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Chasing the Poachers: Protecting Nigeria's Wildlife Endangered Species from Extinction

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Abstract:

Global concern over disappearing species led to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), in 1973. Nigeria's response came in the enactment of Endangered Species (Control of International Trade and Traffic) Act, 1985. Apart from being signatory to CITES on 7th November 1975, Nigeria is also signatory to Ramsar Wetlands Convention; Convention on Biological Diversity; Migratory Bird Treaty; Whaling Convention and other international conventions and treaties designed to protect or manage threatened species and biological resources. These international and national legislations represents a new attitude towards global and national attempt in protecting wildlife endangered species fauna and flora from extinction. This article examines Nigeria's legal regime for the protection of wildlife endangered species fauna and flora; the challenges of implementation; the inter-linkage between the protection of wildlife endangered species fauna and flora in Nigeria and the concept of sustainable development. There is also the problem of enforcement, poverty and compliance due to political factors, institutional constraints, national focus on economic growth due to rising poverty level, shortage of funding and manpower, local protectionism and continued illegal trade in endangered species. Poaching is a problem in Nigeria as respects trade in wildlife products and this is severely depleting wildlife populations.

Keywords: endangered species, wildlife, sustainable development, fauna, flora, extinct, IUCN Red list, CITES; extinction, poaching

1. Introduction

This article generally is about the extinction of fauna and flora in the wild and the laws and institutional framework that have been put in place in Nigeria to address the challenges.

National legislations in Nigeria respecting the protection of species fauna and flora in the wild is not well developed like its counterparts in India and Brazil. Unlike the fauna, there is no direct or specific national law or regulation that protects the flora species in Nigeria. The existing legislations are only on paper as implementation and enforcement is too poor. The following provides a summary of Nigeria's legislation on wildlife and species protection:

- Endangered Species (Control of International Trade and Traffic) Act¹
- Sea Fisheries Act²
- Pest Control of Produce (Special Powers) Act³
- Agriculture (Control of Importation) Act⁴
- Animal Diseases (Control) Act⁵
- Bees (Import Control and Management) Act⁶
- Hides and Skins Act⁷
- National Park Service Act⁸
- Niger Delta Development Commission (NDDC) Act⁹

¹ 1985, now Cap. E9, Laws of the Federation of Nigeria (L.F.N), 2010.

² Cap S4, L.F.N., 2010.

³ Cap P9, L.F.N., 2010.

⁴ Cap A13, L.F.N., 2010.

⁵ Cap A17, L.F.N., 2010.

⁶ Cap B6, L.F.N., 2010.

⁷ Cap H3, L.F.N., 2010.

⁸ Cap N65, L.F.N., 2010.

⁹ Cap N86, L.F.N., 2010.

- Nigeria Urban and Regional Planning Act¹⁰
- Inland Fisheries Act¹¹
- Land Use Act¹²
- Constitution of the Federal Republic of Nigeria 1999 (as amended). ¹³

The above, are national laws in Nigeria protecting endangered or threatened species fauna and flora in the wild.

We must quickly note that Nigeria has not ratified the International Plant Protection Convention (IPPC), 1952, but indicated in August 17, 1993 that it will comply with the IPPC. But by the provisions of section 12 of the Constitution of the Federal Republic of Nigeria, 1999 (as amended), 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 Assembly¹⁴. Therefore, the IPPC has no binding effect on Nigeria.

Moreso, Nigeria is not signatory to the International Convention for the Protection of New Varieties of Plants 1961 (UPOV Convention) and its revisions in 1972, 1978 and 1991, neither has it ratified it and any of its revisions. Nigeria, did not participate in the negotiations of UPOV and this may not be unconnected with their non-ratification of the convention. Nigeria considers UPOV as a 'one-size fits-all' legal framework that limits a government's ability to design law to suit a country's particular needs or take into account the interests of the country.

The Nigerian Biodiversity Strategy and Acton Plan (NBSA) Protected Area Programme; Shelter Belts and Ecological Disaster Relief Programmes; Forestry II Programme; Linkage Programme; Tropical Forestry Action Programme (TFAP) and the Environmental Management Project (EMP), all protect endangered or threatened ecosystems and by extension species. It is important to note that the only specific legislation covering protection of endangered species is the 1985 Act¹⁶ which is not enforced and the compliance level is zero.

Due to economic growth and population explosion in Nigeria, natural ecological systems are being destroyed thus causing loss of wildlife and plant extinction. Fauna that are threatened include cheetah, the pygmy hippopotamus, the giraffe, the black rhinoceros, the giant eland, the sclater's guenous and the white throated guenous species of primates. Poaching is a problem in Nigeria as respects trade in wildlife products. This is severely depleting wildlife populations. Hunting, both legal and illegal is putting a strain on the existing wildlife fauna and flora.

Oil spills have been hazardous to the surrounding wildlife, especially birds and marine animals. The introduction of exotic species along the coastal areas has also become a problem. Forest conservation is a necessary and vital tool in the protection of endangered species fauna and flora. The increasing deforestation of forest due to farming, construction and lumbering activities has led to the rapid destruction of wildlife fauna and flora species. There is therefore, need to enforce the policy on forestry, wildlife and protection areas as contained in the National Policy on the Environment¹⁷.

It is also noteworthy that the modern quest and attempt to protect faunas and floras in relation to the concept of sustainable development is not new. It has enjoyed support in the philosophy of ancient societies 18 as well as the major religions 19 ranging from Christianity 20, Judaism 21, Islam 22, Buddhism 23, Hinduism 24, Confucianism 25 and Pantheism 26. Thus, conservation of natural resources especially in terms of extinction of a substantial number of species fauna has been apparent over the centuries. Despite the earliest efforts and the modern legislations aimed at species fauna and flora protection, little has really transpired in Nigeria in terms of protection and conservation of species fauna and flora. Nigeria is still struggling feebly to contain the systematic and indiscriminate destruction of wildlife by unwholesome human predatory activities.

There is however, hope as the Federal Ministry of Environment has established wildlife rescue centres to preserve endangered species of wild fauna across Nigeria²⁷, as part of the efforts to implement the CITES. This is laudable, as in the past, the poor enforcement and

¹⁰ Cap N138, L.F.N., 2010.

¹¹ Cap I10 L.F.N., 2010.

¹² Cap L5, L.F.N., 2010.

¹³ 1999, particularly section 20, ('The State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria').

¹⁴ Section 12(1), ibid.

¹⁵ Amokaye, O. G. (2015). Agricultural Law in Nigeria: Overview. Practical Law, A Thomas Reuters Legal Solution.

¹⁶ Ibid.

¹⁷ Developed in 1989 and revised in 2001.

¹⁸ Mahesh, S. (2009). Ancient Approach to Environmental Protection. In Law Relating to Environmental Pollution and Protection, Vol. 1, Acts & Rules, (4th Edition). Hyderabad, Asia Law House.
¹⁹ Ibid.

²⁰ The Book of Genesis, The Holy Bible (1982). New King James Version, Women of Destiny Bible, Nashville: Thomas Nelson Publishers, Chapter 1. Verses 11-12; 20-22; 24-25 and 28-31.

²¹ The Torah, (Holy Bible – Old Testament), Job 12:7-9.

²² The Quran 55: 1-12

²³ Anguttara Nikaya iii. 368. See also, the case of Gabcikovo – Nagymaros Project, Hungary v. Slovakia, I.C.J (1997), G.L. No. 92.

²⁴ Atharva Veda 12:1.

²⁵ Menicus I.A.3; Analects 7. 26.

²⁶ Pantheism is a religion/philosophy with ancient roots and many environmental implications.

²⁷ Official, 'Nigeria establishes wildlife rescue centers', Premium Times, (Abuja, September 25, 2013).

compliance level of CITES and the Endangered Species Act had led to numerous wildlife crimes involving illegal trade, smuggling and forgery within and across Nigeria's borders²⁸.

