Some Insights on the Legal Measures for Access and Benefit Sharing of Genetic Resources in Nigeria

By Menes Abinami Muzan*

Abstract This article analyzes the effectiveness of Nigeria's genetic resources regime as an appropriate measure to engender adequate conservation and sustainable use of biodiversity, particularly in the face of global economic realities, best practices and emerging trends in international environmental law. Nigeria has enormous biodiversity and is a state party to several multilateral environmental agreements that emphasize the significance of access and benefit sharing as avenues for the conservation and sustainable use of biodiversity. The underpinning value elements of biodiversity as life support systems for millions of Nigerians therefore require serious consideration in national policy and legislation. Until recently, environmental protection, and by implication, biodiversity conservation, seemed to lag behind other sectors in domestic policy and legislative reforms. Effective domestic measures for the overreaching environmental objectives of conserving and facilitating access to genetic resources as well as supporting the sharing of the benefits in a fair and equitable manner in order to enhance the benefits of biodiversity and ecosystem services to human societies is increasingly imperative.

A. Introduction

Nigeria is rich in biodiversity and among the regions of the world, houses comparable levels of endemism and species richness due to a complex topography and wide variety of habitats. Generally speaking, the terrain is varied with rugged hills, undulating slopes, gullies, flat and undulating land surfaces.¹ These varied terrains include but are not limited to the coastal creeks of the Niger Delta, the rainforests of the Cross River basin and the moun-

^{*} LLB; BL; LLM (SOAS, University of London); Lecturer, Faculty of Law, University of Port Harcourt; Barrister and Solicitor of the Supreme Court of Nigeria. Email: menes.muzan@uniport.edu.ng. The author wishes to thank Professor Allswell Muzan of the Faculty of Law, Kogi State University; Dr. Uzuazo Etemire of the Faculty of Law, University of Port Harcourt and the anonymous reviewers for their comments on the earlier draft of this article.

Margaret Okorodudu-Fubara, Country Report: Nigeria Legal Developments 2009-2011, IUCN Academy of Environmental Law (e-Journal) 1 (2012), p. 170 available at: www.iucnael.org/en/docu ments/913-ej2012-1-21-country-nigeria2/file (last accessed 18 April 2016).

tains along the Cameroun border with Nigeria.² The categories of biodiversity related sites in Nigeria include seven National Parks of Old Oyo, Cross River, Gashaka-Gumti, Okomu, Chad Basin, Kainji Lake, and Kamuku; 27 Important Bird Areas including all National Parks and 60 percent of the Ramsar sites; 11 Ramsar Sites; two World Heritage Sites of Sukur Kingdom and Osun Osogbo Grove; 994 Forest Reserves; 32 Game Reserves; one Biosphere Reserve; and many sacred groves at varied levels of protection.³ Climatic conditions in Nigeria also vary from equatorial in the south, tropical in the middle belt and arid in the north.⁴ All of these enormous biodiversity provide ecosystem services that improve the value and knowledge about life.

The value of biodiversity to Nigerians is closely linked to the wide range of the various ecosystems found.⁵ With regards to the environmental problems in Nigeria, Ladan argues that the four broad issues being accorded highest priority at present are: ensuring sustainable industrial production, preventing and reversing desertification, managing forests, natural resources and wildlife as well as combating floods and erosion.⁶ In the light of the above environmental concerns, the need to use law as an avenue for the regulation, management and protection of Nigeria's environment has become increasingly paramount. Since the illegal dumping of toxic waste incident in 1987, the country has enacted a number of legislative as well as policy measures that address global environmental concerns such as the conservation and sustainable use of biological diversity, thereby demonstrating commitment to its treaty obligations domestically.⁷

- 2 Secretariat of the Convention on Biological Diversity, Nigeria's Fifth Biodiversity Report (submitted to the CBD on 31 December 2015), p. 29; available at: https://www.cbd.int/reports/nr5/ (last accessed on 18 April 2016) (hereafter "Fifth National Biodiversity Report"); According to the IUCN, Nigeria has a total of 309 threatened species in the following taxonomic categories: Mammals (26), Birds (19), Reptiles (8), Amphibians (13), Fishes (60), Molluscus (1), other Invertebrates (14) and Plants (168). See: Secretariat of the Convention on Biological Diversity, 2016-2020 National Biodiversity Strategy and Action Plan for Nigeria (hereafter "2016-2020 NBSAP"), p. 6; available at: https://www.cbd.int/doc/world/ng/ng-nbsap-01-en.doc (last accessed on 18 April 2016).
- 3 See for instance, the Endangered Species Act, CAP E9, Laws of the Federation of Nigeria 2004, which generally provides for the conservation and management of wildlife and the protection of species in danger of extinction as a result of overexploitation.
- 4 Okorodudu-Fubara, note 1, p. 170-171.
- 5 Fifth National Biodiversity Report, note 2, p. 2. Biodiversity in forests, savannah woodlands and coastal mangroves make significant direct contribution to the nutrition of the rural poor in Nigeria. As an agrarian society, Nigerians depend largely on biodiversity resources for food supplies and supplements. Biodiversity therefore supports 70-80% of food requirements of 70% of rural Nigerians, while about 30-50% of urban and peri-urban communities depend on biodiversity for their nutritional support.
- 6 Muhammed Tawfiq Ladan, Review of the NESREA Act 2007 and Regulations 2009-2011: A New Dawn in Environmental Compliance and Enforcement in Nigeria, Law Environment and Development Journal 8(1) (2012), p. 118.
- 7 Ladan, note 6, p. 119 "[t]he 1980s and 1990s witnessed the most drastic and systematic development of environmental laws in Nigeria, partly owing to Nigeria's ratification of or accession to a

Considering the current international expectations, the robust international regime as well as best practices for access and benefit sharing,⁸ especially in view of steadily increasing global environmental challenges with regard to the conservation and sustainable use of biodiversity, a discussion on the adequacy of legal measures on access and benefit sharing in Nigeria is critical. Yet, there are not many existing academic contributions that highlight the current international legal framework on access and benefit sharing with particular reference to Nigeria.

The purpose of this article is to present some general insights on the international environmental regime as well as the domestic legal measures on access and benefit sharing in Nigeria from an essentially comparative perspective. The article's main thesis broadly addresses the question whether domestic legislative measures for access and benefit sharing of genetic resources in Nigeria could be regarded as adequate responses to the global concern for the conservation of biodiversity as expressed in multilateral environmental treaties. In doing so, the article tests the validity of the claim that no developing country has a proper national legal regime for access and benefit sharing.⁹

The article is structured into six major headings: Part B is the general conceptual framework within which more critical legal analysis will be made in the subsequent parts. Part C provides a critical analysis of the major multilateral environmental treaties that Nigeria is signatory to, particularly those treaties that embody the principles and objectives for the regulation of access and benefit sharing. Specifically, Part C sheds some light on provisions of the Nagoya Protocol dealing with fair and equitable benefit sharing,¹⁰ access to genetic resources¹¹ and access to traditional knowledge associated with genetic resources,¹² respectively.

Part D critically analyzes recent domestic legislation and policy instruments for access and benefit sharing in Nigeria.¹³ The essence of this is to provide an appraisal of the current

number of international instruments during this period"; see also *Kaniye Ebeku*, Biodiversity Conservation in Nigeria: An Appraisal of the Legal Regime in relation to the Niger Delta of the Country, Journal of Environmental Law 16(3) (2004), pp. 365-367; *S. Gozie Ogbodo*, Environmental Protection in Nigeria: Two Decades After the Koko Incident, Annual Survey of International and Comparative Law, 15(1) (2009), p.2.

- 8 Secretariat of the Convention on Biological Diversity, Global Biodiversity Outlook-4, (Montreal 2014), pp. 25, 104-105; available at: http://www.cbd.int/GBO4 (last accessed on 16 May 2016).
- 9 Evanson Chege Kamau, Facilitating or Restraining Access to Genetic Resources?: Procedural Dimensions in Kenya, Law Environment and Development Journal 5(2) (2009), p. 154.
- 10 Nagoya Protocol on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their Utilization to the Convention on Biological Diversity (hereinafter "Nagoya Protocol"); available at: https://www.cbd.int/abs/doc/protocol/nagoya-protocol-en.pdf, (last accessed on 16 May 2016), art 5.

