

Legal Framework on Management and Protection of Mangroves in the Niger Delta, Nigeria

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Abstract: *The depletion of natural resources including mangrove forests is severe and devastating. In order to mitigate the effects of depletion of such natural resources, legal and frameworks are in place to regulate activities in the mangroves with particular aim to manage and preserve the mangroves in the Niger Delta. This article adopted the doctrinal research method in appraising the legal and institutional frameworks. While the article concedes to the plethora of legislation on the subject, the article reveals that very little impact is felt, as deforestation is carried out without control in the mangroves. Accordingly, it is recommended that an effective machinery should be set in place to enforce the provisions of the various legislation, and protect the mangrove for the good of generation and generations to come.*

Keywords: Mangroves, Deforestation, Protection

1. Introduction

This article discusses the legal framework on management and protection of mangroves in the Niger Delta region of Nigeria. In discussing this, recourse is had to national, regional, and international laws available in form of legislations and treaties and conventions. We shall be having a rather brief discourse on this in this article.

1.1 National Legal Framework

Reference to national frameworks implies the legislation enacted by the National Assembly for the control and protection of the mangroves in Nigeria, and the Niger Delta region as the core of this article. These frameworks shall be discussed briefly:

1) Constitution of the Federal Republic of Nigeria 1999 (as amended)

The CFRN 1999 is the supreme law,¹ and its provisions are binding on all authorities and persons in Nigeria.² The provisions of the CFRN 1999 are binding to the extent that any other law which is inconsistent with the provisions of the CFRN 1999, that of the latter shall prevail and the other law to the extent of the inconsistency be void.³ The legislative powers of the Federal Republic of Nigeria was vested in the National Assembly,⁴ with exclusive powers to make laws with respect to any matter included in the Exclusive legislative List set out in Part 1 of the Second Schedule of the CFRN 1999.⁵

Chapter II of the CFRN 1999 made provisions for the Fundamental Objectives and Directive Principles of State Policy. It was provided that it shall be the duty and responsibility of all organs of government and of all authorities and persons in the exercise of legislative, executive or judicial powers to conform to, observe and apply the provisions of Chapter II of the CFRN 1999.⁶ The

security and welfare of the people was stated to be the primary purpose of government.⁷ Several objectives such as political objectives, economic objectives, social objectives, educational objectives, foreign policy objectives and environmental objectives are the fundamental objectives under Chapter II of the CFRN 1999.⁸ In this regard, exploitation of human or natural resources in any form whatsoever, for reasons other than the good of the community shall be prevented,⁹ and the State is to protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria.¹⁰

Agriculture or forestry is not in the Exclusive Legislative List. Therefore, the management and control of mangrove forests is exercised as a matter under the Concurrent Legislative List.¹¹ As a result of this, legislation on protection of the forest, sustainable forest management, management and protection of mangrove forests are within the legislative powers of the National Assembly of the Federation and House of Assembly of a State. Following this, a number of laws have been enacted relating to the management and control of mangrove forests particularly in the Niger Delta region.

2) Land Use Act 1978

The position of our land tenure system before the LUA depicted a general dichotomy between North and South. In the South, individual ownership was generally unknown; land belonged to families, clans and communities with headship of the institutions holding the land in trust for members.¹² There was huge fragmentation of land meant for use by members and alienation in any form was made subject to consent by the holding institution.¹³ In the North, the land tenure law,¹⁴ streamlined the system of land holding by granting occupancy right in the form of lease

¹ CFRN 1999, s 1 (1).

² *Ibid.*

³ *Ibid.*, s 1 (3).

⁴ *Ibid.*, s 4 (1).

⁵ *Ibid.*, s 4 (2) (3).

⁶ *Ibid.*, s 13.

⁷ *Ibid.*, s 14 (2) (b).

⁸ *Ibid.*, ss 15 – 20.

⁹ *Ibid.*, s 17 (2) (d).

¹⁰ *Ibid.*, s 20.

¹¹ *Ibid.*, pt II, 2nd sch.

¹² *Amodu Tijani v Secretary, Southern Nigeria* (1921) A C 399.

¹³ *Ekpendu v Erika* (1959) 4 FSC 79; *Lukan v Ogunsusi* (1972) 1

All NLR (Pt 2) 42; *Ojoh v Kamalu* (2005) 18 NWLR (Pt 958) 523.

¹⁴ Cap 59 Laws of Northern Nigeria 1963.

hold interest to natives and non - natives with restrictions on the transfer of interest.¹⁵

Customary practices in Southern Nigeria were found inimical to development as they inhibited government's access to land. The fragmentation of land and traditional subsistence farming was fast becoming out of step with the economic realities of modern times with negative impact on commercial agriculture. The need for a new land tenure regime became eminent in the face of non - availability of land for agricultural and industrial purposes and the need for equitable distribution of land for abundant food production and poverty alleviation.

Consequently, the LUA was enacted, vesting radical title to the parcels of land within the territory of each state in the Governor of that State,¹⁶ to be held in trust for the use and common benefit of all Nigerians.¹⁷ There are known pitfalls in the provisions of the LUA which are inimical to agricultural development. Access to land under the LUA is not guaranteed for, although the Governor or Local Government Chairman has the power to make a grant, there is no duty to make such grant even where conditions for the grant have been fulfilled. Customary land rights upon which commercial agricultural investments have taken place may be overridden by the Governor in order to promote mineral development, and where this happens, the benefits delivered to generations of communities and families would be displaced by mineral development that hardly delivers any benefit to the communities and families. This calls for a policy change that gives better recognition to customary land rights.

The provisions of the LUA raised jurisdictional uncertainties bordering on ownership in management and protection of mangrove forests in the Niger Delta, Nigeria.¹⁸ This forms one of the challenges to effective implementation of the legal measures for management and protection of mangrove forests to be analysed in Chapter Four of this thesis.

3) Petroleum Industry Act 2021

PIA 2021 is an Act of the National Assembly that provided amongst others, the legal governance, regulatory and fiscal framework for the Nigerian petroleum industry.¹⁹ It created efficient and effective governing institutions with clear and separate role for the petroleum industry.²⁰ The PIA 2021 provided clear roles for the Minister of Petroleum,²¹ the Nigerian Upstream Petroleum Regulatory Commission (NUPRC),²² and the Nigerian Midstream and Downstream Petroleum Regulatory Authority (NMDPRA).²³ Importantly, both NUPRC and NMDPRA were empowered to make regulations for the purposes of carrying out their

duties and exercising conferred powers.²⁴ In administration of upstream petroleum operations and environment, the PIA 2021 made provisions for licences, as a prerequisite for carrying out operations in the upstream petroleum sector.²⁵ In this respect, the PIA 2021 provides for petroleum exploration licence,²⁶ and petroleum prospecting licence.²⁷ In the case of midstream and downstream petroleum operations carrying operations in the sector requires the operator to obtain a licence or permit.²⁸ It is important to state that there are conditions to be fulfilled before the grant of a licence or permit.²⁹

The most important provision of the PIA 2021 as it relates to this article is the provisions on environmental management,³⁰ financial contribution for remediation of environmental damage,³¹ gas flaring penalties,³² prohibition of flaring or venting of natural gas,³³ and natural gas flare elimination plan.³⁴ The environmental management as provided for under the PIA 2021 entails that a licensee or a lessee is to submit an environmental management plan to NUPRC or NMDPRA, as the case may be.³⁵ The PIA 2021 further mandates a licensee or lessee producing natural gas to submit a natural gas flare elimination and monetisation plan to the NUPRC.