2. Endangered Species

An endangered species is a population of organisms which is at risk of becoming extinct because it is either few in numbers, or threatened by changing environmental or predation parameters. The International Union for Conservation of Nature (IUCN) has calculated the percentage of endangered species as 40 percent of all organisms based on the sample of species that have been evaluated through 2006²⁹. Many nations have national laws offering protection to conservation reliant species-some of these laws prohibit hunting, restricting land development or creating preserves³⁰. It must be noted that of all endangered species, only a few make it to the list, thus obtaining legal protection, like pandas. Some more species become extinct or potentially will become extinct, without gaining public notice.

There is also the question of conservation status of a species - this is an indicator of the likelihood of that endangered species not living. Many factors need to be considered when assessing the conservation status of a species; not simply the number remaining, but the overall increase or decrease in the population overtime, breeding success rate, known threat, et cetra. On the international scene, 199 countries have signed an accord agreeing to create Biodiversity Action Plans to protect endangered and other threatened species. The conservation status of a group of organism (for instance, a species) indicates whether the group is still extant (that is, members of it are still alive) and if yes, how likely the group is to become extinct in the near future.

The IUCN Red List of Threatened Species is the best-known worldwide conservation status listing and ranking system. It divides threatened species into three categories Critically Endangered (CR); Endangered (EN), and Vulnerable (VU). IUCN also list extinctions that have occurred since the 16th century, i.e. A.D. 1500 and taxa that are extinct in the wild³¹. Lower risk taxa are also divided into categories, with the lowest rating being "Least Concern".

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival³². Nigel Stork in the article 'Re-assessing Extinction Rate' explains, "the key cause of extinction being climate change, and in particular rising temperature rather than deforestation alone". According to Stork, rising temperature on a local and global level are making it harder for species to reproduce. As global warming continues, species are no longer able to survive and their kind starts to deteriorate. This is a repeating cycle that is starting to increase at a rapid rate because of climate change therefore landing many species on the endangered species list.³³

The IUCN Red list of Endangered species³⁴ refers to a specific category of threatened species, and may include critically endangered species. IUCN Red List of threatened species uses the term endangered species "as a specific category of imperilment, rather than as a general term". Under IUCN categorization, endangered species may be either critically endangered and vulnerable. The IUCN used the term threatened species for species at risk of extinction which includes the less-at-risk category of vulnerable species together with endangered and critically endangered. IUCN categories include:

- Extinct (EX): Examples: Dinosaurs, Pterosaurs, Javan, Tiger, Thylacine, Dodo, Passenger Pigeon, Caribbean Monk seal, Steller's Sea Cow, Aurochs, Elephant Bird Moa, Haast's Eagle, Woolly Mammoth Woolly Rhinoceros, Dusky Seaside Sparrow, Golden Toad.
- Extinct in the wild (EW): captive individuals survive, but there is no free-living, natural population. Examples: Hawaian Crow, Wyoming Toad, Spix's Macaw, Socorro Dove, Scimitar Oryx, Catarina Pupfish.
- Critically Endangered (CR): faces an extremely high risk of extinction in the immediate future. Example are; mountain Gorilla, Bactrian Camel, Ethiopian Wolf, Saigon Takhi, Iberian Lynx, Kakapo, Rhinoceros, Javan Rhino, Brazilian Merganser, Axolotl, Leather back Sea Turtle, Northern Whikte Rhinoceros, Gharial, Vaquita, Philippine Eagle, Brown Spider Monkey, California Condor, Island Fox, Black Rhinoceros, Chinese Alligator, Sumatran Orangutan, Asiatic Cheetah, African wild Ass, Hawaiian Monk Seal, Red Wolf:
- Endangered (EN): faces a very high risk of extinction in the near future. They are: Dhole, Blue Whale, Asian Elephant, Giant panda, Snow Leopard, African Wild Dog, Green Sea Turtle, Malayan Tapir, Tiger, Steller's Sea Lion, Asiatic Lion, Markhor, Bornean Orangutan, Grevy 's Zebra, Tasmanian Devil, Japaneses Crane, Gorillas, Bonobo, wild Water Buffalo, African Penguin, Goliath Trogi Lear's Macaw, Roths child Giraffe, Giant Otter, Pygmy Hippopotamus.
- Vulnerable (VU): faces a high risk of extinction in the medium -term. They are African Elephant, Cheetah, Gaur, Lion, Sloth Bear, Dugong, Polar Bear, Indian Rhinoceros, Komodo Dragon, Great White Shark, Hippopotamus, Mandrill, Fossa, Crowned Crane, Clouded Leopard Sarus Crane, Galapagos Tortoise, Mountain Zebra, Humboldt Penguin, Golden

²⁸ Salisu D. Ibid.

²⁹ IUCN Red-List Statistics (2006). Endangered Species [www document] URL http://en.m. wikipedia.org/wiki/Endangered species (visited 27/9,20II).

³⁰ Ibid.

³¹ A taxon (plural: taxa) is a group of (one or more) organisms, which a taxonomist adjudges to be a unit. Usually a taxon is given a name and a rank, although neither is a requirement. Defining what belongs or does not belong to such a taxonomic group is done by a taxonomist with the science of taxonomy.

³² Signed 3 March 1973 at Washington DC, effective 1 July 1975. Parties 175 (as July 201.J) Depository Government of the Swiss Confederation.

³³ Stork, N (2010). Re-assessing Current Extinction Rates, (www document) URL http://en.wkipedia. org/wiki/endangered Species (visited 27/9/2011).

³⁴ The IUCN Red List of Threatened Species (also known as the IUCN Red List or Red Data List) founded in 1963 is the world's most comprehensive inventory of the global conservation status of biological species.

Hamster.

- *Near Threatened (NT):* may be considered threatened in the near future. They are: blue- billed Dude, Solitary Eagle, American Bigon, Jaguar, Leopard, Maned Wolf, Tiger Shark, Southern White Rhinoceros, Okapi, African Grey parrot, Striped Hytena, narwhal, Magellanic Penguin.
- Least Concern (LC): no immediate threat to the survival of the species. They are: Common Wood Pigeon, Rock Pigeon, Giraffe, Common Bottlenose Dolphin, California Sea Lion, Brown Bear, Grey Wolf, House Mouse, Scarlet Macaw, Platypus, Bald Eagle, Brown Rat, Cane Toad, Humpback Whale, Emperor penguin, American Crow, Wolverine, Human Mute Swan, Mallard, Red-tailed Hawk, Indian Peafowl, American Alligator, Southern Elephant Seal, Meerkat.
- Data Deficient (DD): Not enough data to make an assessment of its risk of extinction.
- Not Evaluated (NE): Has not yet been evaluated against the criteria.

The latest update of the International Union for Conservation of Nature (IUCN) red list published in 2013 shows that out of the 71,576 species assessed, 21,286 are threatened with extinction according to the international organization. It also has it that almost 200 species of birds are now critically endangered. The number of species assessed in the IUCN red list, by category shows total species assessed (71, 576); total threatened species (21,286); extinct (799); extinct in the wild (61); critically endangered (4,286); endangered (6,451); vulnerable (10,549); near threatened (4,822); lower risk/conservation dependent (241); least concern (32,486) and data deficient (11,881).

Threatened species in each country shows that Nigeria has:

Mammals	Birds	Reptiles	Amphibians
26	19	8	13

According to the IUCN Red List of threatened plant species, version 2012.2 and 2013.2, a total of 164 threatened species of flora (plants) were found in Nigeria, of which 21 were endemic to the country.

3. Concept and Meaning of the 'Wild'

'Wild' as an adjective has been defined as "living in a state of nature and not ordinarily domesticated ... growing or produced without human aid or care...". It is 'expressive of wildlife³⁵'. As a noun 'wild' means a sparsely inhabited or uncultivated region or tract: a wild, free, or natural state of existence³⁶. As an adverb it means 'without regulation or control: plants that grow wild: off an intended or expected course³⁷.