¹¹ Ibid, art 6.

¹² Ibid, art 7.

¹³ Namely: National Environmental Standards and Regulations Enforcement Agency (Establishment) Act No. 57 of 2007, Laws of the Federation of Nigeria (hereafter "NESREA Act"); the National

legislative measures and policies regulating access and equitable benefit sharing in Nigeria. It therefore argues that these measures broadly demonstrate the country's commitment to the principles and objectives of international obligations governing genetic resources exploitation.¹⁴ Part E analyzes the judicial attitudes in Nigerian Courts with regard to implementing multilateral environmental treaties into the domestic legal regime on biodiversity conservation in Nigeria. Part F is the general conclusion.

B. Conceptual Framework

The primary obligation of countries rich in biodiversity, mainly developing nations, is to create conditions to facilitate access to genetic resources for environmentally sound uses without undue restrictions. Hence, their legislation and policies need to attain equilibrium between controlling access to genetic resources and facilitating it.¹⁵ There are three major requirements for access to genetic resources¹⁶ and equitable sharing of the benefits derived from their utilization which are reflected in the multilateral environmental agreements to which Nigeria is a state party. First, access and benefit sharing is hinged on the principle that states have sovereign rights over their natural resources.¹⁷

The second condition is that access and benefit sharing shall be subject to domestic access and benefit-sharing legislation or regulatory measures of states.¹⁸ The third which is reflected in both international and regional environmental treaties as well as under domestic

Environmental (Access to Genetic Resources and Benefit Sharing) Regulations, Federal Republic of Nigeria, Regulations No. 30 of 2009, Official Gazette, Vol. 96, No. 62 of 9 October 2009 (here-inafter "ABS Regulations of 2009"); the 2016-2020 NBSAP; and the revised National Policy on Environment.

- 14 See: Convention on Biological Diversity, done at Rio de Janerio on 5 June 1992; available at: https://www.cbd.int/convention/text/default.shtml (last accessed 16 May 2016) (hereafter "CBD"), art 1 and Nagoya Protocol, note 10, art 2. Nigeria is a party to several international treaties and Conventions governing environmental issues (such as access and benefit sharing), including the CBD and the Revised African Convention on the Conservation of Nature and Natural Resources, adopted in Maputo on 11 July 2003; available at: http://www.au.int/en/treaties/african-conventionconservation-nature-and-natural-resources-revised-version (hereinafter "African Convention") (last accessed on 16 May 2016).
- 15 Abdul Haseeb Ansari / Lekha Laxman, A Review of the International Framework for Access and Benefit Sharing of Genetic Resources with Special Reference to the Nagoya Protocol, Asia Pacific Journal of Environmental Law 16 (2013), p. 116.
- 16 Under art 2 of the CBD, "Genetic resources" means genetic material of actual or potential value, while "Genetic material" means any material of plant, animal, microbial or other origin containing functional units of heredity.
- 17 For an analysis of the environmental law principle of sovereignty over natural resources see Michael Bowman / Peter Davies / Catherine Redgwell, Lyster's International Wildlife Law, Cambridge 2010, pp. 48-50.
- 18 While art 6.1 of the Nagoya Protocol provides that "in exercise of sovereign rights over natural resources, and subject to domestic access and benefit-sharing legislation or regulatory requirements", art 15.1 of the CBD provides that "recognizing the sovereign rights of States over natural

access and benefit sharing regulation in Nigeria is that access, either to genetic resources or to traditional knowledge associated with genetic resources shall be subject to the principle of free prior informed consent.¹⁹

Ansari and Laxman argue that because a symbiotic relationship exists between international and domestic laws, the harmonization of the two legal regimes is advantageous and necessary to both.²⁰ International law may have an important catalytic effect and may establish norms of conduct, but, without implementation of such rules and norms at domestic or municipal level, it will be ineffective in achieving the goals of environmental protection. Therefore, international law alone cannot solve global environmental problems. Political boundaries dictate that the response to these problems must primarily be implemented by each country within its domestic territories. Conversely, domestic laws will be ineffective in addressing trans-boundary environmental impacts without overarching international laws.

The initial stages of implementing the access and benefit sharing components during the first decade following the CBD's existence were discouraging because of the erroneous presumption that provider country's (from which genetic resources are obtained) legislation would suffice to implement these commitments only to later discover that fewer than 10 per cent of the CBD parties have adopted the access and benefit sharing legislation, of which none could make claims to an arrangement that was functioning effectively.²¹ Kamau also argues that none of these legislations have succeeded to effectively regulate access and benefit sharing in developing countries. In fact, (according to Kamau) most of the laws have created a contradictory effect of impeding access rather than facilitating access.²²

The issue of access and benefit sharing is very significant given scientific evidence that the existing pool of genetic resources is eroding rapidly mainly due to globalization, habitat loss and fragmentation, alien species introduction, global warming, overharvesting of flora and fauna, climate change, pollution, and tourism.²³ Other contributing factors are industrialization, loss of indigenous knowledge, widespread use of simple variety crops, and lack of gene banks.²⁴ The greatest of these threats, particularly in tropical developing countries (such as Nigeria) are the destruction and deterioration of habitats, and the introduction of

resources, the authority to determine access to genetic resources rests with the national governments and is subject to national legislation".

- 19 CBD, note 14, art 15.5; Nagoya Protocol, note 10, art 6.2.
- 20 Ansari / Laxman, note 15, p. 109.
- 21 Ansari / Laxman, note 15, p. 119.
- 22 Kamau, note 9, p. 154.
- 23 Michael I Jeffery / Jeremy Firestone / Karen Bubna-Litic (Eds.), Biodiversity Conservation, Law + Livelihoods: Bridging the North-South Divide, Cambridge 2008, p.1.
- 24 Ansari / Laxman, note 15, p. 106.

exotic species.²⁵ All of these factors threaten not only the sustainability of global biodiversity, but also the sustainability of cultural diversity.²⁶

Moreover, the ongoing evolution of the knowledge base of life sciences and biotechnology has resulted in new applications in healthcare, agriculture and food production, and environmental protection, as well as new scientific discoveries.²⁷ The IUCN discovered that while there was significant cooperation and progress in addressing the first two objectives related to conservation and sustainable use, the progress in relation to access and benefit sharing measures for the third CBD objective was less than encouraging.²⁸ Empirical findings of a study evaluating the effectiveness of access and benefit sharing regimes under the CBD based on three case studies of biodiversity-providing countries (Costa Rica, the Philippines and Ethiopia) and one case study of a community of user countries (the European Union) raised significant questions about the effectiveness of a market-based approach to the protection of biodiversity, and about the fair and equitable sharing of benefits arising from the commercialization.²⁹

In summary, access and benefit sharing is a complex mechanism which adopts a market-based approach that attempts to reconcile the two contradictory goals of conservation and sustainable use of biodiversity as an indirect contribution to the solution of the underlying ecological problem.³⁰ Much has been left to the discretion and political will of countries to devise a suitable national legislative framework that gives effect to the "grand bargain" of the CBD; that is, to facilitate access to genetic resources in return for an equitable share of the benefits derived from their use.³¹ As such, the access and benefit sharing experience very much impinges on the extent to which national legislatures are able to ensure sustainable biodiversity prospecting.³²

- 25 Klaus Ammann, The Impact of Agricultural Biotechnology on Biodiversity: A Review, (23 August 2004), p. 3 available at: http://www.ask-force.org/web/Biotech-Biodiv/Report-Biodiv-Biotechl2.p df (last accessed on 20 December 2016).
- 26 Ansari / Laxman, note 15, p. 106.
- 27 G. Kristin Rosendal, The Convention on Biological Diversity: Tensions with the WTO TRIPS Agreement over Access to Genetic Resources and the Sharing of Benefits in Sebastian Oberthur / Thomas Gehring (Eds.), Institutional Interaction in Global Environmental Governance: Synergy and Conflict among International and EU Policies, Massachusetts 2006, p. 79.
- 28 IUCN, The ABS Project Facts, Expertise and Coherence in ABS Implementation: Enabling Innovative Solutions to the Problems of ABS Implementation (2004) available at: http://weavingaweb.org/absdocuments/eng brochure.pdf (last accessed on 20 December 2016).
- 29 Carmen Richerzhagen, Protecting Biological Diversity: The Effectiveness of Access and Benefit-Sharing Regimes (1st Ed.), London 2010, p. 292.
- 30 Ansari / Laxman, note 15, p. 117.
- 31 Michael I Jeffery, Bioprospecting: Access to Genetic Resources and Benefit-Sharing under the Convention on Biodiversity and the Bonn Guidelines, Singapore Journal of International & Comparative Law 6 (2002), pp. 747, 750.
- 32 Jeffery, note 31, p. 747.