1.2 National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007

NESREAA replaced the repealed Federal Environmental Protection Agency Act 1988 (FEPAA). The NESREAA embodied laws and regulations focused on the protection and sustainable development of the environment and its natural resources.³⁶ The National Environmental Standards and Regulations Enforcement Agency (NESREA),³⁷ was established by the NESREAA as a body corporate and enforcement agency for environmental standards, regulations, rules, laws, policies and guidelines.³⁸

The NESREAA charged the NESREA with the responsibility for the protection and development of the environment.³⁹ The responsibilities of NESREA also included biodiversity conservation and sustainable development of Nigeria's natural resources in general.⁴⁰ Specifically, the NESREA is to enforce compliance with laws, guidelines, policies and standards on environmental

¹⁵ *Ibid*, s 27 – 28.

¹⁶ LUA, s 1.

¹⁷ *Ogunola v Eiyekola* (1990) 4 NWLR (Pt 146) 632.

¹⁸ M T Okorodudu-Fubara, *Law of Environmental Protection: Materials and Text* (Ibadan: Caltop Publishers 1998) 239.

¹⁹ PIA 2021, preamble.

²⁰ *Ibid*, s 2 (a).

²¹ *Ibid*, s 3.

²² *Ibid*, ss 4 – 10.

²³ *Ibid*, ss 29 – 32.

²⁴ *Ibid*, s 33.

²⁵ *Ibid*, s 70.

²⁶ *Ibid*, s 71.

²⁷ *Ibid*, s 72.

²⁸ *Ibid*, ss 111 – 114.

²⁹ *Ibid*.

³⁰ *Ibid*, s 102.

³¹ *Ibid*, s 103.

³² *Ibid*, s 104.

³³ *Ibid*, s 105.

³⁴ PIA 2021, s 108.

³⁵ *Ibid*, s 102 (1).

³⁶ NESREAA, preamble.

³⁷ *Ibid*, s 1 (1).

³⁸ *Ibid*, s 1 (2) (a) (b).

³⁹ *Ibid*, s 2.

⁴⁰ *Ibid*.

matters;⁴¹ and to enforce compliance with the provisions of international agreements, protocols, conventions and treaties on the environment, including climate change, biodiversity, conservation, desertification and forestry.⁴²

1.2.1 National Policy on the Environment (Revised 2016)

The key environmental issues facing Nigeria include land degradation, deforestation, urbanisation and multiple uses of forest resources. The goal of the NPE is to ensure environmental protection and the conservation of natural resources for sustainable development.⁴³ The strategic objectives of the NPE including securing a quality of environment adequate for good health and well being and promoting sustainable use of natural resources and the restoration and maintenance of the biological diversity of ecosystems.⁴⁴

The conservation and sustainable development of forest ecosystems and their associated resources in poverty reduction and sustainable development was well articulated.⁴⁵ The mangrove was identified as a major form of vegetation in the Niger Delta area.⁴⁶ In this respect, the forms of direct impact on the mangrove including the destruction of biodiversity by land uses such as oil and gas production, aquaculture (shrimp and fish ponds), agriculture (rice), urban development, and forest clear felling for economic gain and other purposes.⁴⁷ Indirect loss of mangrove biodiversity components has resulted from human alterations of upland watersheds, causing diversion of fresh water flows and deterioration of water quality from the input of toxic chemicals.⁴⁸ In order to address the impacts both direct and indirect on the forest ecosystem, 14 policy statements were issued and contained in the NPE.⁴⁹

The policy statements direct the Government amongst others, to: Formulate and implement innovative strategy to increase forest and tree cover to at least 25% of the total land area in line with the FAO standard; Develop and implement a National Strategy for Rehabilitation and Restoration of degraded forest ecosystems; Promote the rational exploitation of forest resources to meet domestic consumption needs; to achieve a significant export activity on a long term bases; and Review and Support the effective implementation of the National Forest Policy and other related policies and legislation.⁵⁰ The policy statements in the NPE further provided for the Government to: Regulate forestry activities to enhance conservation and environmentally sound management practices; Develop and support appropriate forest based development mechanisms in the emerging carbon market; and to implement a Forestry Trust Fund (FTF) for forest activities in Nigeria.⁵¹

⁴¹ *Ibid*, s 7 (a).

⁴² *Ibid*, s 7 (c).

⁴³ NPE, 3.1.

⁴⁴ NPE, 3.2 i, ii.

⁴⁵ *Ibid*, 4.6.

⁴⁶ *Ibid*, 2.

⁴⁷ *Ibid*.

⁴⁸ *Ibid*.

⁴⁹ *Ibid*, 4.6.

⁵⁰ *Ibid*.

⁵¹ NPE, 4.6.

1.2.2 National Environmental (Desertification Control and Drought Mitigation) Regulation 2011

Regulation 2011

The NEDCDMR is a regulation made for the control of desertification in all affected areas in Nigeria.⁵² Amongst the objectives of NEDCDMR are to: Provide an Effective and Pragmatic Regulatory Framework for the sustainable use of all areas affected by desertification and the protection of vulnerable lands;⁵³ encourage reforestation, reseedling, afforestation, and conservation of areas under desertification;⁵⁴ and attain the 25% forest cover as prescribed by FAO.⁵⁵

NESREA is permitted to make declaration of specially protected areas under desertification or threatened.⁵⁶ NEDCDMR provides for the grant of permit in order to carry out any of the regulated activities as listed in schedule iv to the NEDCDMR.⁵⁷ Consequently, guidelines, targets, and enforcement procedures were copiously provided for in the NEDCDMR.⁵⁸ Importantly, offences and penalties were provided in the NEDCDMR.⁵⁹

1.2.3 National Environmental (Control of Bush, Forest Fire and Open Burning) Regulations 2011

Regulations 2011

The essence of the National Environmental (Control of Bush, Forest Fire and Open Burning) Regulations 2011 (CBFFOBR) is to prevent and minimise the destruction of ecosystem through fire outbreak and burning of any material that may affect the health of the ecosystem through the emission of hazardous air pollutants.⁶⁰ CBFFOBR restricts the burning of bush/forest or any activity that may cause bush/forest fire except with permit sought and obtained from the NESREA.⁶¹

It is instructive that a permit holder is under mandate to comply with the conditions set out in the permit.⁶² Notwithstanding the permit, the permit holder before proceeding to burn the bush/forest, is enjoined to give notice of intention to burn the bush/forest to the Enforcement Officer of NESREA who is in charge of the area where the land is situated;⁶³ and to the owner of occupier of any adjoining land.⁶⁴ The mode, period and procedure for the notice of intention were well defined in the CBFFOBR.⁶⁵ The CBFFOBR prohibits the use of explosives on land,⁶⁶ use of fireworks,⁶⁷ and burning of bush or forest for hunting

⁵² NEDCDMR, reg 1.

⁵³ *Ibid*, reg 2 (a).

⁵⁴ *Ibid* reg 2 (e)

⁵⁵ *Ibid* reg 2 (f).

⁵⁶ *Ibid*, reg 6 (1).

⁵⁷ *Ibid*, regs 7 (1), 8 (1).

⁵⁸ *Ibid*, regs 7, 8,9.

⁵⁹ *Ibid*, reg 21.

⁶⁰ CBFFOBR, reg 1.

⁶¹ *Ibid*, regs 3 – 6.

⁶² *Ibid*, reg 7 (1).

⁶³ *Ibid*, reg 7 (2) (a).