Elsewhere, 'wild' has been defined as 'a natural or undomesticated state: animals in wild. Plants that grow abundantly in the wild'³⁸. 'Wild' represents 'life sciences and allied applications of zoology of animals living independently of man, not domesticated or tamed³⁹. It also means 'life sciences and allied applications of Botany: of plants growing in a natural state, not cultivated⁴⁰. The concept and meaning of the 'wild' is therefore that of the natural environment. The natural environment comprises all naturally occurring surroundings and conditions in which living things grow and interact on earth. These include complete landscape units that function as natural systems without major human as well as plants, animals, rocks and natural phenomena occurring within their boundaries. They also include non-local or universal natural resources that lack clear-cut boundaries, such as air, water, and climate. The concept of the natural environment in the sense of wild flora and fauna can be distinguished by components:

- Complete ecological units that function as natural systems without massive human intervention, including all vegetation, animals, microorganisms, soil rocks, atmosphere and natural phenomena that occur within their boundaries.
- Universal natural resources and physical phenomena that lack clear-cut boundaries, such as air, water and climate, as well as energy, radiation, electric charge, and magnetism, not originating from human activity.

As human population increases, and as humans continue to evolve, human activity modifies the natural environment at a rapidly increasing rate, producing what is referred to as the built environment. The potential of the natural environment to sustain these anthropogenic changes while continuing to function as an ecosystem is an issue of major worldwide concern.⁴¹

But here we are concerned with the concept of the 'wild'. This usually is a reference to natural condition of flora and fauna which is reserved or set aside by a governmental or private agency for the protection of a particular species of animals during part or all of the year. An area designated for the protection of wild animals, within which hunting and fishing is either prohibited or strictly controlled⁴².

³⁵ Meriam-webster Dictionary (2011). 'Wild' [www document] URL http://i.word.com/:dictionary/wild. (01/10/2011).

³⁶ Ibid.

³⁷ Ibid.

³⁸ Houghton, M. (2000). The American Dictionary of the English Language (4th ed.). Houghton Miffin Company.

³⁹ Kememan (2006-2010). 'wild', Kememan English Multilingual Dictionary. Harper Collins Publishers, 2009.

⁴⁰ Ibid.

⁴¹ Portal: Environment (2011). [www document] URL http://en.m.wikipedia.org/wiki/Portal: Environment (visited October 1, 2011).

⁴² Eionet Gernet Thesarus (12/9/2011). Wildlife Sanctuary [www document] URL http://www.eionet.europa. eu/gernet/concept?cp=9321 (visited October 1, 2011).

The word 'wild' also denotes 'wildness' or 'wilderness'-in other words, that which is not controllable by humans. The words etymology is from the old English *wildeornes*, which in turn derives from *wildeor* meaning wild beast⁴³. From this point of view, it is the wild nature of a place that makes it a wilderness. The mere presence or activity of people does not disqualify an area from being a 'wilderness'. Many ecosystems that are, or have been or influenced by activities of people may still be considered 'wild'.

The WILD foundation states that wilderness areas have two dimensions: they must be biologically intact and legally protected. The World Conservation Union (IUCN) classifies wilderness at two levels - (strict Nature Reserves) and (Wilderness Areas).

According to the WILD Foundation, it is:

The most intact, undisturbed wild natural areas left on our planet-those last truly wild places that humans do not control and have not developed industrial infrastructure.⁴⁴

Wilderness areas are considered important for the survival of certain species, biodiversity, ecological studies, conservation, solitude and recreation. They preserve historic genetic traits and provide habitat for wild flora and fauna that may be difficult to recreate in zoos, arboretums or laboratories.

4. Definition and Meaning of 'Species Fauna' and 'Flora'

'Species fauna' means all the animals of an area or of a particular period. All the animals in a region or during a period of earth's history are the fauna of the place or of the period. The word is often used as part of the phrase, the flora and fauna, meaning all the plants and animals in a region/period. The fauna of millions of years ago included dinosaurs. That is, dinosaurs were among the animals that roamed the earth millions of years ago. The lion is an important species of the fauna of Asia. That is, the lion is an important species of the Asian region. It should be noted, that the gigantic and monstrous land animals which were among the fauna of prehistoric times disappeared suddenly, leaving us guessing the reasons for their extinction. Domestic animals like the cow and the buffalo are among the fauna of almost every habitable region of the earth⁴⁵.

Flora and fauna refer to plant and wildlife, respectively. The indigenous plant and wildlife of a geographical region is often referred to as that region's flora and fauna. Both are collective terms, referring to groups of plant or wildlife specific to a region or a time period. For example, the flora and fauna of a warm region may consist of tropical to warm temperate vegetation and exotic species of birds. ⁴⁶ By definition, flora is a word of Latin origin referring to Flora, the goddess of flowers. Flora can refer to a group of plants, as well as to bacteria. Flora is a root of the word *flora* which means pertaining to flowers. Fauna can refer to the animal life or classification of animals of a certain region, time period or environment. Fauna is also Latin origin. In Roman Mythology Fauna was the sister of Faunus, a good Spirit of forest and plains⁴⁷. The flora and fauna of any given region is usually explained in biological terms to include the genus and species of plant and animal life, their preferred growing or breeding habits, and their connection to one another in the environment as well. In addition to geographical groupings, environment also helps further classifications of flora and fauna. For example, aquatic flora and fauna of a region refers to the plant and animal life found in the waters in or surrounding a geographic region⁴⁸. Biologists and environmentalists study flora and fauna for a number of reasons. Preservation and conservation as well as gaining new biological understandings are just a few reasons why flora and fauna are important to researchers. Several organizations, including Fauna and Flora International (FFI), work together to use their research and findings to further policy on conservation as well as biodiversity⁴⁹.

5. Endangered Species and Sustainable Development

The connection between endangered species and sustainable development means that species ecosystems and biodiversity must be managed by maintaining an equilibrium between human and conservation needs. Rural communities around protected areas need support in the management of natural resources, so they can receive benefits from conservation and better manage the fauna and florahuman conflicts. There are many issues that connect endangered species and sustainable development- these include: poverty, education, human and wildlife, health, population growth, sustainable development pressures, land use planning, technical and financial capacity.

Efforts to move towards sustainable development and endangered species protection are beginning to be based on the understanding that issues of poverty need to be addressed, to provide people with alternatives. On April 16, 2003, Britain's BBC aired an award winning documentary titled Ape Hunters⁵⁰. The documentary, directed and produced by Jeremy Bristow, was originally shown as part of the inaugural BBC FOUR launch line up. The film shows how the apes of Central Africa are being hunted and eaten to extinction. It aimed to challenge the perceptions of the West about the problem, with contributions from people who have to live with the Apes, counterpointing developed countries' attitudes with tales of apes destroying crops when the fight against famine is all-consuming⁵¹.

⁴³The Collins English Dictionary, (2000).

⁴⁴ WILD FOUNDATION (9/12/2009).

⁴⁵ Fauna [www document] URL http://www.univsource.com/words/faunap-noun.html (visited October 1, 2011).

⁴⁶ WiseGeek. (2003-2011) What is Flora and Fauna? [www document] URL http://www.wisegeek.com/m /what-is-flora-and-fauna.html (visited 1/10/2011).

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ Ibid.

⁵⁰ BBC Press Office (29:11:02). Hunt Ends for Fourth Award, [www document] URL http://www.bbc.co.uk/ pressoffice/pressreleases/stories/2002/11-november/29/ape-hunters.shtml (visited October 2, 2011).
⁵¹ Ibid.

The documentary also explored the inter-relationship and challenges between:

- Commercial logging
- Increased bush meat consumption, and
- How poachers fared when offered sustainable development as an alternative to hunting⁵².

The documentary highlighted that in the west, conservation is seen as desirable and therefore there is an urgent need to protect the rapidly declining numbers of species (the great apes). They fail however, to recognize the complex causes, to which the affluent world contributes even passively. Thus, it had been easier to blame "others" and almost ignoring our own impacts⁵³.

The exploitation of species though calls for concerns about their dwindling number, the causes of the increase in their consumption (animals) need understanding. For example, in small villages on the frontiers of the forest individual bush meat consumption has been part of local customs for a long time, as there are no domesticated animals, and the forest has been the source of survival for villagers, for most of their requirement (both fauna and flora)⁵⁴.