The CBD 2011-2020 Strategic Plan for Biodiversity provides timely and key potential actions that countries would need to take in order to accelerate progress towards this goal thereby enhancing the benefits to all from biodiversity and ecosystem services. The plan suggests putting in place, "[b]y 2015, legislative, administrative or policy measures for implementing the Nagoya Protocol, and undertaking associated awareness-raising and capacity-building activities, including by engaging with indigenous and local communities and the private sector."³³

Environmental legislation on biodiversity conservation in Nigeria dates back to the colonial era.³⁴ It is noteworthy that the pre-1987 environmental legislations in Nigeria were essentially *ad hoc* responses to emergency situations.³⁵ However, the post-1988 era in the evolution of environmental legislation in Nigeria has seen the start of serious legislation and is characterized by increased environmental awareness and sophistication.³⁶ Although there has also been a number of biodiversity conservation legislation, both at federal and state levels in the post-colonial era,³⁷ it has also been rightly argued that most of those laws were made in fulfillment of obligations under multilateral environmental treaties.³⁸ Like some African countries, Nigeria has recently developed access and benefit sharing specific legislations.³⁹

- 33 Global Biodiversity Outlook-4, note 8, p. 15; The Nagoya Protocol entered into force on 12 October 2014 following its ratification by 51 parties to the CBD.
- 34 Adebola Ogunba, An Appraisal of the Evolution of Environmental Legislation in Nigeria, Vermont Law Review 40 (2016), p. 675; Ebeku, note 7, p. 365.
- 35 Ladan, note 6, p. 118 is of the view that "[t]he laws were, however, typically 'knee-jerk' responses to emergency situations." See also Damilola S. Olawuyi, The Principles of Nigerian Environmental Law (Revised Ed.), Ado-Ekiti 2015, p. 37.
- 36 See Ogunba, note 34, p. 674; Olawuyi, note 35, p. 37; Okorodudu-Fubara, note 1, p. 171.
- 37 For a history of environmental regulation in Nigeria see generally *Ogunba*, note 34, pp. 675-685; *Ogbodo*, note 7, p. 2.
- 38 Ebeku, note 7, p. 366.
- 39 It is worthy of note that Nigeria is among some developing countries, especially those in Africa that have enacted access and benefit sharing legislative measures. The Philippines was the first country to enact access and benefit sharing legislation into its national law under Executive Order No. 247 of 1996. In Kenya, the law regulating access and benefit sharing is the Environmental Management and Co-ordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulation, 2006. In Ethiopia, there is Proclamation 482/2006 to provide for Access to Genetic Resources and Community Knowledge and Community Right, 2006. Also, the South African National Environmental Management: Biodiversity Act, 2004 provides for access and benefit sharing under Chapter 6. See: *Kamau*, note 9, p. 154; also *Gurdial Singh Nijar*, Incorporating Traditional Knowledge in an International Regime on Access to Genetic Resources and Benefit Sharing: Problems and Prospects, European Journal of International Law 21(2) (2010), p. 461.

Access and benefit sharing cut across a number of issue areas that are not purely environment-related, including international trade and intellectual property protection. These issue areas also have profound implications on a number of international institutions and organizations.⁴⁰ However, in explaining the impact of the Nagoya Protocol on the institutional complexity of access and benefit sharing governance, some authors are of the view that the CBD remains the only institution regulating the full issue area, including both aspects of access and benefit sharing.⁴¹ The analysis here focuses on access and benefit sharing provisions under the CBD, specific provisions of the Nagoya Protocol⁴² as well as similar provisions of the African convention.⁴³

I. Convention on Biological Diversity

Access and benefit sharing became a global environmental agenda with the adoption of the CBD in 1992. The CBD, which was opened for signature at the United Nations Conference on Environment and Development, entered into force in December 1993. Nigeria became a party to the CBD in 1994. The implication of its membership in the treaty is that the country has agreed to commit itself to the convention's three objectives – the conservation of biological diversity; the sustainable use of its components; and the fair and equitable sharing of benefits arising from the utilization of genetic resources.⁴⁴ The fair and equitable sharing of benefits arising from the utilization of genetic resources being the third objective

- 40 These include: the World Trade Organization (WTO), the UN Convention on the Law of the Sea (UNCLOS), the World Intellectual Property Organization (WIPO), the Antarctic Treaty (AT) system, the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR), of the Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO). See: *Sebastian Oberthur /Justyna Pozarowska*, Managing Institutional Complexity and Fragmentation: The Nagoya Protocol and the Global Governance of Genetic Resources, Global Environmental Politics 13(3) (2013), p. 100; See also: *Elena Blanco/Jona Razzaque*, Globalization and Natural Resources Law, Cheltenham 2011, p. 376; *Ulrich Beyerlin/Thilo Marauhn*, International Environmental Law, Oxford 2011, p. 437.
- 41 Oberthur/Pozarowska, note 40, p. 106; also Blanco/Razzaque, note 40, p. 376.
- 42 Provisions dealing with access to genetic resources, access to traditional knowledge associated with genetic resources as well as fair and equitable benefit-sharing, respectively.
- 43 African Convention, note 14, art IX para 2 (j).
- 44 CBD, note 14, art 1 "Utilization of genetic resources means to conduct research and development on the genetic and/or biochemical composition of genetic resources, including through the application of biotechnology as defined in Article 2 of the Convention." Nigeria's commitment to the CBD is a genuine appreciation of biodiversity in national development and socio-economic welfare of the Nigerian people. National Environment Policy incorporates specific principles that support best practices in environment and natural resource management, including biodiversity. See: 2016-2020 NBSAP, note 2, p. 34.

is generally considered as a key element of measures necessary for the realization of the other two objectives of the CBD.⁴⁵

Prior to the entry into force of the CBD; genetic resources were regarded as a "common good", believed to be an inheritance of all mankind.⁴⁶ However, apart from the requirement for countries to promote the sustainable use of biological resources, the CBD also places genetic resources under the territorial sovereignty of states where such genetic resources are found.⁴⁷ The Convention endorses and formally recognizes the sovereign right of countries possessing genetic resources to determine the rules of access, subject to national legislation.⁴⁸ Besides being the first multilateral environmental agreement that explicitly addresses all aspects of biodiversity conservation,⁴⁹ the CBD is also generally regarded as one of the most widely ratified of all environmental Conventions.⁵⁰

The Convention offers incentives to developed and developing states to "cooperate in balancing their different interests"⁵¹ and acknowledges the sovereign right of states to determine access to the enormous biological resources within its territory as well as their right to stipulate the sharing of benefits from the utilization of genetic resources.⁵² The interest in establishing rules to ensure that scientific collecting activities "give back" to communities involved in biodiversity conservation culminated in language on facilitated access and fair and equitable benefit sharing in relation to genetic resources within the CBD.⁵³