⁶⁴ *Ibid*, reg 7 (2) (d).

⁶⁵ CBFFOBR, reg 7 (3) – (5).

⁶⁶ *Ibid*, reg 17.

⁶⁷ *Ibid*, reg 18.

of animals.⁶⁸ Unless in circumstances provided in the CBFFOBR.

Violation of the provisions of the CBFFOBR constitutes an offence,⁶⁹ attracting punishment and penalties.⁷⁰

1.3 Climate Change Act 2021

CCA 2021 is a stand - alone legislation that provides a framework for achievement of low green - house gas emissions (GHG) through inclusive green growth and sustainable economic development and the implementation of Nigeria's commitment to net zero emissions declared at conference of parties 26 (COP 26) in 2021. The CCA 2021 established the National Council on Climate Change (NCCC),⁷¹ which will be tasked with implementing the country's climate action plan.⁷²

The CCA 2021 provided for the climate change obligations of MDAs which includes establishment of a climate change desk;⁷³ climate change obligations of public entities as may be imposed by the NCCC;⁷⁴ and climate change obligations any private entity with employees numbering 50 and above. The CCA 2021 provided for the promotion and adoption of nature - based solutions to reducing GHG emissions and mitigating climate change issues in Nigeria.⁷⁵

1.4 Natural Resources Conservation Act 1989/Forestry Research Institute of Nigeria (Establishment) Act 2018

The NRCA established the Natural Resource Conservation Council (NRCC). The NRCC is empowered to address soil, water, forestry, fisheries and wildlife conservation by formulating and implementing policies, programmes and projects on conservation of the country's natural resources. On the other hand, the FRINA established the Forestry Research Institute of Nigeria (FRIN) for forestry research, education and training in Nigeria.⁷⁶

The functions of FRIN includes researching, experimentation, sample application and patenting; innovation and technology dissemination through farming systems and extension services; the improvement of the genetic resources of forest trees and the ecosystem for economic development; and researching into the biodiversity of Nigerian forest in relation to its flora and fauna and management of the coastal mangrove watershed and dunes.⁷⁷ In order to carry out its functions, FRIN was conferred with powers.⁷⁸ However, it is important to state that FRIN exercises some of the powers subject to the approval of its supervising Ministry or Board, or upon written request by the Federal Government, Government Agencies, States or

Local Government authorities, or any authorised body.⁷⁹ The Governing Board of the FRIN is charged with the administration of policies,⁸⁰ while the Director General of the FRIN is charged with the day - to - day management of the affairs.⁸¹

1.5 Environmental Impact Assessment Act 1992

EIAA sets out the general principles, procedure and methods for prior consideration of Environmental Impact Assessment on certain public or private projects.⁸² The objectives of any EIA include to establish before a decision is taken by any person, authority, corporate body or unincorporated body, including the Government of the Federation, State or Local Government intending to undertake or authorise the undertaking of any activity, needs to consider.⁸³

EIAA prohibits or restricts the initiation of a project without prior consideration of EIA.⁸⁴ In same vein, the minimum content of EIA was provided.⁸⁵ Mandatory study list requiring report of NESREA before a project can be undertaken.⁸⁶ Activities in the forestry sector are included in mandatory study list.⁸⁷ EIAA prescribes notification and consultations in respect of transboundary.⁸⁸

1.6 Nigerian Police Act 2020

The NPA 2020 repealed the Police Act.⁸⁹ It provides for the framework for the Police Force; to ensure corporation and partnership between the police and communities in maintaining peace, combating crime, protecting liberties, life and property.⁹⁰ The objectives of the NPA 2020 is to provide for a more efficient and effective police force that is based on the principles of accountability and transparency; protection of human right and fundamental freedoms; and partnership with other security agencies.⁹¹

The CFRN 1999 specified expansive functions, powers and duties of the police force.⁹² The functions, powers and duties of the police force amongst others are to: prevent and detect crimes and protect the rights and freedom of every person in Nigeria;⁹³ maintain public safety, law and order;⁹⁴ protect the lives and property of all persons in Nigeria;⁹⁵ enforce all laws and regulations;⁹⁶ and adopt community partnership in the discharge of its responsibilities.⁹⁷

⁷⁹ FRINA, s 3.

⁸⁰ *Ibid*, s 4 (1).

⁸¹ *Ibid*, s 6 (1) (2) (b).

⁸² EIAA, preamble.

⁸³ EIAA, s 2 (a).

⁸⁴ *Ibid*, s 2

⁸⁵ *Ibid*, s 4.

⁸⁶ *Ibid*, s 12.

⁸⁷ *Ibid*, sch, s 6.

⁸⁸ *Ibid*, s 11.

⁸⁹ Cap P19 LFN 2004.

⁹⁰ NPA 2020, preamble.

⁹¹ *Ibid*, s 1.

⁹² *Ibid*, s 4.

⁹³ *Ibid*, s 4 (a).

⁹⁴ *Ibid*, s 4 (b).

⁹⁵ *Ibid*, s 4 (c).

⁹⁶ NPA 2020, s 4 (d).

⁹⁷ *Ibid*, s 4 (f).

⁶⁸ *Ibid*, reg 19.

⁶⁹ *Ibid*, reg 21 (1).

⁷⁰ *Ibid*, reg 21 (2) (3) (4).

⁷¹ CCA 2021, s 3.

⁷² *Ibid*, s 20.

⁷³ *Ibid*, s 22 (1).

⁷⁴ *Ibid*, s 23.

⁷⁵ *Ibid*, s 27.

⁷⁶ FRINA, preamble.

⁷⁷ *Ibid*, s 2 (1).

⁷⁸ *Ibid*, s 3 (1).

The provisions of the NPA 2020 are very salutary. In practice, the provisions of the NPA 2020, although still recent, seems not observed in the spirit and letter of the law. Police officers play significant role in the implementation of the various laws on forestry, particularly in the prevention of offences relating to forestry.

1.7 National Biodiversity Strategy and Action Plan 2016 – 2020

The NBSAP guides on the conservation and sustainable utilisation of biodiversity, access to genetic resources and the fair and equitable sharing of the benefits arising from their utilisation. The NBSAP is anchored on the long - term vision of a Nigeria with healthy living environment where people live in harmony with nature and sustain the gains and benefits of biodiversity, integrating biodiversity into national programme aimed at reducing poverty and developing a secured future in line with the principle of ecological sustainability and social equity.⁹⁸

The NBSAP adopts and applies 5 goals of the Global Strategic Plan 2021 – 2020.⁹⁹ These goals or priority areas are to: address the underlying causes of biodiversity laws by mainstreaming biodiversity into national planning and societal values;¹⁰⁰ reduce the direct pressures on Nigeria's biodiversity resources and promote sustainable use;¹⁰¹ improve the statuses of biodiversity by safeguarding ecosystems, species and genetic diversity;¹⁰² ensure fair and equitable sharing of the benefits from biodiversity and ecosystem services to all;¹⁰³ and promote participatory planning, knowledge management and capacity building as an integral part of implementation of biodiversity management.¹⁰⁴

The NBSAP provided the strategic and action plan for its implementation.¹⁰⁵ In addition to setting out national programmes for attaining the various targets,¹⁰⁶ steps to be taken to actualise the goals were also provided. In respect of mainstreaming biodiversity into national development, poverty reduction, and climate change plans, 7 sectoral actions were provided.¹⁰⁷

1.8 National Forest Policy 2006 (as Revised)

Efficient forest management can be based on sound forest policy. The first Nigerian forest policy which was approved in 1988 as part of agricultural policy for Nigeria was aimed at achieving self - sufficiency in wood products through the employment of sound forest principles and technics.¹⁰⁸ First policy was developed in 2006 based on guiding principles

crafted along the lines of addressing the factors that contribute to the decline of forest resources.