In sum total, we agree from the above, there is a relationship between poverty, consumption and environmental (species) destruction. The only way out is to alleviate poverty. Corruption and lack of political will must be addressed⁵⁵.

6. Link between Wildlife and Endangered Species

The link between wildlife and endangered species is found in human activities that deplete the stocks of wildlife thus, making them endangered species. Wildlife smuggling or illegal trade occurs either locally or internationally. The intensity of illegal trafficking has led ostensibly to most of these fauna being endangered. Demand for wildlife and the products therefrom, such as exotic pets, food, traditional medicine, clothing, jewellery made from tusks, fins, skin, shells, horns and the intended organs of animals used for spiritual purposes threaten the existence of fauna species in the wild. Illegal trade in wild life is increasing due to the global demand. This results in threats to the existence of the animals. There is also the environmental aspect of the linkage -illegal trade in wildlife affects biodiversity of various ecosystems. This results in apparent decline in the population of the fauna, causing imbalance in the ecosystem. Illegal trade in endangered species 'may cause the introduction of invasive and harmful species into an ecosystem'. The introduction of such animals can cause considerable economic and environmental damage to an ecosystem by endangering or threatening indigenous species⁵⁶.

There are several driving forces in the link between wildlife and endangered species. These are human population growth; land use transformation; species habitat loss, degradation and fragmentation; growing interest in eco-tourism and increasing access to nature reserves; increasing livestock population and competitive exclusion of wild herbivores; abundance and distribution of wild prey; increasing wildlife population as a result of conservation programmes; climate factors and stochastic events (e.g. fire). There is also the human-wildlife conflict factor-in Africa, Asia, South America, North America, Europe and Middle East.

In all these, what is required is adoption of preventive strategies such as artificial and natural barrier, physical and biological; alternative high-cost husbandry practices; voluntary relocation of human population resettlement; compensation systems; insurance programmes, incentive programmes; community based nature resource management schemes, regulated harvest and wildlife translocation. As a remedy we recommend conservation education for local populations; better definition and prediction of hot spots; data collection and evaluation of the impact; better sharing of information; promotion of dialogue and cooperation among different stakeholders; better commitment by governments in addressing the problem; improved policy; better control of hunting; limitation of persecution and poaching and better sharing of income from tourism.

Elisa Distefano, examined human-wildlife conflict⁵⁷ and concluded that it is fast a critical threat to the survival of many globally endangered species. The human wildlife conflict results in some species being endangered. According to Elisa Distefano and the World Conservation Union (World Park Congress 2003), it occurs when wildlife's requirements overlap with those of human populations, creating costs to residents and wild animals⁵⁸. It is the human activities that impact on wildlife thus triggering a chain of actions and reactions that bears negatively on species, thus, endangering some of them. This has far reaching environmental impacts, which in turn expose species to extinction. Distefano states that:

Species most exposed to conflict are also shown to be more prone to extinction (Ogada et al 2003) because of injury and death caused by humans; these can be either accidental, such as road traffic and railway accidents. capture in snares set for other species or from falling into farm wells, or intentional, caused by retaliatory shooting, poison or capture. Such human-induced mortality affects not only the population viability of some of the most endangered species, but also has broader environmental impacts on ecosystem equilibrium and biodiversity preservation.

Terry A. Messmer had discussed the issue of human-wild conflict management and how challenges could be turned into opportunities⁵⁹.

⁵² Ibid.

⁵³Anup S. (Sunday, May 15, 2011). 'Nature and Animal Conservation' [www document] URL http://www.globalissues.or/article/177/nature-and-animal-conservation. (visited October 2, 2011).

⁵⁴ Ibid.

⁵⁵ Ibid.

⁵⁶Wikipedia: (2011). 'Wildlife Smuggling'. [www document] URL http://en.m.wikipedia.org/wiki/wildlife-smuggling (visited October 2, 2011).

⁵⁷ Elisa D. (2008). 'Human-Wildlife Conflict Worldwide: Collection of Case Studies Analysis of Management Strategies and Good Practices', [www document] URL http://www.fao.org/ll/hwc-final.pdf (visited October 4, 2004).

⁵⁸ Ibid.

⁵⁹ Ibid.

Human population growth represents a threat to wildlife in several ways. If our consumption pattern remains constant, with more people, we will need to harvest more timber, catch more fish, plow more land for agriculture, dig up more fossil fuels and minerals, build more houses, and use more water. All of these demands impact wild species⁶⁰. Another link is overharvesting. Cunningham and Cunningham states that 'overharvesting is responsible for depletion or extinction of many species⁶¹. According to them, 'the most destructive example of harvesting terrestrial wild animal species today is the African bush meat trade⁶². 'Wildlife biologists estimate that 1 million tons of bush meat, including antelope, elephants, primates, and other animals, are sold in African markets every year⁶³.

Cunningham and Cunningham give the following statistics⁶⁴:

The profits to be made in wildlife smuggling are enormous. Tiger or leopard fur coats can bring \$100,000 in Japan or Europe. The population of Africa black rhinos dropped from approximately 100,000 in the 1960s to about 3,000 in the 1980s because of a demand for their horns. In Asia, where it is prized for its supposed medicinal properties, powdered rhino horn fetches \$28,000 per kg. In Yemen, a rhino horn dagger handle can sell for up to \$1,000.

Plants also are threatened by overharvesting. Wild ginseng has been nearly eliminated in many areas because of the Asian demand for the root which are used as an aphrodisiac and folk medicine. Cactus "rustlers" steal cacti by the ton from the American Southwest and Mexico. With prices as high as \$1,000 for rare specimens, it's not surprising that many are now endangered.

The trade in wild species for pets is an enormous business. Worldwide, some 5 million live birds are sold each year for pets, mostly in Europe and North America. Currently, pet traders import (often illegally) into the United States some 2 million reptiles, 1 million amphibians and mammals, 5,000,000 birds, and 128 million tropical fish each year. About 75 percent of all saltwater tropical aquarium fish sold come from coral reefs of the Philippines and Indonesia.

What is required is endangered species management and biodiversity protection. National legislation and international treaties are a must to protect 'these irreplaceable assets'. And restoration programs should be established, particularly in developing countries to protect nature and rebuild depleted populations. There should be a committed and massive public enlightenment campaign and advocacy to educate the people not to buy endangered species products. Recovery plans should also be put in place. This will detail how populations 'will be rebuilt to sustainable levels'. We also maintain that economic costs and benefits be incorporated into endangered species planning. It is time 'to focus on a national, continent wide preservation of ecosystems that supports maximum biological diversity rather than a species-by-species battle for the rarest or most popular organisms'. The 1975 Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), represent a new attitude toward nature in which we protect fauna and flora that are threatened or endangered.

7. Endangered Species (Control of International Trade and Traffic) Act⁶⁵

Titled, Endangered Species (Control of International Trade and Traffic) Act, this piece of legislation prohibits the hunting or capture of or trade in animals listed in the First Schedule to the Act, (animals in relation to which international trade is absolutely prohibited)⁶⁶. The Second Schedule to the Act are animals in relation to which international trade may only be conducted under license⁶⁷. The Act sets out the conditions of licenses and permits. The Minister (of course, the Minister charged with responsibility for the environment) may by an order publish in the Federal Gazette the list of animals specified in the first and second schedule of the Act by way of addition, substitution or deletion or otherwise⁶⁸. Penalties and forfeitures for violations are also provided⁶⁹.

The Act, cast in nine sections states that it is an Act to provide for the conservation and management of Nigeria's wildlife, and the protection of some of her endangered species in danger of extinction as a result of over-exploitation, as required under certain international treaties to which Nigeria is a signatory. The Act has two Schedules. The First Schedule contains a list of 59 animal species in relation to which international trade is absolutely prohibited. *Canivora* has 15 animals absolutely prohibited; followed by *artiodactyla* which has 12; primates 7, eagles 7, reptiles 6 and others.