- 45 Evanson Chege Kamau / Bevis Fedder / Gerd Winter, The Nagoya Protocol on Access to Genetic Resources and Benefit Sharing: What is New and what are the Implications for Provider and User Countries and the Scientific Community? Law Environment and Development Journal 6(3) (2010), p. 248.
- 46 Ansari / Laxman, note 15, p. 114. For an analysis of the common heritage principle see generally Jutta Brunee, Common Areas, Common Heritage and Common Concern in: Daniel Bodansky / Jutta Brunee /Ellen Hey (eds.), The Oxford Handbook of International Environmental Law, Oxford 2007, pp. 550-573; Patricia Birnie / Alan Boyle /Catherine Redgwell, International Law and the Environment, (3rd Ed.) Oxford 2009, pp. 128-131, 657-659; Bowman/Davies/Redgwell, pp. 51-52; see also Kamau, note 9, p. 155; Stephen Stec, Humanitarian Limits to Sovereignty: Common Concern and Common Heritage Approaches to Natural Resources and Environment, International Community Law Review 12(3) (2010), pp. 361-389; Marc Williams, Review: Sebastian Oberthur / G. Kristin Rosendall, Global Governance of Genetic Resources: Access and Benefit Sharing after the Nagoya Protocol, Global Environmental Politics 15(2) (2015), p. 188.
- 47 CBD, note 14, art 15.1.
- 48 Kamau, note 9, p. 155.
- 49 Bowman/Davies/Redgwell, note 17, p. 593.
- 50 Birnie/Boyle/Redgwell, note 46, p. 612.
- 51 According to *Birnie/Boyle/Redgwell*, note 46, p. 630 in common with most multilateral agreements signed by states, the CBD brokered a compromise among competing interests. See also *Williams*, note 46, p. 188; *Beyerlin /Marauhn*, note 40, pp. 440-441.
- 52 CBD, note 14, arts 15.1 and 15.7; Kamau, note 9, p. 248; also Phillip Sands / Paolo Galizzi, Documents in International Environmental Law (Second Ed), Cambridge 2004, p. 696.
- 53 Kabir Bavikatte / Daniel F Robinson, Towards a People's History of the Law: Bio cultural Jurisprudence and the Nagoya Protocol on Access and Benefit Sharing, Law Environment and Development Journal 7(1) (2011), p. 37.

Article 15 essentially provides that the authority to determine access to genetic resources lies with national governments and is subject to national legislation.⁵⁴ Much as the Convention recognizes the sovereign rights of states over their natural resources, Kamau argues that the provision was absolutely not meant to give provider states the right to deny others access to genetic resources found in their territories.⁵⁵ It establishes some sort of legal burden for states to create conditions to facilitate access and places a *caveat* requiring resource providing countries not to impose restrictions that hinder access to genetic resources and thereby restrain their conservation and sustainable use.

There is also an obligation under the CBD to share benefits from the utilization of traditional knowledge, innovations and practices of indigenous peoples and local communities associated with genetic resources.⁵⁶ In recognizing the vital role of indigenous and local communities in preserving and enhancing biodiversity, the CBD exhorts parties to "promote their wider application" with the approval and involvement of indigenous and local communities.⁵⁷ Yet, the practical implementation of the CBD provisions on access and benefit sharing within national and/or regional spheres has not been an easy task for many countries.⁵⁸

However, the CBD does not provide a list of conditions necessary to facilitate access, and therefore the need for appropriate measures subject to domestic legislation⁵⁹ of states in exercise of their sovereign rights over natural resources within their territory is critical. Another condition for access to genetic resources is that it be on mutually agreed terms as provided under the Convention. Benefit sharing also shall be on mutually agreed terms.⁶⁰ It has been argued that as "mutually agreed terms implies an expectation to negotiate, terms are mutually agreed upon where they are reciprocally accepted".⁶¹ The implication of this provision is that the users of genetic resources have an obligation to share the benefits arising from the utilization of genetic resources with the state providing such resources.

- 55 Kamau, note 9, p. 155.
- 56 CBD, note 14, art 8 (j).
- 57 Nijar, note 39, pp. 459-460; he argues that the requirement for prior informed consent of indigenous and local communities for access to traditional knowledge associated with genetic resources may have evolved as part of international customary law.
- 58 Kamau, note 9, p. 166; Ansari / Laxman, note 15, p. 114.
- 59 CBD, note 14, art 15.1; see also the Nagoya Protocol, note 10, art 5.2 which uses the phrase "in accordance with domestic legislation".
- 60 CBD, note 14, art 15.7.
- 61 Tully, note 54, p. 92.

⁵⁴ Stephen Tully, The Bonn Guidelines on Access to Genetic Resources and Benefit Sharing, Review of European Comparative and International Environmental Law 12(3) (2003), p. 88.

II. Nagoya Protocol on Access and Benefit-sharing

To further the advancement of the third objective of the CBD, the World Summit on Sustainable Development (WSSD) in September 2002 called for the negotiation of an international regime, within the framework of the CBD, to promote the fair and equitable sharing of benefits arising from the utilization of genetic resources. An Ad Hoc Open-ended Working Group on Access and Benefit-Sharing (WG-ABS) was established and mandated to develop guidelines and other approaches for an international instrument for access and benefit sharing.⁶² The outcome eventually led to the adoption of the Nagoya Protocol, an important step in the governance of access and benefit sharing.⁶³

Not only does the Protocol further develop the access and benefit sharing governance system as the third objective of the CBD, it is indeed, as has been suggested, a "significant milestone" in ensuring progress to achieve the goal of access and benefit-sharing.⁶⁴ The Nagoya Protocol covers very critical issues relating to access and benefit sharing such as compliance with mutually agreed terms and dispute resolution mechanisms,⁶⁵ elaboration of model contractual clauses and codes of best practices,⁶⁶ awareness raising,⁶⁷ capacity building,⁶⁸ technology transfer,⁶⁹ financial mechanism,⁷⁰ and monetary and non-monetary benefits.⁷¹

In as much as contemporary literature makes reference to the possible "benefits"⁷² of the Nagoya Protocol, it is noteworthy that the Protocol has been criticized as being a "masterpiece in creative ambiguity"⁷³ and also as having several drawbacks such as using weak language in central provisions.⁷⁴ However, it is clear that the objective of the Protocol re-

- 62 Secretariat of the Convention on Biological Diversity, Fifth meeting of the Conference of the Parties to the Convention on Biological Diversity CBD/COP/5/Decision V/26 (2000) available at: https://www.cbd.int/decision/cop/?id=7168 (last accessed on 9 June 2016).
- 63 Oberthur/Pozarowska, note 40, p. 100.
- 64 Ansari / Laxman, note 15, p. 188.
- 65 Nagoya Protocol, note 10, art 18.
- 66 Ibid, arts 19 and 20.
- 67 Ibid, art 21.
- 68 Ibid, art 22.
- 69 Ibid, art 23.
- 70 Ibid, art 25.
- 71 Ibid, Annex.
- 72 For instance, it has been argued that the Protocol provides renewed emphasis on fair and equitable sharing of benefits as a central component of biodiversity strategies; it strengthens biodiversity governance by establishing a stronger legal framework; and it institutionalizes the biodiversity regime. See *Williams*, note 46, p. 188.
- 73 Brendan Coolsaet /John Pitseys, Fair and Equitable Negotiations?: African Influence and the International Access and Benefit Sharing Regime, Global Environmental Politics 15(2) (2015), p. 44.
- 74 Kamau/Fedder/Winter, note 45, p. 262.

peats verbatim the third objective of the CBD and then links the other objectives of the CBD – the conservation of biodiversity and the sustainable use of its components with access and benefit sharing.⁷⁵ In order to better appreciate the general conceptual background on access and benefit sharing, the article critically analyzes specific provisions of the Nagoya Protocol dealing with access to genetic resources, access to traditional knowledge associated with genetic resources as well as fair and equitable benefit-sharing, respectively:

1. Access to Genetic Resources

The Nagoya Protocol makes the condition for access subject to domestic legislation or regulatory requirements and on the basis of the principle that states have sovereign rights over their natural resources.⁷⁶ In the same breath with the African Convention, Article 6.1 of the Protocol further provides that access to genetic resources shall be subject to the prior informed consent of the country of origin of such resources. The requirement for prior informed consent and the involvement of indigenous and local communities taking into account their traditional knowledge associated with genetic resources as a basis for access is re-emphasized.⁷⁷

The Protocol also recognizes in principle the sovereign right of states to exploit their own natural resources pursuant to their environmental and developmental policies.⁷⁸ The Nagoya Protocol further obliges countries to take legislative, administrative and policy measures for access and benefit sharing. Moreover, with respect to traditional knowledge associated with genetic resources, the Protocol provides that traditional knowledge is to be accessed with the prior informed consent of indigenous and local communities having been obtained in accordance with domestic law.⁷⁹

2. Access to Traditional Knowledge associated with Genetic Resources

With respect to traditional knowledge associated with genetic resources, the Protocol obliges states to ensure that traditional knowledge associated with genetic resources is accessed with the prior informed consent of indigenous and local communities in accordance with domestic law.⁸⁰ The Protocol also makes provision for compliance with domestic leg-

77 Nagoya Protocol, note 10, art 6.2.

- 79 Ibid, art 6.2.
- 80 Ibid, art 7.

⁷⁵ Nagoya Protocol, note 10, art 1; also Kamau/Fedder/Winter, note 45, p. 250.

⁷⁶ Nagoya Protocol, note 10, art 6.1; also art 15.1 of the CBD provides that: "Recognizing the sovereign rights of States over natural resources, the authority to determine access to genetic resources rests with the national governments and is subject to national legislation".

⁷⁸ Ibid, art 6.1.

islation or regulatory requirements on access and benefit sharing⁸¹ and for compliance with domestic legislation or regulatory requirements on access and benefit sharing of traditional knowledge associated with genetic resources under Articles 15, 16 and 18 respectively.

The issue of whether these communities are entitled to provide access for genetic resources, as well as the conditions of access to their knowledge on these resources, is subject to national legislation in accordance to Article 8(j) of the CBD. In addition, Article 10(c) urges parties to protect and encourage the customary use of biological resources in accordance with traditional cultural practices, particularly those that are compatible with conservation or sustainable use requirements. In the implementation of Article 6, paragraph 3 (g), (i) and Article 7, each party shall encourage providers and users of genetic resources and/or traditional knowledge associated with genetic resources to include provisions in mutually agreed terms to include dispute resolution mechanisms.⁸² In relation to genetic resources of indigenous and local communities, each party shall take appropriate legislative, administrative or policy measures in accordance with domestic legislation⁸³ to ensure that the benefits arising from the utilization of genetic resources are shared in a fair and equitable way with the communities concerned.

3. Fair and Equitable Benefit-Sharing

Article 5.1 of the Protocol provides that the benefits arising from the utilization of genetic resources as well as the subsequent application and commercialization of such resources shall be shared in a fair and equitable way, in accordance with the CBD. The obligation on parties is a "shall" obligation that makes it mandatory.⁸⁴ There is also an obligation under the Protocol as is the case under the CBD to share in a fair and equitable way the benefits arising from the utilization of traditional knowledge, innovations and practices of indigenous peoples and local communities associated with genetic resources.⁸⁵The benefits listed under the Protocol include monetary and non-monetary benefits and are almost a verbatim repetition of the benefits listed in the Bonn Guidelines.⁸⁶ What is clear is that the access and benefit sharing compliance measures⁸⁷ is suggestive of the fact that access to genetic re-

- 83 Nagoya Protocol, note 10, art 5.2.
- 84 Bavikatte/Robinson, note 53, p.47.
- 85 CBD, note 14, art 8 (j).
- 86 See Nagoya Protocol, note 10, art 5.4; also Kamau/Fedder/Winter, note 45, p. 251.
- 87 Ibid, arts 15 and 16.

⁸¹ *Ibid*, art15.1 provides that "Each party shall take appropriate, effective and proportionate legislative, administrative or policy measures to provide that genetic resources utilized within its jurisdiction have been accessed in accordance with prior informed consent and that mutually agreed terms have been established, as required by domestic access and benefit-sharing legislation or regulatory requirements of the other party".

⁸² Ibid, art 18.1.

sources obtained without fulfilling the requirements for prior informed consent and not based upon mutually agreed terms would have been obtained in violation.⁸⁸

III. Revised African Convention on Conservation of Nature 2003

Developments in environmental law at the global level have influenced Africa's approach to environmental law and policy in general.⁸⁹ In addition to the significant number of multilateral environmental agreements to which African countries are states parties, at the global level, as well as their contribution to the development of environmental principles and practices, African countries have at regional level also adopted a number of treaties and agreements governing the environment.⁹⁰ There is no doubt that the physical and cultural subsistence of numerous rural communities on the African continent heavily depends upon natural resources and associated traditional knowledge'.⁹¹ Africa has the second largest tropical rain forest and the second largest freshwater lake in the world. The Continent is a major provider of genetic resources, hosting six out of the 25 biodiversity hotspots in the world and thus has a lot at stake in biodiversity and genetic resources debates.⁹²

At the regional level, the advantage of a common strategy for access and benefit sharing ensures the adoption of obligations more suited to the unique situation of African countries, and will also help concentrate efforts in implementation. The fundamental obligation of the African Convention is that countries in Africa are expected to adopt and implement all measures necessary to achieve the objective of this convention.⁹³ In furtherance of this central treaty obligation to implement necessary measures for the conservation and sustainable use of biodiversity, African countries are therefore committed to provide for fair and equitable access to genetic resources⁹⁴ and also provide for the fair and equitable sharing of benefits arising.⁹⁵ Specifically, countries are obliged to provide for the fair and equitable access to genetic resources, on terms mutually agreed between the providers and users of such resources.⁹⁶ It could be said that the revised African Convention creates a more com-

- 88 Ibid, art 15.3; the same applies regarding access to traditional knowledge associated with genetic resources under art 16.3.
- 89 Bolanle T. Erinosho, The Revised African Convention on the Conservation of Nature and Natural Resources: Prospects for a Comprehensive Treaty for the Management of African's Natural Resources, African Journal of International and Comparative Law 21(3) (2013), p. 381.
- 90 Erinosho, note 89, p. 378.
- 91 According to *Coolsaet /Pitseys*, note 73, p. 41, African countries were prompt protagonists of an international access and benefit sharing regime, as testified by the early adoption in 2000 of the African Model Legislation for the Protection of the Rights of Local Communities, Farmers, Breeders, and for the Regulation of Access to Biological Resources.
- 92 Coolsaet /Pitseys, note 73, p. 41; see also Ebeku, note 7, p. 361.
- 93 African Convention, note 14, art IV.
- 94 Ibid, art IX para 2 (j).
- 95 Ibid, para 2 (k).
- 96 African Convention, note 14, art IX para 2 (j).

pelling obligation on state parties as compared to a rather loose obligation under the CBD.⁹⁷ What is more is that the revised African convention makes reference to related traditional knowledge, as is the case under the CBD and also subjects access to genetic resources to the free prior informed consent of the holders of such knowledge or areas of origin of such genetic resource.⁹⁸

With regards to the protection of flora and fauna, the Convention contains detailed provisions and reflects many of the developments in international law. It establishes a range of obligations including a requirement to manage harvestable populations of species in a sustainable manner. The treaty also makes provision for the preservation of many varieties as possible of domestic or cultivated species as well as the provision of fair and equitable access to genetic resources and the sharing of the benefits arising out of biotechnologies based upon genetic resources and related traditional knowledge with the providers of such resources.⁹⁹ The Convention creates an obligation under Article IV for states to adopt and implement all measures necessary, including enacting legislation with a view to regulating all forms of bio-prospecting, quite similar to the obligations created under the CBD and the Nagoya Protocol.