The guiding principles in NFP threw insights into some issues such as livelihoods and poverty reduction, food security, biodiversity conservation and environmental services, national forestry legislation and forestry valuation. The NFP issued policy statements on 31 sectoral issues which were also described as Principal Policy Elements. The 31 sectoral issues included forest management, biodiversity conservation, national parks and game reserves of conservation interest, forest administration, forest fires, poverty alleviation and food security, national tree planting campaign, wood fuels, drought and desertification control, and manpower development. The elements of support for implementing the NFP included a national forest programme development, forestry legislation, gender and equity, funding mechanisms, international and regional corporation and forest sector monitoring and evaluation. The 3 Principal Policy Elements of Forestry Alienation and Food Security; Forestry Research and Development; and Gender Issues were elaborately spelt out with Policy Statement, Policy Objectives, and Policy Strategies.

1.9 Forest Laws of Selected States of the Niger Delta

Nigeria had never lacked laws regulating forest, forest management and forest resources. The legal protection of the forest estate in Nigeria dates back 1901 with the promulgation of the Forestry Ordinance, later the Forestry Act 1985, now repealed.¹⁰⁹ Under the Forest Ordinance, forests are classified either government reserved, government protected forest, or as communal forest areas.¹¹⁰ The key features of the forestry Ordinance were directed towards the following:

- 1) Prohibiting or regulating forest produce of all kinds;
- 2) Prohibiting the sale and the purchase of forest produce of any kind;
- 3) Prohibiting the possession/collection of forest produce of any kind;
- 4) Doing anything that may cause injury to any forest produce or forest growth or forest property;
- 5) Establishment and maintenance of nurseries and afforestation of lands; and
- 6) Regulating the kindling of fires for any purpose within a protected forest or a reserved forest.

It is important to state that all through the colonial period the management of forests were without hitches. Currently, there is no Act of the National Assembly directly regulating forestry in Nigeria, although, there are policies. It is important to underscore the fact that there is a world of difference between Policy and Law.¹¹¹ However, most of

⁹⁸ NBSAP, chap 3.1.

⁹⁹ *Ibid*, chap 3.3.

¹⁰⁰ *Ibid*, Goal 1.

¹⁰¹ *Ibid*, Goal 2.

¹⁰² *Ibid*, Goal 3.

¹⁰³ *Ibid*, Goal 4.

¹⁰⁴ *Ibid*, Goal 5.

¹⁰⁵ *Ibid*, chap 5.

¹⁰⁶ *Ibid*, chap 4.

¹⁰⁷ *Ibid*, chap 4.2.

¹⁰⁸ G C Ujor, 'The Forest Policies of Nigeria: A Cursory Analysis' *Nigerian Agricultural Research Journal (NAPREJ)* (2018) 5 (1); 20 – 30, 20.

¹⁰⁹ J P Esavwede and M Ojo, 'Nigeria without Oil: A Call for Paradigm Shift to Forest Laws as a Tool for Harnessing Forest Resources in Nigeria' *Journal of, Ethical and Regulatory Issues* (2022) 25 (6); 1 – 9, 2.

¹¹⁰ *Ibid*; 5.

¹¹¹ Esavwede and Ojo (n261); 6; P A Akhiero, 'Applications of the Forestry Law in Forestry Management' (a Paper Presented at the one-day Legal Workshop for Stakeholders in the Forest Industry in Edo State of Nigeria at the Ogba Zoological Gardens, Benin City 9th February 2006); 1 – 21.

the States in the Niger Delta have enacted laws regulating forestry.¹¹² Regrettably, the content of these laws are largely relics of the Forestry Ordinance, except CRSFCL with some unique provisions. For instance, the CRSFCL established a body corporate known as the Forestry Commission (FC), and conferred on it expansive powers,¹¹³ to carry out the functions specified in *section* 6: and also established the Forestry Reserve Fund;¹¹⁴ and Forest Trust Fund.¹¹⁵ In same vein, the FL 1976 established a special fund called the Forest Protection Fund.¹¹⁶

Legal measures for management and protection of forests including mangrove forest were provided for in the various laws on forestry discussed above. One of the prominent measures adopted under the various laws for protection of forest is by way of licences, permits and authorisation.¹¹⁷ Another measure is the power to make regulations governing the use of forests.¹¹⁸ It is pertinent to state that regulations is an all - embracing measure in the protection of forest as it covers a number of matters. Prohibitions and Restrictions constitute another measure for protection of forest under the various laws.¹¹⁹

Offences, fines, penalties, and sanctions also constitute a measure for protection of forests under the various laws.¹²⁰ The management and protection of forests is also exercised through some appointed officers charged with enormous responsibility. The various laws made provisions, and established positions such as Reserve Settlement Officer,¹²¹ the Director of Forestry,¹²² Administrative Officer, Forest Officer, Police Officer,¹²³ Enforcement Officers,¹²⁴ Wildlife Conservation Advisory Committee,¹²⁵ Director of Wildlife and Ecotourism,¹²⁶ and Conservator General.¹²⁷ The courts have significant roles to play in the management and control of forest under the various laws, whether on its original jurisdiction or appellate jurisdiction.¹²⁸

¹¹² Forest Law 1963, Cap 57 Laws of Rivers State of Nigeria 1999 (FLRS); Cross River State Forestry Commission Law 2010 (CRSFCL; Forestry Law, Cap 51 Laws of Bayelsa State (FLBL); Forestry Law, Cap 59, Vol. III, Laws of Bendel State of Nigeria 1976 as amended (FL 1976), now Applicable in Delta State of Nigeria and Edo State of Nigeria.

¹¹³ CRSFCL, s 7.

¹¹⁴ *Ibid*, s 19.

¹¹⁵ *Ibid*, s 20; FLBL, s 1 (1).

¹¹⁶ FL 1976, s 23A.

¹¹⁷ FLRS, s 29; CRSFCL, ss 44, 46, 53; FLBL, s 39; FL 1976, ss 30 -34; FL 1976 Regulations, pts 3, 4.

¹¹⁸ FLRS, s 31 (1); CRSFCL, s 55 (1); FLBL, s 41; FL 1976, s 28.

¹¹⁹ FLRS, s 31 (1) (b) (c) (f) (g); CRSFCL, s 48, 50 (1), 55 (1), 51 (1) (b) (ii) (iii), (c), (f), (g), 77, 78, 79, 80; FLBL, s 41 (1) (b) (ii) (iii) (c) (f) (g) (v); FL 1976, s 28; FL 1976 Regulations, pt 2.

¹²⁰ FLRS, pt 8; CRSFCL, ss 83 – 88; FLBL, ss 49, 50, 52, 53; FL 1976, ss 30 -34, 38.

¹²¹ FLRS, ss 8 – 11; CRSFCL, ss 29 – 32; FLBL, ss 16 – 21.

¹²² FLRS, s 12; FL 1976, s 40.

¹²³ FLRS, ss 35 (1), 44; CRSFCL, ss 96 – 98; FLBL, ss 43, 44, 45, 50 (1), 54 (1), 56, 57; FL 1976 Regulations, reg 2.