The Second Schedule contains a list of 35 animals in relation to which international trade may only be conducted under license⁷¹.

Messmer T. A. (2000). The Emergence of Human Wildlife Conflict Management: Turning Challenges into Opportunities, International Biodeterioration & Biodegradation, Volume 45, Issue 3-4 (April-June 2000), pp. 97-102.

⁶¹ Cunningham W.P., Cunningham M. A. (2006). Principles of Environmental Science: Inquiry and Applications. New York: McGrawHill Higher Education, (3rd Edition) pp. 115-125.

⁶² Ibid, pp. 115-116.

⁶³ Ibid, p. 116.

⁶⁴ Ibid, p. 116.

⁶⁵ Originally Decree No. 11, 1985, now Cap. E9, Laws of the Federation of Nigeria, 2010.

⁶⁶ Section 1(1).

⁶⁷ Section 1(2).

⁶⁸ Sections 2, 3, 4.

⁶⁹ Section 5.

⁷⁰ These animals are categorized into: insectivore; phoeidota; primates; rodents; canivora; tubulidentata; proboscidea; sirenia; perissodactyla; artiodactyla; dolphines; cetacean; reptiles; aves and eagles.

⁷¹ Nigeria's Endangered Species (Control of International Trade and Traffic) Act, 1985, was hurriedly drafted by the then Military administration and is in dire need of review. A classical example of a holistic Act in this area is Jamaica's Endangered Species (Protection, Conservation and Regulation of Trade) Act, 2000 which unlike Nigeria's Act is very exhaustive and detailed and covers both fauna and flora species in the wild.

Acting under the section 7 powers (powers to make regulations) conferred on him by the Act, the Minister for Environment on 9th May, 2011 made Regulations (S. I. No. 16, 9th May, 2011) titled the National Environmental (Protection of Endangered Species in International Trade) Regulations⁷².

8. National Environmental (Protection of Endangered Species in International Trade) Regulations⁷³

The objective of these Regulations is very clear-protection of endangered species in international trade. It prohibits import, introduction from sea, export, re-export and possession of protected species specified in Regulation 1 of these Regulations⁷⁴.

These regulations shall apply to specimen of wildlife species listed in *Appendix* I, II or III to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES or the Convention) domesticated by the Endangered Species (Control of International Trade and Traffic) Act, Cap E9, Laws of the Federation of Nigeria, 2010 (the Act), (and shall include wildlife species included by the Convention after the coming into force of these Regulations) and also those listed in the Schedules I and II to the Act. The prohibited activities are spelt out in Regulation 3⁷⁵:

- (1) Unless the requirements in this Part are met, or any of the exceptions in this Part is applicable, it shall be unlawful for any person to commit, attempt to commit, solicit another to commit, or cause to be committed any of the acts described under subregulation (2) (a)-(e) of this regulation.
- (2) It is unlawful:
 - (a) to import into the Federal Republic of Nigeria any specimen of a wildlife species listed in *Appendix* I, II or III of the Convention or Schedule I and II to the Act from any foreign country;
 - (b) to introduce directly into the Federal Republic of Nigeria any specimen of a wildlife species listed in *Appendix* I or II of the Convention or Schedules 1 and II of the Act taken in the marine environment not under the jurisdiction of any country;
 - (c) to export from the Federal Republic of Nigeria any specimen of a wildlife species listed in *Appendix* I, II or III of the Convention or Schedules I and II of the Act;
 - (d) to re-export from the Federal Republic of Nigeria any specimen of a wildlife species listed in *Appendix* I, II or III of the Convention or Schedules I and II to the Act; and
 - (e) for any person to possess any specimen of a wildlife species listed in *Appendix* I, II or III of the Convention or Schedules I and II to the Act imported into the Federal Republic of Nigeria, or exported or re- exported from the Federal Republic of Nigeria contrary to the provisions of the Convention and the Act.

Regulation 4⁷⁶ lists out the requirements for import introduction from sea, export and re-export as follows:

- (1) In order to import into the Federal Republic of Nigeria any specimen of a wildlife species listed in:
 - (a) Appendix I of the Convention from any foreign country, an import permit issued pursuant to Section 3 of the Act, and a valid foreign re-export permit issued by the country of origin or a valid foreign re-export certificate issued by the country of re-export must be obtained and presented prior to such importation.
 - (b) Appendix I of the Convention taken in the marine environment not under the jurisdiction of any country, certificate of introduction from the sea issued pursuant to section 3 of the Act must be obtained prior to such introduction.
 - (c) Appendix II of the Convention or Schedule II to the Act from any foreign country, a valid foreign export permit issued by the country of origin, or a valid foreign re-export certificate issued by the country of re-export, must be obtained and presented prior to such importation.
 - (d) Appendix II of the Convention or Schedule II to the Act taken in the marine environment not under the jurisdiction of any country, an introduction from the sea, certificate issued pursuant to the provisions of the Act and these Regulations must be obtained prior to such introduction.
 - (e) Appendix III of the Convention from a foreign country that has not listed such specimen of wildlife in Appendix III of the Convention, a valid foreign export permit or re-export certificate issued by such country must be obtained prior to such importation.
 - (f) Appendix III of the Convention from a foreign country that has not listed such specimen of a wildlife species in Appendix III of the Convention, a valid foreign certificate of origin of foreign re- export certificate must be obtained prior to such importation.
- (2) In order to export or re-export from the Federal Republic of Nigeria any specimen of a wildlife species listed in:
 - (a) *Appendix* I or II of the Convention, an export permit or re-export certificate, issued pursuant to Section 3 of the Act must be obtained prior to such exportation or re-exportation;
 - (b) *Appendix* III of the Convention or Schedule II to the Act, an export permit issued pursuant to section 3 of the Act, must be obtained prior to such exportation or re-exportation; and
 - (c) Appendix III of the Convention that has not been listed by the Federal Republic of Nigeria, a certificate of origin, issued pursuant to section 3 of the Act, must be obtained prior to such exportation;

⁷² S. I. No. 16, 9th May, 2011.

⁷³ S. I. No. 16, 9th May, 2011.

⁷⁴ Ibid.

⁷⁵ Ibid.

⁷⁶ Ibid.

(3) In order to re-export from the Federal Republic of Nigeria any specimen of wildlife listed in *Appendix* III of the Convention, a certificate issued pursuant to the provisions of the Act and these Regulations that the specimen was processed in the Federal Republic of Nigeria or is being re- exported must be obtained prior to such re-exportation.

Exemptions and special procedures are provided in Regulation 5:

- (1) The prohibitions in regulation 3 of these Regulation concerning importation, exportation and re-exportation shall not apply to:
 - (a) specimens of a wildlife species listed in Appendices I, II or III of the Convention or Schedules I and II to the Act that are being transshipped through the Federal Republic of Nigeria provided such specimen or species remain in the Nigeria Custom's custody and is accompanied by valid CITES documentation or comparable documentation, issued by a foreign country;
 - (b) specimen of a wildlife species, when a certificate has been issued by the Management Authority (referred to as the Authority) of the country of origin or the country of re-export to the effect that the specimen of a wildlife species was acquired prior to the date the Convention applied to it;
 - (c) legally acquired specimen of a wildlife species that are accompanying personal baggage or part of a shipment of the household effects of persons moving their residences to or from the Federal Republic of Nigeria: Provided that this exception shall not apply to:
 - (i) importation by Nigerian residents of specimens of species listed in *Appendix* I of the Convention or Schedule I to the Act that were acquired outside the Federal Republic of Nigeria; or
 - (ii) importation by Nigerian residents of specimens of species listed in *Appendix* II of the Convention or Schedule II to the Act that were taken from the wild in a foreign country, if that country requires the prior grant of export permits before any export of such specimens and no export permit is presented.
- (2) Specimen of a wildlife species listed in Appendix I of the Convention or Schedule I to the Act that have been bred in captivity or artificially propagated, for commercial purposes, shall be treated as if listed in *Appendix* II of the Convention and Schedule II to the Act.
- (3) The prohibitions in regulation (3) of these Regulations concerning importation, exportation and re-exportation shall not apply to:
 - (a) any specimen of a wildlife species that was bred in captivity or artificially propagated, or is a part of such wildlife or plant or was derived there from and which is accompanied by a certificate to that effect when a certificate has been issued by the Authority of the country of export to the effect that the wild animal or plant was bred in captivity or artificially propagated, or was part of or derived there from;
 - (b) herbarium specimens, other preserved, dried or embedded museum specimens, and live plant material when they are imported, exported or re-exported as a non-commercial loan, donation or exchange between scientists or scientific institutions that have been registered by the Authority of their country, and when a label issued or approved by the Authority is clearly affixed to the package or container or approval of labels; and
 - (c) movement of specimens which form part of a traveling zoo, circus, menagerie, plant exhibition or other traveling exhibition, provided that:
 - (i) the exporter or importer registers full details of such specimens with the Authority;
 - (ii) the specimens are covered by a pre-Convention certificate; or
 - (iii) a certificate showing that they were bred in captivity or artificially propagated and the Authority is satisfied that any living specimen will be so transported and cared for in manner that minimizes the risk of injury, damage to health or cruel treatment.

