and monitoring objectives; lack of credit facilities to farmers to aid adaptation to climate change using coping mechanisms; inadequate indigenous knowledge of farmers on coping strategies; lack of access to veterinary services and extension services; limited local government and grassroots involvement in decision making and in implementing climate change initiatives; imbalanced priority on mitigation mechanisms evidenced by more finance flows to mitigation as against balanced finance flows to both mitigation and adaptation; inaccurate weather reports over unstable and unpredictable weather which were it accurate, would aid early warning systems; weak policy incentives to encourage private sector investment; underdeveloped financial instruments; and the preference or focus on short-term rather than long-term disaster response strategies; gender inequality restricts women from contributing their quota in decision making and in implementing climate change adaptation mechanisms and climate change initiatives. The study comparatively analyzes the Climate Change Acts of Nigeria, Denmark and the UK highlighting lessons for Nigeria. The findings suggest that Nigeria's Climate

Change Act can be strengthened by adopting best practices from Denmark and the UK.

6.2 Recommendations:

The study recommends the following:

There is the need to strengthen regulatory institutions, empower agencies with greater autonomy, increased funding to reduce corruption and bolster agencies capacity for

environmental regulation. Effective coordination amongst agencies to erase bureaucratic inefficiency; increase human and technical capacity by leveraging on workshops and trainings to better equip officers and personnel of agencies with skills to carry out their roles effectively. To aid policy coherence, involve stakeholders, youth, women, technical experts, Civil Society Organizations (C.S.O's), Non-governmental Organization (NGO's), representatives of marginalized communities in policy making and implementation.

There is need for Nigeria to diversify her economy away from dependence on oil and gas exports and fossil fuel usage to other sustainable means of energy and electricity objectives. Encourage investments in green technologies to aid rapid de-carbonization; technology which is centered around Carbon Capture Infrastructure Targeted Technology Research and Development, provide enabling environment for Public-

Private Partnerships (PPP's) through clear environmental standards, provide incentives such as tax breaks, or subsidies to foster private sector investments. Investments in green technology and a focus on technology transfers would also see to the fulfillment of SDG 8 by creation of gainful employment.

Increased funding, national budgetary appropriation to climate action should be sufficient, reduce dependence on loans and donor support from international organizations, leverage on carbon taxes. Resort to innovative financing mechanisms for bridging the gap in domestic finance, such as Debt-For-Climate-Swaps, green bonds etc. To enhance carbon credits applicability, policymakers should prioritize upgrading market structures, stakeholder participation and enforcement structures which would reinforce the regulatory infrastructure for carbon trade, ensure participation in carbon markets and investing in capacity building measures for emitters and regulators. Increase the budget for whatever

strategy is experiencing a deficit from the legislature, thereby creating a balance in adaptation and mitigation appropriation.

In order for farmers to adapt locally at their community and grassroots levels, provide access to credit facilities, relevant technology, and necessary funding in order to support their CCAS or CCMS as the case may be, whether by way of purchasing genetically improved crops, livestock, seedlings, build irrigation systems etc. There is the need for renewed commitment by the government to attain SDG 13, exerting the much needed political will. In order to 'extract' or strengthen political will, CSO's and the media inclusive of environmental activists need to engage in increased advocacy to aid policy implementation. Similarly, there should be structures for holding leaders accountable for instance, legal consequences for lack of climate commitment.

Education and awareness of climate change, its impacts, climate change policies, and knowledge of CCAs and CCMs to aid climate action should go beyond formal education which is limited in outreach to those in rural settings. Climate Change information, polices and strategies (CCAS and CCMS) should be disseminated in local languages, spanning across various ethnic groups, with visual aids and storytelling. Communication platforms such as television, radio, social media, extension services workers, veterinary services workers, climate change clubs, community engagement and participation groups, Theatre for Development (TfD), can be explored in communicating information to boost awareness.