¹²⁴ CRSFCL, ss 67, 68,

¹²⁵ CRSFCL, s 70 (1),

¹²⁶ CRSFCL, s 69 (1),

¹²⁷ CRSFCL, s 70 (2).

¹²⁸ FLRS, ss 14, 15; CRSFCL, ss 83 (1), 105; FLBL, ss 24, 25; FL 1976, s 35.

2. Regional Legal Framework

Regional legal instruments are in place that are relevant to this article, and they are briefly discussed hereunder:

2.1 Revised Treaty of the Economic Community of West African States 1993

The ECOWAS Treaty reaffirmed the establishment of ECOWAS as the sole economic community in the West African Region for the purpose of economic integration and the realisation of the objectives of the African economic community.¹²⁹ The aims of the ECOWAS amongst others were to promote cooperation and integration, raise the living standards of the peoples of ECOWAS, contribute to the progress and development of the African Continent,¹³⁰ and to ensure the harmonization and coordination of policies for the protection of the environment.¹³¹

The ECOWAS Treaty provided for certain fundamental principles to guide the pursuit of its enshrined objects. These fundamental principles included: maintenance of regional peace, stability, and security through promotion and strengthening of good neighbourliness; recognition, promotion and protection of inter - state cooperation, harmonization of policies and integration of programmes in the field of natural resources,¹³² and equitable and just distribution of the cost and benefits of economic cooperation and integration of programmes.¹³³ The member states undertook to protect, preserve and enhance the natural environment of the region; adopt policies, strategies and programmes at National and Regional levels; and establish appropriate institutions to protect, preserve and enhance the environment, control erosion, deforestation, and so on.¹³⁴

2.2 ECOWAS Environmental Policy 2008/Supplementary Act A/SA.4/12/08 Relation to the ECOWAS Environmental Policy

The environment and natural resources are characterized by a general trend of degradation and resources depletion. The problems affecting the environment in the ECOWAS region includes land degradation, deforestation, loss of biodiversity and the abusive exploitation of trees and forest. It was therefore essential and urgent that policies and initiatives for addressing these challenges be put in place. This was what the ECOWAS Environmental Policy set out to achieve. The EEP was anchored to address 6 problems, including: Land Desertification, Erosion and Degradation;¹³⁵ Loss of Biodiversity;¹³⁶ and Degradation processes brought about by the development of mineral resources.

Loss of biodiversity was acknowledged to be through deforestation: the unexpected or irregular transfer of forest land use to other sectors for other uses; incessant and

¹²⁹ ECOWAS Treaty, art. 2.

¹³⁰ ECOWAS Treaty, art 3.1.

¹³¹ *Ibid*, art 2 (b).

¹³² *Ibid*, art 31.1.

¹³³ *Ibid*, art 4 (k).

¹³⁴ *Ibid*, art 29.

¹³⁵ EEP, s 2.1.

¹³⁶ *Ibid*, s 2.2.

uncontrolled bush and forest fires; armed conflict in the ECOWAS region; poor and inadequate knowledge on natural resource conservation and management; and lack of synergy in the management of forestry ecosystems in the ECOWAS Subregion.¹³⁷ The EEP specified a number of guiding principles for achieving its overall objective which is to reverse environmental degradation and depletion of natural resources, ameliorate the quality of the living environment, conserve biological diversity with a view to ensuring a healthy and productive environment.¹³⁸ This objective is geared towards improving the well being of the ecosystem and the population of the ECOWAS region.

The EEP set out 4 strategic thrusts or lines for action for addressing the environmental problems of the ECOWAS region. The strategic thrusts or lines for action are as follows:

- 1) Strengthening of environmental governance (setting up of a Sub - Regional Mechanisms) and promotion of capacities to that effect (SL1);
- 2) Promotion of sustainable management of the resources for the improvement of the sub - regional economy in an environment friendly manner (SL 2);
- 3) Prevention of environmental pollution and nuisance, urban waste, and for the control of trans - boundary movement of hazardous waste/products (SL 3); and
- 4) Promotion of information, education and communication for a healthy environment (SL 4).

2.3 African Convention on the Conservation of Nature and Natural Resources 1968 (as Revised)

The objectives of the ACCNNR are to enhance environmental protection, foster the conservation and sustainable use of natural resources and to harmonise and coordinate policies in this field.¹³⁹ This objective is with a view to achieving ecologically rational, economically sound and socially acceptable development policies and programmes.¹⁴⁰ The ACCNNR provided 3 principles that will guide the parties in taking actions to achieve its objectives and implement its provisions. The guiding principles are the rights of all peoples to a satisfactory environment, favourable to their development; the duty of States, individually and collectively, to ensure the enjoyment of the right to development and the duty of States to ensure that developmental and environmental needs are met in a sustainable, fair and equitable manner.¹⁴¹ The meaning of terms were defined in the ACCNNR.¹⁴²

The ACCNNR enjoined the parties to take all necessary measures for the protection, conservation, sustainable use and rehabilitation of vegetation cover.¹⁴³ These measures will be achieved if the parties:

- 1) Adopt scientifically based and sound traditional conservation, utilisation and management plans for

forests, woodlands, rangelands wetlands and other areas with vegetation cover;

- 2) Control fires, forest exploitation, land clearing for cultivation, grazing by domestic and wild animals and invasive species;
- 3) Establish forest reserves, and carry out afforestation programmes where necessary; and
- 4) Limit forest grazing to season and intensities that will not prevent forest regeneration.

2.4 African Strategy on Climate Change 2014

The African Union in recognition of the vulnerability and change, developed the African Strategy on Climate Change (ASCC).¹⁴⁴ In order to counteract the numerous risks associated with climate change, a good number of strategies and initiatives were developed in ASCC. The ASCC is organised on four thematic pillars of: Climate Change Governance; Promotion of research, education, awareness raising and advocacy; Mainstreaming and integrating climate change imperatives in planning, budgeting, and development processes; and Promotion of national, regional, and international cooperation. The ASCC is divided into six parts with various chapters and sub - chapters followed by three annexes.

It was recognised in the ASCC that over 70% of Africa's population depends on forests.¹⁴⁵ Forests provide many social, economic and environmental benefits, including carbon sinks, biodiversity conservation, watershed protection and livelihoods.¹⁴⁶ Climate change, however, poses enormous challenges for forest, forest dependent people and society through reduced delivery of forest products and forest ecosystem services.¹⁴⁷ Nevertheless, climate change issues have not been addressed in national policy frameworks and sectoral framework.

In order to achieve sustainable forest management and climate resilient forests, ASCC employed African Countries to implement REDD+. To this end, the goal of sustainable forest management (SFM) can only be achieved through the following, namely: develop a continental framework/strategy for REDD+; promote and support development and review of forest policies and strategies at regional and national levels that enhance community participation; promote and support development and implementation of REDD+ strategies at regional and national levels; and enhance capacity to implement REDD+ and Clean Development Mechanism (CDM).¹⁴⁸

3. Foreign Legal Framework

There are legal and institutional frameworks in Brazil, and Indonesia on management and protection of forest ecosystem. This thesis will therefore analyse these legal and institutional frameworks as follows:

¹³⁷ *Ibid*, s 2.2.

¹³⁸ *Ibid*, s 5.3.

¹³⁹ ACCNNR, art 2 (ii).

¹⁴⁰ *Ibid*.

¹⁴¹ ACCNNR, art 3 (iii).

¹⁴² *Ibid*, art v.

¹⁴³ *Ibid*, art viii.1.

¹⁴⁴ ASCC in 2014.

¹⁴⁵ *Ibid*, x1.17.