Regulation 6 articulates registration of persons engaged in trading in specimens of any species listed in Appendix I of the Convention and the Schedules to the Act.

Regulation 7 makes any violation punishable:

- (1) It shall be an offence under these Regulations to import, export, re-export, or introduce from the sea, or attempt to import, export, re-export or introduce from the sea, any specimen listed in Appendices I, II and III to the Convention and the Schedules to the Act and these Regulations without a valid permit or certificate.
- (2) Any person found guilty of contravening the provisions of sub regulation (1) of this regulation shall, on conviction be liable to a fine not exceeding 5 million Naira (¥5m) and to imprisonment for a term not exceeding three years or to both such fine and imprisonment.
- (3) It shall be an offence under these Regulations for any person to have in his possession or under his control, or to offer or expose for sale or display to the public, any specimen of the species listed in *Appendices* I, II and III of the Convention or the Schedules to the Act and these Regulations, which was acquired in contravention of the provisions of the Convention, the Act and/or these Regulations.
- (4) Any person found guilty of contravening the provisions of sub-regulation 3 of this regulation shall be guilty of an offence and shall on conviction be liable to a fine not exceeding 5 million Naira (N5m) and to imprisonment for a term not exceeding three years, or to both such fine and imprisonment.
- (5) It shall be an offence under these Regulations to make or attempt to make either oral or written false or misleading statements in connection with an application for a permit or certificate or registration.

- (6) Any person found guilty of contravening the provisions of sub-regulation 5 of this regulation shall on conviction be liable to a fine not exceeding 3 million Naira (N3m) and to imprisonment for a term not exceeding 3 years or to both such fine and imprisonment.
- (7) It shall be an offence under these Regulations to obstruct or otherwise hinder an officer in the performance of his duties.
- (8) A person found guilty of contravening the provisions of sub-regulation 7 of this regulation shall on conviction be liable to a fine not exceeding 1 million Naira (\mathbb{H}1m) and to imprisonment or a term not exceeding 1 year or to both such fine and imprisonment.
- (9) It is an offence under these Regulations for any unauthorized person to alter, deface or erase a mark used by the Authority to individually and permanently identify specimens.
- (10) Any person found guilty of contravening the provisions of sub-regulation 9 of this regulation shall on conviction be liable to a fine not exceeding 2 million Naira (N2m) and to imprisonment for a term not exceeding 2 years and to both such fine and imprisonment.
- (11) Where a body corporate is found guilty of contravening any of the provisions of these regulations, such body corporate, or any person who was purporting to act in any such capacity, shall on conviction be liable to a fine not exceeding 20 million (\frac{\text{\text{\text{\text{\text{\text{\text{\text{e}}}}}}}}{20}) and its principal officers liable to a term of imprisonment not exceeding 7 years, or to both such fine and imprisonment.
- (12) Expenses incurred as a result of seizure, including custody costs, the costs of transporting and disposing of specimens or of maintaining live animals and plants during the time of seizure shall be recoverable from the offender.

Enforcement of these Regulations rests on the Agency. Any authorized officer of the Agency who is satisfied that there is reasonable evidence of an offence, may order the arrest of the person suspected and seize any item related to the suspected offence.⁷⁷

9. Institutional Framework, Compliance and Enforcement

Nigeria ratified CITES in 1976, thus the establishment of wildlife rescue centres to preserve endangered species of fauna and flora is part of the attempt to implement CITES. Nigeria's Endangered Species (Control of International Trade and Traffic) Act, 1985 was the country's domestication of CITES. CITES is domiciled in the Federal Ministry of Environment, but enforcement is spread across other Ministries, Departments, Agencies and Security personnel with functional responsibility in this area. Prominent among the enforcement Agencies are the National Environmental Standards Regulations and Enforcement Agency (NESREA); the wildlife division of the Federal Ministry of Environment, the Customs; the Police; the National Plant Quarantine Service and others. These bodies are all stationed in our airports, seaports and land borders. This joint arrangement in enforcement is likely to result in a reduction of the illegal trade and traffic in endangered species in Nigeria. These wildlife rescue centres is a joint project of the Federal Ministry of Environment and the Ecological Fund Office. Their duty amongst others is to ensure that whenever any of the endangered species are confiscated, they are evacuated to the rescue centres for rehabilitation.

However, statistics are not available on the efficiency or otherwise of this project. It should be recalled that sometime in 1990, the CITES enforcement Officers were withdrawn from their points of duty at the airports, but they are back now. Nigeria has made modest achievement in implementing CITES, and reviewing the national CITES legislation as well as attempting within the available resources and personnel to enforce CITES.

In 2011, the 2009 National Environmental (Protection of Endangered Species in International Trade) Regulations was revised to meet up with the prevailing international situation. The Federal Ministry of Environment again, within the capacity of available human and financial resources has been ensuring that all the guidelines as contained in the Regulations for trading in wildlife are adhered to. The prohibited list of endangered species is guarded jealously and species contained therein are strictly protected. Violators are usually, but in rare cases charged to court, but the Nigerian society and its corrupt setting and delay in court proceedings appears to have whittled down whatever efforts are being made in this regard. Unlike other jurisdictions in India and Brazil, where violators and poachers are jailed outright or heavily penalized, in Nigeria such offenders walk away with very light punishments in the nature of paltry fines and penalties.

Public education, enlightenment and advocacy on wildlife conservation and the negative consequences of illegal trade in endangered wildlife species and their products are not sufficiently carried out. This article calls for professionalism and use of consultants in this area. There is also the need to committedly partner with recognized local and international organizations for effective controlling of illegal trade in endangered species of fauna and flora in order to protect them from extinction.

10. Challenges of Implementation and Recommendations

At present rate of exploitation due to human activities, Nigeria's fauna and flora in the wild faces critical and extinct future. The International Union for Conservation of Nature (IUCN) Red List of threatened species 2013, shows that Nigeria's wildlife species are among the world's most threatened. In Nigeria, poachers operate almost unhindered within the country's protected game reserves, which if not checked, would result in depleted or empty game reserves. It should be recalled that in 2008, Nigeria was suspended from CITES when two gorillas illegally trafficked into the country were found in Kano. The two gorillas were subsequently returned back to its habitat in Cameroon, while international and local observers pointed accusing fingers on Nigeria's complacency and complicity in the illegal traffic. Nigeria was also accused of not doing enough to implement compliance with the CITES Convention. The Federal Government should enforce the national laws on conservation of fauna and flora as well as ensure strict enforcement of CITES.

⁷⁷ Regulation 8, ibid.

Continued overharvesting and poaching of wildlife is speedily exerting pressures on Nigeria's wildlife species, as poachers with sophisticated weapons daily kill and decimate the endangered animals, thus depriving the future generations of Nigerians the benefit and value of wild animals and plants as common heritage.