The CBD, the Nagoya Protocol and the revised African Conventions all recognize in principle the sovereign right of states to exploit their own natural resources pursuant to their environmental and developmental policies. On the whole, the international access and benefit sharing framework recognizes that uncontrolled access to genetic resources can in addition to negatively impacting on the people who depend upon such resources for their sustained livelihood, but also on the natural environment including biodiversity.¹⁰⁰ Yet, either in relation to genetic resources or with respect to access to and transfer of technology,¹⁰¹ there is no clear definition of access under the Convention. However, under the Nigerian access and benefit sharing regulation (as will be discussed in the subsequent part), access means "obtaining, possessing and using genetic resources conserved, whether derived products and where applicable intangible components, for purposes of research, bio-prospecting, conservation, industrial application or commercial use."¹⁰²

D. Legislative and Policy Measures on Access and Benefit Sharing in Nigeria

The fact that biodiversity is appreciated and valued by Nigerians in different ways cannot be overstated. For instance, in Nigeria (as well as in many other developing countries), an overwhelming large population depends upon traditional medicines for their primary health

- 97 CBD, note 14, art 15.2.
- 98 African Convention, note 10, art XVII para 2.
- 99 Erinosho, note 89, p. 392.
- 100 Blanco/Razzaque, note 40, p. 375.
- 101 CBD, note 14, art 16.
- 102 ABS Regulation of 2009, note 13, sec 25.

care needs.¹⁰³ Therefore, realizing the potential of adequate laws and policies to engender the conservation and sustainable use of biodiversity, the Constitution creates a general foundation for the legal framework relating to environmental protection and biodiversity conservation.¹⁰⁴ First, under the Nigerian Constitution, the fundamental objective and directive principle of state policy with regards to environmental protection is that "the State shall protect and improve the environment and safeguard the water, air and land, forest and wild life of Nigeria".¹⁰⁵

Second, in furtherance of the social order of the state, the Nigerian Constitution further provides that "[the] exploitation of human and natural resources in any form whatsoever for reasons, other than the good of the community, shall be prevented".¹⁰⁶ In addition to these constitutional principles for environmental protection, Nigeria has entered into several international agreements on the environment in matters such as climate change, biodiversity, desertification, forestry, hazardous waste, marine and wildlife and pollution.¹⁰⁷

I. National Environmental Standards and Regulations Enforcement Agency Act of 2007

The NESREA Act is the most important addition to Nigeria's environmental regime, particularly because of its efforts to address and safeguard all aspects of the environment.¹⁰⁸ The Act establishes an Agency¹⁰⁹ for the purposes of enforcing environmental standards, regulations, rules, laws, policies and guidelines.¹¹⁰ In order to provide for effective enforcement of environmental standards, regulations, laws, policies and guidelines by NESREA, the Minister of Environment is empowered to make regulations for the general purposes of carrying out or giving full effect to the functions of the Agency under the Act.¹¹¹

- 103 In India, 65% of the population has access to traditional systems of medicine, and in Africa 80% of the population uses traditional medicines. See *Bavikatte/Robinson*, note 53, p. 38.
- 104 Ogbodo, note 7, p. 8.
- 105 Constitution of the Federal Republic of Nigeria 1999 (as amended) CAP C23 Laws of the Federation of Nigeria, 2004, sec 20 (hereinafter "CFRN 1999"); The 2014 National Conference decided in its report that sec 20 of the Constitution be transferred from Chapter II which is not justiciable to the justiciable fundamental rights chapter of the Constitution. See generally: *Kaniye Ebeku*, Constitutional Right to a Healthy Environment and Human Rights Approaches to Environmental Protection in Nigeria: Gbemre v. Shell Revisited, Review of European Comparative and International Environmental Law 16(3) (2007), p. 315; see also Uzuazo Etemire, The 2014 Nigerian National Conference and the Development of Environmental Law and Governance, Verfassung und Recht in Übersee 4 (2014), p. 484.
- 106 CFRN 1999, note 106, sec 17 (4) d.
- 107 Ladan, note 6, p. 122.
- 108 Ladan, note 6, p.119; Ogunba, note 34, p. 688.
- 109 NESREA Act, note 13, sec 1(1), establishes the National Environmental Standards Regulations and Enforcement Agency (NESREA) with the functions as set out in sec 7(a) (m) of the Act.
- 110 NESREA Act, note 13, sec 1(2) a.
- 111 Ibid, sec 34; see Okorodudu-Fubara, note 1, p. 172.

The Act mandates NESREA to present for the Minister's approval proposals for guidelines, regulations and standards on environmental matters (excluding matters in the oil and gas sector), such as atmospheric protection, air quality, ozone depleting substances, noise control, effluent limitations, water quality, waste management and environmental sanitation, erosion and flood control, coastal zone management, dams and reservoirs, watersheds, deforestation and bush burning, other forms of pollution and sanitation, and control of hazardous substances and removal control methods.¹¹²

The Act also empowers NESREA to enforce compliance with provisions of international agreements, protocols, conventions and treaties on the environment and such other agreements as may from time to time come into force.¹¹³ Under the general powers conferred on the Minister of Environment, eleven regulations were made as subsidiary legislation and published in the Federal Republic of Nigeria Official Gazette. Some of the regulations include: the National Environmental (Wetlands, River Banks and Lake Shores Protection) Regulations;¹¹⁴ National Environmental (Watershed, Mountainous, Hilly and Catchment Areas) Regulations;¹¹⁵ and the ABS regulation of 2009, among others.¹¹⁶

In addition to those regulations, another set of thirteen regulations were made by the Minister and signed into law in 2011, bringing the total number of subsidiary legislation made under the NESREA Act so far to twenty four.¹¹⁷ Inherent in these regulations are salient areas of synergy and features relevant for regulating the environment. Some points of synergy include: the adoption of a licensing and permit system, the inclusion of a polluter pays principle, the use of environmental management plans, the use of monthly report, the recognition of environmental auditing, the obligations to embrace best practices, punishment and sentencing and capacity building initiatives.¹¹⁸

II. National Environmental (Access to Genetic Resources and Benefit Sharing) Regulations

The ABS regulation of 2009 was made pursuant to Section 34 of the NESREA Act¹¹⁹ for the purpose of monitoring and conserving access to and ensuring benefits sharing of the

- 112 NESREA Act, note 13, sec 8(k), see Okorodudu-Fubara, note 1, p. 172.
- 113 NESREA Act, note 13, sec 7(c).
- 114 Federal Republic of Nigeria, Abuja, Regulation No. 26 of 2009, Official Gazette, Vol. 96, No. 58 of 2 October 2009.
- 115 Federal Republic of Nigeria, Abuja, Regulation No. 27 of 2009, Official Gazette, Vol. 96, No. 59 of 2 October 2009.
- 116 See generally S. Gozie Ogbodo, Handbook on the National Environmental Standards and Regulations Enforcement Agency Act (NESREA) 2007, Benin 2010, p. 27; Olawuyi, note 35, pp. 44-45; see also Okorodudu-Fubara, note 1, pp. 172-174.
- 117 See Okorodudu-Fubara, note 1, p. 170; Olawuyi, note 35, pp. 44-45.
- 118 Okorodudu-Fubara, note 1, p. 174.
- 119 In order to provide for effective enforcement of environmental standards, regulations, rules, laws, policies and guidelines by NESREA, the minister of Environment is empowered to make regula-

country's genetic resources derived from her enormous biodiversity. The ABS regulation of 2009 has the overall objective of regulating the access to genetic resources¹²⁰ and ensures sharing of the benefits from their utilization.¹²¹ The ABS regulation of 2009 perhaps makes Nigeria one of the countries with growing preponderance of national and regional access and benefit sharing laws.¹²² The regulation provides for conservation monitoring, covering matters relating to environmental impact assessment,¹²³ conservation of threatened species,¹²⁴ inventory of biological diversity,¹²⁵ and monitoring of status.¹²⁶

In addition, the ABS regulation of 2009 also deals with access to genetic resources¹²⁷ and makes provision for matters relating to application for access permit; prior informed consent; material transfer agreement; notification of application; examination of documents; determination of application; access permit form; communication of decision; validity and renewal of access permit; terms and conditions of access permit; suspension and cancellation of access permit and register of access permits, respectively. It makes provision for entitlements to benefits sharing; and traditional and community rights as well as provides for miscellaneous matters such as offences and penalties.¹²⁸

III. 2016-2020 National Biodiversity Strategy and Action Plan

State parties under the CBD are mandated to develop national strategies, plans and programs for the conservation and sustainable use of biological diversity, or adopt for this purpose existing strategies, plans or programs.¹²⁹ With regard to the importance and specific impact of the National Biodiversity Strategy and Action Plan on access and benefit sharing measures in Nigeria, the document provides information on biodiversity and their threats and analyzes institutional and legal frameworks that govern biodiversity issues in Nigeria. The 2016-2020 NBSAP provides current information on the status of biodiversity and its contribution to varied sectors of the Nigerian economy including tourism, agriculture, water resources, health, commerce and industrial development.