¹⁴⁶ *Ibid*.

¹⁴⁷ *Ibid*.

¹⁴⁸ ASCC, x1.17.

3.1 Brazil

Brazil is known to have significant forest resources, accounting for 551 million hectares, or 65 percent of the country's total land area.¹⁴⁹ The Brazilian rain forest accounts for 30% of all wooded regions on the planet.¹⁵⁰

The Amazon basin encompasses nearly all of Brazil's rain forest land. Rain forests occupy approximately 64% of the Amazon; the remaining 36% is covered by savannas and natural grasslands.¹⁵¹

The Amazon is abundant in natural resources, including aluminium, copper, tin, nickel, iron, gold, manganese, and natural gas, in addition to timber this without doubt strikes a semblance with the Niger Delta mangrove which is rich in oil and gas. What seems to be different is that unlike in Nigeria where the harvest of oil and gas marked the beginning of massive destruction of mangroves, the case in Brazil is that the devastation to the Amazon Forest began with conversion of the forest to other agricultural purposes. For example, the Amazon rain forest was mainly unspoiled until the 1960s.

Without doubt, Brazilian forests have suffered from deforestation just like the Niger Delta mangrove forests. In Brazil, however, there seem to be two types of deforestation which will include total forest removal and partial forest logging. The first involves conversion of forest area to agriculture and cattle grazing. Selective logging, which is common in tropical forest countries, is the main source of the second kind of deforestation. Selective logging is used in timber exploitation to harvest a few important tree species. Because the forest looks to be intact, this type of logging is critically deceiving. Selective logging, on the other hand, may result in genetic degradation at the species level. It does not seem that nothing has been done to deal with the challenges of deforestation in Brazil the problem rather lies in the poor implementation of the frameworks put in place to deal with the problem.

By enacting and enforcing regulations, the federal government is responsible for the maintenance of a healthy environment,¹⁵² and the conservation of flora.¹⁵³ Nonetheless, as three major government investigations and several other studies have shown, illicit predatory logging predominates in the Amazon. First, information gathered by the Brazilian Institute of Agriculture Research (EMBRAPA) indicates that the federal government has failed to enforce forestry regulations related to forest management, demonstrating widespread failure to apply forestry legislation. Again, the Brazilian Institute of the Environment and Renewable Natural Resources (*Instituto Brasileiro do Meio Ambiente e Recursos Naturais Renováveis* – IBAMA)

did a technical screening of forest management plans, which revealed that 75% of the plan had inconsistencies. In order to address these challenges, this thesis examines the following legal and institutional frameworks governing management and protection of forests in Brazil.

3.1.1 Constitution of the Federative Republic of Brazil 1988 (as amended)

It is vital to grasp the Brazilian legal system in order to comprehend the legal instruments utilized in the administration of Amazonian forestland. Brazil is a Federal Republic just like Nigeria. Her government levels will include the Union, States, Federal District, and Municipalities. This is in line with the provisions of the Constitution of the Federative Republic of Brazil 1988 as amended (CFRB) which provides that; 'The political and administrative organization of the Federative Republic of Brazil includes the Union, States, Federal District, and Counties, all autonomous, as provided for in this CFRB.'¹⁵⁴

It is therefore correct to assert that the CFRB sets down the structure of government, organizes political institutions, specifies government roles, and outlines citizens' rights and responsibilities. It also divides authority among the three branches of government: the legislative, the executive, and the judiciary. Like the CFRN 1999 and most Federal constitutions, legislative powers are divided between the different levels of government. While article 22 of the CFRB provides for items within the Exclusive Legislative powers of the Union, article 24 contains items that fall within the concurrent legislative powers of the Union, States and Federal Districts. Interestingly forests fall within the Concurrent List by reason of the following provision: The Union, States and Federal District shall have concurrent power to legislate on: forests, hunting, fishing, fauna, preservation of nature, defence of the soil and natural resources, protection of the environment and pollution control.¹⁵⁵

3.1.2 Forest Code 1965 (as amended)

Generally, Brazil's forestry is governed by three primary laws. First, the Forestry Code (FC 1965).¹⁵⁶ It is without doubt the primary legislative legislation or code governing general forest management in Brazil. The second one is the National Environmental Policy Law.¹⁵⁷ The law provides the fundamental principles of governmental action for ecological balance, planning, and law enforcement for the rational use of natural resources. The overarching goal of this law is to protect, improve, and restore environmental quality to a level that is conducive to socioeconomic growth.¹⁵⁸ The third is the Environmental Crime Law of 1998,¹⁵⁹ establishes criminal and administrative consequences for environmentally destructive behaviour and actions. This legislation enforces harsh penalties for forest - related breaches, with fines ranging from R\$50 (US\$31) to R\$50 million (US\$31 million) as a minimum.¹⁶⁰ Until this rule

¹⁴⁹ Food and Agriculture Organization of the United Nations (FAO) 1999 State of the World's Forests 1999. Rome, Italy.

¹⁵⁰ D Mahar, *Government Policies and Deforestation in Brazil's Amazon Region* (Washington DC: World Bank 1989) 3.

¹⁵¹ Food and Agriculture Organization of the United Nations (FAO) 2000 FAO forestry statistics <http://apps1.fao.org/servlet/XteServlet/SUA&Item/Types=Forestry/Primary&Language> accessed February 20 2022

¹⁵² Constitution of the Federal Republic of Brazil, art 225.

¹⁵³ *Ibid*, art 225 (1) VII.

¹⁵⁴ *Ibid*, art 18.

¹⁵⁵ CFRB, art 225.

¹⁵⁶ Law No 4771 of 1965.

¹⁵⁷ Law No 6.938 of 1981.

¹⁵⁸ *Ibid*, art 2.

¹⁵⁹ Law No 9.605 of February 1998

¹⁶⁰ CFRB, art 75.

was passed, all fines were based on administrative actions that were readily reversed in court.

The evolution of these forestry laws is a bit more complex and need to be looked into even if very briefly. In this regard it needs to be observed that the Brazilian legal regime for forestry regulation finds its foundation in the CFRB. This is so considering that under the CFRB very value is placed on the forest resources and on the greater environment in line with many provisions of the CFRB. In the first instance, the CFRB explicitly incorporates protection for the various biomes of the country in the following words:

The Brazilian Amazonian Forest, the Atlantic Forest, the Serra do Mar, the Pantanal Mato - Grossense and the coastal zone are part of the national patrimony, and they shall be used, as provided by law, under conditions which ensure the preservation of the environment.¹⁶¹

In addition, the lack of consistent punishment diminishes the effectiveness of Brazil's forest management policies. Most illegal deforestation fines go unpaid and illegal logging equipment goes unconfiscated due to overburdened courts, an overly complicated review process, and loopholes in enforcement laws.¹⁶² These issues are often compounded by elements of regulatory capture that allow political patronage groups aligned with the timber industry to obtain favourable policies and decisions at the local level. Delays in regulatory rollout are also hindering the efficacy of Brazil's forest management policies.

Without doubt weak environmental safeguards in other sectors may counteract reforestation efforts. For instance, every kilometre of road built through the Brazilian Amazon leads to approximately 400 - 2, 000 hectares of destroyed rainforest.¹⁶³ Additionally, large - scale infrastructure projects, persistent credit programs that promote rural cattle farms, and the globalized trade in Brazilian commodities such as minerals and soybeans all link to Brazil's rate of deforestation.