The regulations existing is very weak and enforcement mechanism its very poor. Enforcing Officers due to poverty and poor conditions of their employment are the ones who connive with poachers and illegal traffickers to kill these species. Corruption is very endemic. There is lack of due diligence and patriotism on the part of the enforcing authorities as most of the funds meant for wildlife protection are either diverted or stolen by their custodians.

Another challenge is the fact that these endangered wildlife species are seen by the rural dwellers as a means of livelihood provided to them by nature, thus their uncooperative and hostile attitude towards enforcing the existing regulations and laws against illegal poaching.

As canvassed by local and international observers, Nigerian government should ensure compliance and strict enforcement of laws against wildlife poaching as this is the only way Nigeria wildlife could be saved from extinction.

Recently, some poachers were arrested in Ogun State, South-West Nigeria for killing an elephant within a game reserve. The poachers were later allowed to go scot-free as they were said to be agents of certain prominent citizens in the society who traffic in elephant tusks. With scenario as this, it would be near impossible to stem the tide and wave of illegal traffic in endangered species in Nigeria.

These are real dangers in the system which could only led to extinction of some faunas and floras in Nigeria. This article therefore, calls on the responsible authorities, particularly the Federal Government to ensure strict enforcement and compliance with the extant laws on wildlife protection. The mantra of anti-corruption stance of the present administration should be extended to the wildlife sector, with the view of removing Nigeria from the list of major players in the illegal trade in endangered species. The authorities should also tackle the challenges of over-harvesting and poaching of wildlife as well as providing information about the present status of most habitats and species, the actual extent of protected areas as well as other key data that could ease management of these natural resources⁷⁸.

As stated earlier, it is very unfortunate that unlike faunas the Endangered Species (Control of International Trade and Traffic) Act⁷⁹ made no provision on the protection of flora. They are treated as 'private property of the land owner/community' 80

Another problem faced by species fauna and flora is linked to environmental degradation and biodiversity loss⁸¹. According to observations and statistics from scientists, species (including the intrinsic genetic resources) are going into extinction at a shockingly fast rate.⁸²

From the foregoing, the major problems faced by Nigeria in the regime of protection of species fauna and flora in the wild are enforcement and institutional challenges. There is also the problem of reconciling economic development and the immediate socioeconomic needs of the people with the sustainable management of its natural resources. Poverty remains the main cause of fauna and flora exploitation, thus, extinction.

Nigeria lacks the political will to provide financial and human resources mostly in these economic downturns, to police and monitor illegal wildlife trade and poaching. Illegal wildlife trade is considered low priority. There are no specialized and trained wildlife law enforcement officials. Barriers toward effective enforcement as stated earlier, include corruption in government, which contributes to the inability of the authorities to monitor and control wildlife crime, collusion between wildlife poachers and law enforcement officials and low priority for conservation at local, state and federal levels of government⁸³.

The implementing and enforcing institutional mechanisms are too weak. A common complaint is: 'We have good laws, but they are not enforced'.

The next enforcement problem is political, economic and cultural traditions. Nigeria is a country ruled by men, rather than by the rule of law, therefore, little attention is paid to the implementation of the laws protecting wildlife species. The individuals charged with enforcement responsibilities prefer to look the other way and pretend that nothing has ever happened or demand for 'settlement' (euphemism for bribes). Very few cases ever reach the law courts, when they do, the police and prosecutors, and the presiding judicial officers demand bribes, and in some case when this happens, the complainant turns to be the accused. For most citizens, they seldom try to figure out what the law say and what their legal right should be. In their opinion, nothing is wrong in killing wildlife for game or for economic reasons such as trading wildlife products. So they ask: Why report a person to the police or take a person to court over what God in His merciful bounty has given mankind. They rather not argue with a person over wildlife hunting or killing for trade purposes, no matter what the law says, for when you do that or take a person to court, you create enmity and that is usually the end of their relationship. Stepping up criminal prosecutions is therefore crucial in the fight against violators of endangered wildlife species laws.

To make Nigeria's endangered species laws workable, it requires efforts in both local, state and national level which must develop strategies and programs to monitor enforcement and compliance.

There is also need to initiate a comprehensive review of the country's Endangered Species Act in line with the aims and core objectives of CITES and Convention on Biological Diversity (CBD). The review should include procedures on access to genetic resources, intellectual property rights, protection on biotechnology transfer, regulations on nature reserve management, laws on plant

⁷⁸ Wildlife Conservation in Nigeria (2015, January 6). This Day.

⁷⁹ Ibid.

⁸⁰ Nigeria's Endangered Species (2013, June 21). This Day.

⁸¹ Kiss A., Shelton D. (1994). International Environmental Law, Supplement, p. 171.

⁸² Ibid

⁸³ CITES (1999). Tiger Technical Mission Report. Geneva: Switzerland.

resources, conservation regulations, protection of sensitive areas in the environment and management of nature reserves.⁸⁴ There should be a specific requirement of Environmental Impact Assessment in any activity which may likely cause the loss of habitat, endangered species and biodiversity. Economic incentives should be used for endangered species conservation.

Implementation of the wildlife laws requires a large source of funding; Nigerian government should seek funding from all possible financing channels which include but not limited to international assistance. The whole society should be involved in the protection of endangered species and biodiversity conservation and sustainable use of natural resources. This article recommends the full participation of indigenous and local communities in the protection of endangered species.⁸⁵

Nigerian government need to develop further legal measures and create effective institutional structures to overcome the identified problems which hinder the implementation of the Act. Beyond rhetorics, the citizens of Nigeria need to change their ways of thinking, they should abandon their inferiority complex, corruption and business-as-usual culture and embrace attitudinal change. Without cohesive attitudinal change, no matter how much money the government puts into the protection of wildlife endangered species, all would be a waste, because if the citizens' attitude and mindset is always on the personal benefit that will accrue to them apart from the public good, it cannot just work. Weak institutional and legal mechanisms must be addressed.

A word on land use impediments in Nigeria – institutional problems in land use management further impairs the protection laws aimed at safeguarding endangered species fauna and flora. For sustainable wildlife management to succeed, perceived benefits have to outweigh the benefits of building up the area, using it as pasture land or cultivating it.⁸⁶

In Anambra State, South-East Nigeria, indiscriminate sale and conversion of state owned lands to private holdings have led to wildlife species fauna and flora destruction. In Onitsha, Awka and Nnewi towns, in Anambra State, South East Nigeria, lands protected forests were destroyed and partitioned by government and sold to private holdings outside the due process. In Enugu State, South East Nigeria, the famous colonial Enugu Zoo was destroyed by the former Governor Chimaroke Nnamani and turned into private estates⁸⁷. The land use system in Nigeria have been characterized as private/modern, communal customary, public/state and open access⁸⁸ It has been argued that Nigeria's Land Use Act, 1978 'obstructs their (Niger Delta) to environmental justice and is a fundamental cause of the violent conflicts that pervade the region.⁸⁹

11. Judicial Response

The poor judicial response has retarded the development of the law for the protection of wildlife endangered species fauna and flora in Nigeria. The Constitution of the Federal Republic of Nigeria 1999 (as amended) is the grundnorm of all laws in Nigeria. It recognizes the importance of improving and protecting the environment and makes provisions for it principally in section 20 which makes it an objective of the Nigerian State to improve and protect the air, land, water and wildlife of Nigeria. Unfortunately, lack of commitment and constitutional conflicts among the responsible authorities have led to poor judicial response to the protection of endangered species.

The common law of tort still represents an important tool for the resolution of environmental disputes that fall beyond the confines of regulated activity. The doctrines of nuisance (public and private), trespass, negligence and strict liability still hold sway in apportioning of blame and assigning liability for activities that today are also governed by regulatory regimes. These doctrines remain relevant and continues to play a leading role in the wildlife laws.