Nigeria's 2016-2020 NBSAP is closely aligned to both the CBD 2011-2020 Strategic Plan for biodiversity and its Aichi biodiversity targets, in accordance with the country's

tions for the general purposes of carrying out or giving full effect to the functions of the Agency under the Act.

- 120 ABS Regulation of 2009, note 13, sec 5.
- 121 ABS Regulation of 2009, note 13, sec 18.
- 122 See Nijar, note 39, p. 461.
- 123 ABS Regulation of 2009, note 13, sec 1.
- 124 Ibid, sec 2.
- 125 Ibid, sec 3.
- 126 Ibid, sec 4.
- 127 Ibid, sec 5 18.
- 128 Ibid, sec 19 23.
- 129 CBD, note 14, art 6(a).

unique priorities and features. Therefore access to genetic resources should be given priority in line with the country's commitment to the Nagoya Protocol.¹³⁰ The hope is that the 2016-2020 NBSAP will guide the conservation and sustainable utilization of biodiversity, access to genetic resources and the fair and equitable sharing of the benefits arising from their utilization.¹³¹

IV. National Policy on Environment

In the aftermath of the 1987 environmental catastrophe, an overreaching environmental framework policy – the National Policy on Environment was formulated in 1989 and was revised in 1999. The purpose of the policy is to define a framework for environmental governance with a strategic objective to coordinate environmental protection and natural resources conservation for sustainable development in Nigeria.¹³² It is on the combined thrust of the numerous international treaties, conventions and agreements governing global environmental issues that the national policy on the environment rests.

With regards to access and benefit sharing, the national policy on environment provides several policies to be pursued. Specifically, in this regard, to conserve and facilitate access to genetic resources that is important to agriculture, medicine and industry and to support the sharing of the benefits and knowledge, expertise and technologies in the use of biodiversity in a fair and equitable manner.¹³³ The policy quite clearly realizes and re-emphasizes the importance of access and benefit sharing as an avenue for the conservation of biodiversity and to use its components in a sustainable manner. The national policy on the environment therefore ensures that environmental protection and the conservation of natural resources are priorities for sustainable development.¹³⁴

It is important to note that one of the strategies for implementing the national policy on environment is the enactment of necessary legal instruments to strengthen and implement the strategies adopted under this Policy and providing enforcement tools thereof.¹³⁵ With respect to biodiversity conservation, this provision is very apt, particularly within the context of appropriate legislative measures for access and benefit sharing¹³⁶ as contained under

- 131 2016-2020 NBSAP, note 2, p. i.
- 132 Ogunba, note 34, p. 686; National Policy on Environment, note 13, para 1.3, p. 4.
- 133 National Policy on Environment, note 13, p. 19.
- 134 Ibid, p. 4.
- 135 *Ibid*, p. 7; this position is very much similar to the requirements as contained in art 15.1 of the CBD and art 6.1 of the Nagoya Protocol.
- 136 The National Policy on Environment notes that "appropriate action will be taken to incorporate into national legislation the international environmental obligations, which Nigeria has assumed under Conventions and Treaties.".

^{130 2016-2020} NBSAP, note 2, p. 34; the principle governing the strategy is that the utilization of Nigeria's biodiversity will be transparent, equitable and efficient.

the CBD and the Nagoya Protocol which the National Policy on Environment makes reference to.¹³⁷

E. Implementing Multilateral Environmental treaties in Nigeria

One of the fundamental concerns in contemporary international environmental law is the integration of developing countries, with vastly different economic, social and environmental priorities, into international environmental regimes.¹³⁸ Also of particular concern is the challenge of strengthening environmental law in the developing world through international cooperation and assistance, such as in the provision of finance as well as in the transfer of environmentally friendly technology.¹³⁹ Quite notably, the NESREA Act mandates the Agency to enforce compliance with provisions of international agreements, protocols, conventions and treaties on the environment and such other agreements as may from time to time come into force.¹⁴⁰

However, one has to consider the attitude of Nigerian superior Courts with regard to domestication of treaties. Section 7(c) of the NESREA Act could be interpreted in terms of giving NESREA the authority to enforce such environmental treaties in Nigeria including those earlier discussed whether or not they have been domesticated.¹⁴¹ This is based on the fact that by ratifying the relevant treaty, Nigeria has signified its intention to be bound by the provisions of the treaty. The country can therefore not shy away from the performance of its treaty obligations under international law. This principle is expressed in the Vienna Convention on the Law of Treaties, which provides that "every treaty in force is binding upon the parties to it and must be performed by them in good faith".¹⁴² The principle is also known as the principle of Good Faith (pacta sunt servanda).

This principle was reflected in the Court of Appeal judgement in the case of *Mojekwu v*. *Ejikeme*.¹⁴³ Although the Convention for the Elimination of All Forms of discrimination Against Women¹⁴⁴ had not been domesticated in Nigeria by an Act of the National Assem-

- 137 National Policy on Environment, note 13, para 6.1 (f) and (g).
- 138 Lavanya Rajamani, Review: Differential Treatment in International Environmental Law, by Philippe Cullet, Environmental Law Review 6 (2004), p. 288.
- 139 William L Adreen, Environmental Law and International Assistance: The Challenge of Strengthening Environmental Law in the Developing World, Columbia Journal of Environmental Law 25 (2000), p. 17.
- 140 NESREA Act, note 13, sec 7(c).
- 141 Ladan, note 6, p. 122.
- 142 Vienna Convention on the Law of Treaties art 26, 1155 U.N.T.S. 331 concluded at Vienna on 23 May 1969 (entered into force 27 January 1980); available at: https://treaties.un.org/doc/publicatio n/unts/volume%201155/volume-1155-i-18232-english.pdf (last accessed 20 December 2016).
- 143 (2002) 5 NWLR (PT. 657), at p. 402.
- 144 Adopted by the UN General Assembly on 18 December 1979 (effective 3 September 1981); available at: http://www.un.org/womenwatch/daw/cedaw/cedaw.htm (last accessed 20 December 206). Nigeria signed and ratified the Convention on 23 April 1984 and 13 June 1985 respectively.

bly as required by the Constitution, the Court however made reference to the Convention in its judgement and declared, without any difficulty, that the *'ili ekpe'* custom was a form of discrimination against women.¹⁴⁵ However, Section 12(1) of the Nigerian Constitution provides that "no treaty between the federation and any other country shall have the force of law except to the extent to which any such treaty has been enacted into law by the National Assembly".¹⁴⁶

Ladan argues that this could be interpreted in such a way as to limit the enforcement powers of NESREA to those international agreements on the environment that have been specifically domesticated in Nigeria by an Act of the National Assembly.¹⁴⁷ The provision requires that for an international obligation for which Nigeria is a party to take effect in Nigeria, a domestic law accepting that obligation as part of Nigerian laws must first be made and passed by an Act of the National Assembly.