3.1.3 National Environmental Policy Law No.6.938 of 1981 (as amended)

The National Environmental Policy Law No.6.938 of 1981 as amended (NEPL) establishes the National Environmental Policy. In addition to certain environmental strategies and standards, the NEPL requires that actors in the environment carry out an EIA and obtain a permit prior to undertaking any pollution activity.¹⁶⁴

The NEPL provides competent environmental institutions with the power to enforce permit conditions, conduct inspections and otherwise control potentially polluting development. The exploration and production of oil and gas as well as the exploration and processing of minerals are among the activities subject to permitting.

¹⁶¹ *Ibid*, Ch. VI, art. 225.

¹⁶² *Ibid*.

¹⁶³ *Ibid*.

¹⁶⁴ International Energy Agency, Law No. 6938 of 1981 – National Environmental Policy <https://www.iea.org/policies/11749-law-no-6938-of-1981-national-environmental-policy> accessed 20 January 2023.

3.1.4 Environmental Crime Law No.9605 of 1998

The Environmental Crime Law No.9605 of 1998 (ECL) is a legislation that regulates criminal and administrative penalties relating to behaviour and activities harmful to the environment.¹⁶⁵ The ECL provides penalties for any person that participates in the crimes covered by it.¹⁶⁶ In order to apply a penalty, the ECL specified issues to be considered by the appropriate authority.¹⁶⁷ Instructively, the ECL provided circumstances on restriction of rights,¹⁶⁸ which shall include rendering of community service; temporary suspension of rights; partial or total suspension of activities; monetary payment and house confinement.¹⁶⁹ Remarkably, while providing circumstances which may attenuate the penalty,¹⁷⁰ circumstances that may aggravate the penalty were also specified.¹⁷¹

Crimes covered under the ECL includes crimes against the environment,¹⁷² crimes against animals,¹⁷³ causing through the emission of effluent or the transporting of materials,¹⁷⁴ fishing during a period when fishing is prohibited or in areas prohibited,¹⁷⁵ crimes against plants,¹⁷⁶ causing a jungle or forest fire,¹⁷⁷ preventing or impeding the natural regrowth of forest and other forms of vegetation,¹⁷⁸ destroying or damaging native forest or plantings of dune - protection vegetation or vegetation protecting mangroves covered by special preservation,¹⁷⁹ and so on.

3.2 Indonesia

Indonesia is crepitated with having the largest mangrove ecosystem in the world in addition to one of the highest available biodiversity. In order to address issues bordering on management and protection of the forest ecosystems, there are a number of laws and institutions put in place in Indonesia.

Management of mangrove areas cannot be regulated sufficiently by only regulations governing spatial planning. The various laws are administered in the management of the region, either directly or indirectly, such as the Law No.7 of 2004 on the Management of the Watershed (DAS). Another one is the Government Regulation No.38 of 2007 on The Government Authorities that regulate the authority of the manager of the activities relating to the types of activities that are intimately associated with the Law 32 of 2004 and the Government Regulation No.7 of 2008. The Regulation of the Minister of Marine and Fishery No.17 of 2008 on the Conservation of Coastal Zones and Small Islands is an

¹⁶⁵ ECL, preamble.

¹⁶⁶ *Ibid*, art 2.

¹⁶⁷ *Ibid*, art 6.

¹⁶⁸ *Ibid*, arts 7, 8 (individuals); arts 22, 23 (legal entity).

¹⁶⁹ *Ibid*, arts 8 – 13.

¹⁷⁰ *Ibid*, art 14.

¹⁷¹ *Ibid*, art 15.

¹⁷² ECL, chap v.

¹⁷³ *Ibid*, arts 29 – 32.

¹⁷⁴ *Ibid*, art 33.

¹⁷⁵ *Ibid*, art 34.

¹⁷⁶ *Ibid*, arts 38, 39.

¹⁷⁷ *Ibid*, art 41.

¹⁷⁸ *Ibid*, art 48.

¹⁷⁹ *Ibid*, art 50.

indirect rule in the level of utilization of mangrove management.¹⁸⁰

Another critical legislation relating to the conservation of the mangrove forests is one that does not necessarily relate to the forests but its biodiversity. It is actually a legislation that domesticated or ratified the UN Convention on Biodiversity.¹⁸¹ While this law does not relate directly to the forests, the reality remains that in a bid to sustain the biodiversity of the mangrove forests one must sustain the forests itself. If the forests are destroyed or removed then all other lives in it will be lost. It will thus be right to say that the relationship between the mangrove forests and its biodiversity is like that of a parasite and its host. Hence to keep the parasite alive, you must protect and sustain the host which in this example is the mangrove forest. It is for this reason, that the ratification on United Nation Convention on Diversity through Law Number 5 of 1994 important for the protection and sustenance of ecosystems. This thesis will examine in particular the laws below.

3.2.1 The 1945 Constitution of the Republic of Indonesia (as amended)

The 1945 Constitution of the Republic of Indonesia (1945 CRI) is the supreme law of the land upon which all other legislations are founded and Indonesia is by no means an exception. Hence it will only be right to begin the consideration on the legal regime for the management and protection of the mangrove forest in Indonesia from the perspectives of the constitution. In this regard it is worthy of states that the 1945 CRI,¹⁸² is not lacking in provisions relevant to the forests in general and the mangroves in particular.

For instance, in article 33 (3) of 1945 CRI provides that earth, water and natural wealth contained therein are controlled by the State and used as much as possible for the people prosperity. This provision goes a long way to elucidate the importance placed on the natural resources by the people of Indonesia and the need for same to be controlled by the governments obviously to avoid mindless depletion of these resources. It is also obvious that the forests/mangrove forests are part of these natural resources.

It must be noted that this provision is similar to the Nigerian provision of state ownership of Natural resources. Hence the provision of article 33 (3) of the 1945 CRI puts the state in the position of not just the controller but the owner who can grant natural resources for the wellbeing of the people. In line with this provision the State is also empowered like in Nigeria to discover natural resources that could be of public benefit and utilize or appropriate same in the interest of the generality of the people.

Another critical provision of the 1945 CRI is that contained in article 28 H (1) to the effect that every person has the right to live physically and mentally prosperously, live, and get a good and healthy environment and is entitled to health

services. To this extent the 1945 CRI duly recognised the importance of good environment and without doubt encourages its conservation and this without doubt has the capacity to impact positively on the environment in general and the mangrove ecosystem in particular.

3.2.2 Act of the Republic of Indonesia No.5 of 1990 Concerning Conservation of Natural

Resources and Ecosystem

Act of the Republic of Indonesia No.5 of 1990 (Act 1990), is a law on the conservation of living natural resources and their ecosystem, realization of the preservation of living natural resources and the balance of the ecosystem so that it can better support efforts to improve the welfare of the community and the quality of human life. The taking, cutting down, possessing, damaging, destroying, maintaining, transporting, and trading protected plants or their parts alive or dead are prohibited.¹⁸³ This particular provision is very important as it leaves no one in doubt that destruction of protected plants by any means is against the law and this is obviously in the interest of the mangrove forests especially the protected aspects of it.