Awareness improves the chances of making informed decision to build adaptive capacity and increase resilience via strategies chosen and employed. Gender equality in education should be encouraged to increase the opportunities of females to make informed choices in climate action. The reach should extend to rural, low-income and underserved areas.

The State Bureau of Statistics must be empowered to produce credible data on SDG 13 implementation and progress uploaded into the National Statistical System (NSS), this will help ensure accurate data management to facilitate monitoring and evaluation objectives. In order to assess the impact of climate finance, the Federal Ministry of

Budget and Economic Planning, National Bureau of Statistics and Nigerian Institute for Social and Economic Research (NISER), the National Council on Climate Change, private sector specialists should collaborate to generate data infrastructure to track emissions and ensure alignment with carbon budgets and the NDC targets.

Local governments need to be more invested in climate action plans at grassroots levels. Strategies incorporating climate change risk reduction, and strengthening of resilience and adaptive capacity at local government and grassroots levels which are more vulnerable to climate change impacts need to be adopted.

Climate governance reviews suggest the preference for development policies that are limited to short-term disaster and risk response rather than long-term adaptation, there is the need for mainstreaming climate risks into national and sectoral planning to attain long-term resilience and manage risks on a long run. The NEMA, Nigerian Emergency Management Agency and Nigerian Meteorological Centre should provide accurate weather reports to relevant agencies meant to disseminate climate change information such as extension services workers.

6.3 Contributions to Knowledge:

The study's comparative analysis of the Nigerian Climate Change Act with the UK and Denmark's reveals lessons for Nigeria to enhance its climate governance framework.

Nigeria should adopt long-term emission targets issuing from the legislature similar to the UK's 100% emissions reduction target by 2050 and Denmark's 50% - 54%

emissions reduction target by 2025 ultimately aiming for climate neutrality and net zero emissions by 2050. This would provide a clear direction for climate action and encourage consistent efforts to combat climate change. Nigeria can follow the UK's example and include emissions from international shipping emissions in its targets, ensuring a more comprehensive approach to reducing greenhouse gas emissions.

Nigeria can benefit from constituting its Climate Change Council with technical experts, similar to the UK's Climate Change Committee and Denmark's Council, to ensure informed decision-making and minimize political interference.

Nigeria should adopt a more frequent reporting schedule, annual reporting specifically, to track progress and identify areas for improvement. This can be achieved by mandating the NCCC to report to parliament yearly, similar to the UK's and Denmark's Climate Change Act provisions, instead of every five years.

These best practices can strengthen Nigeria's climate governance framework, ultimately contributing to a more effective response to climate change.

6.4 Area For Further Studies:

Assessment of the implementation of Sustainable Development Goal 13 in Nigeria: Implications for Climate Justice.

The area for further study aims to investigate the extent to which Nigeria's implementation of SDG 13 has addressed the needs and rights of marginalized communities inclusive of Niger Delta areas, which communities are unevenly affected by climate change, despite being minutely responsible for greenhouse gas emissions. The study would examine the distributive, procedural and recognition dimensions of climate change in the context of SDG 13 implementation with a focus on its impacts on vulnerable populations and the environment. The study would also examine the state of climate change litigation in Nigeria in securing climate change justice.

6.5 Conclusion:

In conclusion, the effective implementation of Sustainable Development Goal 13 in Nigeria requires a multifaceted approach that addresses the identified barriers. To achieve Sustainable Development Goal 13, Nigeria must prioritize climate-resilient infrastructure, enhance climate finance, and promote green technology. Additionally, strengthening institutional frameworks, improving climate change awareness, and fostering stakeholder engagement is crucial. By adopting a holistic and inclusive approach that leverages the strengths of government, civil society and the private sector, Nigeria can address climate change and achieve SDG 13. Ultimately, the successful implementation of SDG 13 would depend on government's commitment to climate action, international cooperation and collective efforts towards a sustainable future. By doing so, Nigeria can pave the way for a climate-resilient and sustainable development trajectory that benefits both present and future generations.

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