There is no direct judicial decision on wildlife endangered species protection in Nigeria, but there are few judicial precedents laid down by the various courts in Nigeria on important environmental law issues. Such cases are: A. G. Lagos State v. A. G. Federation & 35 Others⁹⁰ (under section 20 of the 1999 Constitution), the Federal government has the responsibility to make laws on broad guidelines for environmental protection); S.P.D.C. v. Ofovere⁹¹ (where a veterinary consultant showed the effect of pollution on the ecosystem especially pigs and poultry which died after drinking of the water polluted by petroleum products); Amachree v. Kalio⁹² (established the principle that as a matter of public policy, riverine communities cannot stop adjoining communities from using rivers or body of water interlinking them); Attorney General v. Holt⁹³ (established that adjoining creeks and lands reclaimed from coastal waters or lagoons belong to the government); S.P.D.C. v. Farah⁹⁴ (there was oil well blow out which polluted about 607 hectares of land. The top soil was heavily contaminated and effort was made by the appellant to rehabilitate the land which it later abandoned.

⁸⁴ IUCN (2011) IUCN Red List of Threatened Species. Version 2011.

^{85 &#}x27;Summary of the Fourth Meeting of the COP to CBD (1998).

⁸⁶ For rural communities, this is tied to the satisfaction of basic needs. Some ways in which conservation imperatives can be harmonized with the aspirations of rural communities is through the channeling of benefits derived from wildlife management to such communities.

⁸⁷Wikipedia, Enugu Zoo (Enugu), 2011. This has led to land use fragmentation, loss of abundant wildlife, habitat loss, alteration of the ecosystem and destruction of ecotourism.

⁸⁸ Ondiege P. Land Tenure and Soil Conservation (1996). in In Land We Trust: Environment: Private Property and Constitutional Change 117, Calestous J. and Ojwangads J. B.

⁸⁹ Ako R. T. (2009), Nigeria's Land Use Act: An Anti-Thessis to Environmental Justice. Journal of African Law, Vol. 53, No. 2, pp.289-304.

⁹⁰ (2003) 35 W.R.N. 1-226.

⁹¹ Unreported – Appeal No. CA/B/80/89 of 27/4/90.

⁹² (1913) 2 N.L.R. 108.

⁹³ (1910-15) 2 N.L.R. 1.

^{94 (1995) 3} N.W.L.R. (Pt 382) 148.

The plaintiff's victory at the trial court was affirmed by the Court of Appeal); *S.P.D.C. v. Abel Isaiah*⁹⁵ S.*P.D.C. v. Maxon*⁹⁶ (oil pollution) *Makure v. Nwukor*⁹⁷ (negligence); *Ademola v. Zik Press*⁹⁸ (noise pollution) and S.*P.D.C. v. Tiebo*⁹⁹.

Therefore, if could be confidently asserted that in Nigeria today, endangered wildlife species fauna and flora have no judicial protection, unlike what is obtainable in other countries like Kenya, South Africa, United Kingdom and the United States of America, where the citizens and environmental bodies and non-governmental organizations consistently approach the court to enforce the laws on conservation and endangered species protection. ¹⁰⁰

12. Conclusions

This article raises awareness of the threats to wildlife endangered species fauna and flora in Nigeria and the importance of improved conservation efforts and the need for a holistic approach against wildlife crime in Nigeria. Estimates presently has if that only about 200 to 300 cross river gorillas are left in the wild, across the rainforests of Nigeria and Cameroon. These gorillas live in a region with a high human population who daily encroach on their habitat by deforestation in order to create lands for farming purposes. Poaching has also become a past time venture with its debilitating effects for the animals.

According to the United Nations Secretary-General, Ban-Kimoon:

'illegal trade in wildlife has become a sophisticated transnational form of crime comparable to other pernicious examples, such as trafficking of drugs, humans, counterfeit items and oil. It is driven by rising demand, and is often facilitated by corruption and weak governance. There is strong evidence of the increased involvement of organized crime networks and non-Stated armed groups'.

This article has shown that chasing the poachers and protecting Nigeria's wildlife endangered species from extinction is a complex issue. The obligations and responsibilities placed on the Nigerian governments, local, state and national, even the people of Nigeria suffer frustrations and breaches as a result of the factors discussed above.

It is time for the government at all levels to undertake measures to establish protected areas and buffer zones, conducting inventories of wildlife and their conservation status, ensuring healthy eco-systems and finding a balance between recreational 'exploitation' of wildlife and their habitats and their conservation.

There is urgent need for a more holistic view of wildlife problems in Nigeria's national laws. Private organizations should be encouraged to respond positively to public support for wildlife protection. Proactive management of human – wildlife conflict and poaching are all likely to go a long way in achieving desired objectives.

As habitat loss is the leading cause of decline in plant and animal diversity and populations, land development of all kinds must have to involve careful consideration of the impact of fauna and flora. Creative incentives to private land owner to protect habitat and wildlife should be encouraged and implemented through such actions as conservation reserve programmes.

Dissemination of information, increased awareness through public enlightenment and advocacy are the ground tools that the government can use to initiate endangered species protection under various programs.

Despite the laws that are in place, most people do not think in terms of wildlife protection or conservation of biodiversity because they do not understand the gravity of the situation. Uppermost in their minds is how to use wildlife for their own purposes, such as for business or trade, food, medicine, pleasure or a symbol of affluence and economic prosperity. A comment credited to a Tibetan trader seem to say much about the thinking and activity of those who actually carry out wildlife trafficking or consume wild products:

'If you live next to the mountain you eat from the mountain......if you live next to the river you eat from the river. We are nomads in Tibet. We are dependent on the animals. 101

It is therefore, clear that only through an alteration of attitudes can the deep impact on the psyches of consumers and traders of endangered species occur that is necessary for the protection of these species.

Another worrisome challenge is that Nigeria's wildlife laws enforcement programs are plagued by weak leadership and oversight. Politics, poverty and corruption still impedes enforcements. Criminal enforcement is non-existent, only on the papers.

In this regard, it might be necessary to employ the use of public interest litigation (as in Kenya and India) to protect wildlife. There should be shift from legal centralism to legal pluralism because social conduct is regulated by the interaction of normative orders, notion of popular justice, community justice and distributive justice. These should be institutionalized outside the sphere of technicalities of the formal legal systems.

In conclusion, while we acknowledge the fact that Nigeria still face numerous development challenges that hinder the effective implementation of the Endangered Species (Control of International Trade and Traffic) Act¹⁰² and the CITES, it is time for the Nigerian government to put things in place to protect the wildlife and their ecosystem. The citizens must police each other by ensuring that these endangered species fauna and flora are not exterminated by unsustainable activities. Concerted efforts should be geared towards addressing the Nigeria's Niger Delta environmental devastation which had led to extinction of some species. The Government should ensure adequate funding of the institutions and agencies with functional responsibility for the protection of endangered species.

^{95 (2001)} F.W.L.R. (Pt 56) 608.

^{96 (2001)} F.W.L.R. (Pt 47) 1030.

⁹⁷ (2001) 89 L.R.C.N. 2381.

⁹⁸ (no citation).

⁹⁹ (1996) 4 N.W.L.R. (Pt. 445) 637.

¹⁰⁰ Endangered Species Related Case (2014). Animal Centre, Legal & Historical, where 50 judicial decisions were listed, all of them emanating from the U.S.A. between 1995 and 2014.

¹⁰¹ Dorgan, (www document), visited December 17, 2011.

¹⁰² 1985, ibid.

Given the above position, we finally submit that there is still hope, but the Nigerian people must be made to be aware of the dangers of indiscriminate poaching of species fauna and flora in the wild. While grappling and hustling for their daily food and necessities of life the citizens must always bear in mind that poaching, habitat loss and overuse of natural resources which threaten the existence of species fauna and flora in the wild poses real threat to the lives and future of generations yet unborn. These future generations of Nigerians yet unborn are entitled to the full benefit, use and enjoyment of the nation's natural resource treasure. It is their fundamental legal right and recognized by the Constitution of the Federal Republic of Nigeria 1999 (as amended)¹⁰³, after all protection of the nation's environment including wildlife endangered species fauna and flora 'is of extreme importance for the country'. ¹⁰⁴

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¹⁰³ Section 20, ibid.