Act 1990 provides for the sustainable use of living natural resources and their ecosystems is carried out through activities, utilization of environmental conditions of natural conservation areas, utilization of wild plants and animals.¹⁸⁴ The utilization of environmental conditions of natural conservation areas carried out while maintaining the sustainability of the area's functions are provided for.¹⁸⁵ Article 28 of the Act 1990 provides that continuity of potential, carrying capacity and diversity of plant and wildlife species should be considered in the use of wild plants and animals.¹⁸⁶

3.2.3 Forestry Act No.41 of 1999

The Forestry Act No.41 of 1999 (FA 1999) provides in article 10 (2) that forest management as intended include activities for the implementation of forestry planning, forest management, research and development, education and training, and forestry counselling, and supervision. Further, forest management as intended includes forest management activities and preparation of forest management plans, forest utilization and use of forest areas, forest rehabilitation and reclamation, and forest protection and natural conservation supervision.¹⁸⁷ The protective and conservative nature of FA 1999 as far as forests are concerned cannot be over emphasized.

Article 47 (1) and (2) of FA 1999 explains protection of forests and forest areas to imply an effort to prevent and limit damage to forests, forest areas, and forest products caused by human actions, livestock, fire, natural resources, pests, and diseases, as well as to maintain and protect countries', communities', and individuals' rights to forests, forest areas, forest products, investments, and devices related to forest management. The FA 1999 also recognizes

¹⁸⁰ Sunyowati and Others (n410).

¹⁸¹ Law Number 5 of 1994 concerning the Ratification of the United Nation Convention on Bio Diversity.

¹⁸² The 1945 Constitution of Republic of Indonesia.

¹⁸³ Act 1990, art 21.

¹⁸⁴ *Ibid*, art 26.

¹⁸⁵ *Ibid*, art 27.

¹⁸⁶ *Ibid*, art 28.

¹⁸⁷ Act 1990, art 21.

that one major human activity that affects the mangrove forest is mining business. Restrictions and prohibitions are measures for protection of the forest.¹⁸⁸ Following these restrictions and prohibitions, any violation attracts imprisonment, fines, penalties and other sanctions.¹⁸⁹

3.3 International Legal Framework

The management and protection of the forest ecosystem have been given recognition and provided for in a number of international instruments. This article will therefore examine some international instruments:

3.3.1 Charter of the United Nations 1945

The Peoples of the United Nations (UN) determined to save succeeding generations from the scourge of war, to reaffirm faith in fundamental human rights, to establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and to promote social progress and better standards of life in larger freedom, through their respective governments and representatives agreed to the CUN. An international organization to be known as the United Nations (UN) was established.¹⁹⁰ Among the purposes of the UN are to maintain international peace and security, and to that end, take effective collective measures for the prevention and removal of threats to peace, and for the suppression of act of aggression or other breaches of the peace.¹⁹¹ In pursuit of its objectives, the UN is based on the principle of sovereign equality of all its members,¹⁹² Various principal organs of the UN were established,¹⁹³ and such subsidiary organs as may be necessary.¹⁹⁴

It is important to state that by the provisions of the CUN, every treaty and international agreement entered into by any member state shall be registered with the secretariat established under chapter XV of the CUN.¹⁹⁵ In the same vein, no party to any such treaty or international agreement which has not been registered in accordance with the provisions of article 102 (1) can invoke that treaty or agreement between any organ of the UN.¹⁹⁶ The functions and powers of the respective organs of the UN were spelt out in the UNC.¹⁹⁷

3.3.2 United Nations Conference on Human Environment 1972

The UN Conference on Human Environment 1972 (UNCHE) was one of the international conferences that assessed the problems of the global environment, and more importantly, suggested corrective action. Stockholm Conference was the pivotal event on the growth of the global environment. Political, social, and economic problems of the

global environment were discussed at the Stockholm Conference (UNCHE).

Stockholm Conference discussed the problems of human environment and directed the attention of the governments and the public on the importance of the problem. The outcome of the Stockholm Conference resulted in the creation of the United Nations Environment Programme (UNEP). The main focus of the Stockholm Conference included that: National resources should be conserved, the earth's capacity to produce renewable resources should be maintained and non - renewable resources shared. Development and environmental concerns should go together and less developed countries are to be given every assistance and incentive to promote national environmental management.

3.3.3 United Nations Conference on Environment and Development 1992

The United Nations Conference on Environment and Development 1992 (Rio Declaration) marked an assemblage of heads of States and delegates to address emerging threats to the earth. The global scale threats included climate change and biodiversity loss. From the Rio Declaration, a joint agenda for sustainable future that is known as 'Agenda 21' was created. Furthermore, three Preparatory Committee Working Groups were formed. These are climate change, conservation of biodiversity and management of biotechnology; protection of the Oceans and freshwater resources; and the legal and institutional frameworks for implementation.

3.3.4 Report of the World Commission on Environment and Development: Our Common Future

There are environmental trends that threaten to radically alter the planet and also threaten the lives of many species upon it, including the human species. Amongst the global challenge is the destruction of forests. In order to address the global challenges, the World Commission on Environment and Development (WCED) released its report titled "Our Common Future".

One of the prominent contents of the report of the WCED is the development of the concept of sustainable development.¹⁹⁸ Remarkably, the WCED provided a salient definition of sustainable development as development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs.¹⁹⁹ The WCED in its report believes that poverty is not an evil in itself but a phenomenon that exposes the world to ecological and other catastrophes.²⁰⁰

The WCED in its report was primarily concerned with securing a global equity, redistributing resources towards poorer nations while encouraging their economic growth. It suggested in its report that equity, growth, and environmental maintenance are simultaneously possible. In this sense, each country is capable of achieving its full

¹⁸⁸ *Ibid*, art 38.

¹⁸⁹ *Ibid*, arts 38 (4), 50 (3) (g), 78 (6).

¹⁹⁰ UNC, preamble.

¹⁹¹ *Ibid*, art 1.1.

¹⁹² *Ibid*, art 2.1.

¹⁹³ *Ibid*, art 10-16.

¹⁹⁴ *Ibid*, art 7.2.

¹⁹⁵ *Ibid*, art 102(1).

¹⁹⁶ *Ibid*, art 102(2).

¹⁹⁷ *Ibid*, arts 10-16; General Assembly, 24; Security Council, 62; Economic and Social Council.

¹⁹⁸ WCED, s 3.27.

¹⁹⁹ *Ibid*.

²⁰⁰ *Ibid*.

economic potential whilst at the same time enhancing its resource base.

WCED recognised in its report, that achieving equity and sustainable growth would require the deployment of technology and adaptation to social changes. Three fundamental components to sustainable development are environmental protection, economic growth, and social equity. In essence, the WCED in its report restated that the environment should be conserved and resource base enhanced through gradual changes in the ways of development and use of technologies.

3.3.5 The United Nations Convention on Biological Diversity 1992 and its Protocols

The UN Convention on Biodiversity Diversity (CBD),²⁰¹ provides in article 2 a broad definition of 'Biological Diversity' as the variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic organisms and the ecological complexes of which they are part; this includes diversity within species, between species and ecosystems.

The purpose of securing conservation and sustainable use of biodiversity must therefore be the conservation of the natural genetic resources, for current and future use. The overall objective, therefore, should be to define and identify, within the current legislative framework, coherent measures that led to the preservation or rehabilitation of biodiversity where it is perceived as being under threat due to fishing, or aquaculture activities.

4. Conclusion/ Recommendation

Despite the plethora of legislations and treaties on management and protection of the mangroves, it is evident that very little or no compliance is recorded, as the climate is continually threatened by the uncontrolled acts of deforestation of the mangrove. It is accordingly recommended that proper awareness be given to communities and locals on the adverse effect of continued unchecked deforestation. This will hopefully create a more effective resistance from the locals against indiscriminate deforestation of the mangroves.

²⁰¹ UN Convention on Biodiversity Diversity adopted 5 June 1992, it came into force 29 December 1993.