It is only after that is done that elements of the obligation can be considered or incorporated into relevant policies and regulations for implementation in Nigeria.¹⁴⁸ The Supreme Court of Nigeria emphasized this point in the case of *General Sani Abacha and 3 others v. Chief Gani Fawehinmi*,¹⁴⁹ when it held that no treaty can be said to come into effect in Nigeria unless the provisions of such treaty have been enacted into law by the Nigerian National Assembly. According to Uwaifo JSC, "when we have an international treaty of this nature, it only becomes binding when enacted into law by our National Assembly...it is only such law that breathes life into it in Nigeria."¹⁵⁰

On the elevation of environmental rights in Nigeria, the 2014 National Conference resolved that Article 24 of the African Charter of Human and Peoples' Rights¹⁵¹ which provides that "[all] peoples should have the right to a general satisfactory environment favourable to their development" should now be enshrined in the Nigerian Constitution as a justiciable right.¹⁵² This is despite the fact that the African Charter has been domesticated in Nigeria by the enactment of the African Charter on Human and Peoples' Rights (Ratification and Enforcement) Act.¹⁵³ The National Conference also decided that Section 20 of the Nigerian Constitution be transferred from Chapter II of the Constitution which is not justiciable to the justiciable fundamental rights chapter of the Constitution.¹⁵⁴ The enforcement

- 145 Ladan, note 6, p. 123.
- 146 CFRN 1999, note 105, sec 12(1).
- 147 Ladan, note 6, p. 123.
- 148 Olawuyi, note 35, p. 80.
- 149 (2000) 77 Law Report of Courts of Nigeria, 1254-1401.
- 150 Ibid.
- 151 1520 UNTS 217 adopted in Nairobi on 27 June 1981 (entered into Force 21 October 1986) (hereinafter "African Charter"); available at: http://www.achpr.org/instruments/achpr/ (last accessed 20 December 2016).
- 152 Etemire, note 105, p. 484.
- 153 CAP A23, Laws of the Federation of Nigeria, 2004.
- 154 2014 National Conference Report, p. 200-201; Etemire, note 105, p. 484.

of the equivalent Article 24 in the national legislation may easily be trumped when faced with a counter constitutional provision, given that the Constitution is the supreme law of the land and takes precedence over any other in cases of inconsistency.¹⁵⁵ The proposed transfer would help to avoid potential conflicts with a justiciable Article 24 provision of the Constitution if the report is implemented.¹⁵⁶

None the less, the recent NESREA regulations are significant domestic responses to the need for the country to implement the objectives and principles embodied in some of the critical multilateral environmental treaties to which Nigeria is a party. A close scrutiny of the general objectives of the twenty four national environmental regulations made pursuant to the NESREA Act shows clearly that international treaties generally set the tone for these subsidiary legislations.¹⁵⁷ The NESREA regulations were based on the principles of multilateral environmental agreements on matters such as climate change, biodiversity conservation, desertification control,¹⁵⁸ trans-boundary movement and disposal of hazardous waste, trade in endangered species¹⁵⁹ as well as ozone layer protection.¹⁶⁰

Hence, a strategy of subsidiary legislation through regulation under the principal statute is informed by the comparative advantage embodied in the process of subsidiary legislation law-making, by avoiding the technicalities and inherent delays in the process of passage of bills through the national legislature. Nigeria has stringent environmental protection laws and regulations to control human and corporate business activities that have adverse consequences on the environment.¹⁶¹ Nigeria has thus taken a bold step in filling the historic gap in the regulatory gap in the country's environmental management system with recent environmental regulations.

F. Conclusion:

From the analysis, the paper emphasized on the significance of appropriate legislative, administrative and policy measures for the conservation and sustainable use of biodiversity in Nigeria with the objective of sharing in a fair and equitable way the benefits arising from

- 155 CFRN 1999, sec 1(1) and (3); *Etemire*, note 105, p. 484; Examples of such potentially trumping constitutional provisions is sec 43 on the right to acquire immoveable property, and sec 6(c) which stipulates that Chapter II of the Constitution containing sec 20 that requires the state to "protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria is non-justiciable.
- 156 Etemire, note 105, p. 484.
- 157 Okorodudu-Fubara, note 1, p. 175.
- 158 National Environmental (Desertification Control and Drought Mitigation) Regulations, Federal Republic of Nigeria, Abuja, Regulation No. 13, Official Gazette, Vol. 98, No. 40 of 3 May 2011.
- 159 National Environmental (Protection of Endangered Species in International Trade) Regulations, Federal Republic of Nigeria, Abuja, Regulation No. 15, Official Gazette, Vol. 98, No. 42 of 6 May 2011.
- 160 See generally Ladan, note 6, p. 122; Olawuyi, note 35, p. 80.
- 161 see Okorodudu-Fubara, note 1, p. 175.

the utilization of the country's genetic resources. The general condition that access to genetic resources and the sharing of benefits arising from their utilization shall be in accordance with domestic legislation cannot be overstated. The issue of access to biological resources and protection of the integrity of genetic resources of Nigeria demands very serious attention in the face of global economic realities, best practices and emerging trends in international trade.¹⁶²

So far, there has not been any reported case in Nigerian Courts where access and benefit sharing has been an issue, particularly as it relates to questions on free prior informed consent and to the participation of indigenous groups as well as questions on the protection of indigenous knowledge and practices. As such, there was no discussion of judicial interpretations with regard to questions of the effectiveness or otherwise of the legal regime on access and benefit sharing in Nigeria. The article therefore did not focus on procedural issues relating to access and benefit sharing.¹⁶³ Moving forward, future research could address procedural questions regarding how national cases on access and benefit sharing have been decided in Nigerian Courts and how it can be deduced from such decisions whether or not the legislative measures are functioning effectively.¹⁶⁴

On the adequacy of the existing legislative measures and policies regulating access and equitable benefit sharing in Nigeria, the article essentially draws on two broad conclusions. First, Nigeria has demonstrated strong commitment to domestically implement the objectives and principles of core multilateral environmental treaties both at international and regional levels that address global environmental concerns such as biodiversity conservation and access and benefit sharing. Second, the country has therefore, at the domestic level, made some legislative enactments and put in place environmental policies and legislative measures that engender adequate access to genetic resources in addition to ensuring that the benefit derived therefrom are shared equitably with the providers of such resources. The NESREA regulations reveal clearly that there is now more cohesion and coherence in Nigeria's environmental regulation.

Moving forward, a number of actions will be required to be implemented in Nigeria in order to ensure that institutional arrangements on access and benefit sharing could be right-fully regarded as effective.¹⁶⁵ There are critical issues that would need to be addressed. An important consideration, for instance, is whether indigenous groups have been able to participate in the discourse which is intended by the CBD and the Nagoya Protocol. These actions would include capacity-building and awareness-raising, developing and implementing contract guidelines for bio-prospecting, access and benefit sharing, as well as associated

- 162 Nigeria's Fifth National Biodiversity Report, note 2, p. 46.
- 163 Kamau, note 9, p. 154; Ansari / Laxman, note 15, p. 119.
- 164 Ansari / Laxman, note 15, p. 109; Richerzhagen, note 29, p. 292.
- 165 *Ogunba*, note 34, p. 689 argues that although the NESREA regulations are laudable, their effectiveness is doubtful.

traditional knowledge¹⁶⁶ in addition to ensure periodic monitoring and evaluation to enable the tracking of progress during the implementation of the 2016-2020 NBSAP.¹⁶⁷These actions are indeed significant. Particularly in view of the fact that access and benefit sharing legislation is a prerequisite for ensuring that contract negotiations for bio prospecting will serve the national policy goals of countries (like Nigeria) that provide genetic resources and will also accelerate progress to meeting the Aichi biodiversity targets, as well as faithfully implement the 2011-2020 Strategic Plan for biodiversity and objectives of the CBD.¹⁶⁸

^{166 2016-2020} NBSAP, note 2, p. 50; in this regard, policies on sharing of benefits derived from the use of Nigeria's biodiversity resources are to be formulated and implemented, at the same time balancing the twin goals of biodiversity conservation and sustainable use.

^{167 2016-2020} NBSAP, note 2, p. vii.

¹⁶⁸ Tully, note 54, p. 92.