


## COVID-19 pandemic and environmental protection: Imperatives for environmental law and management in Nigeria

 Anthony Ekpoudo<sup>1</sup>, Alex Abang Ebu<sup>2</sup>, Akpanke, Shishiitileugiang Aniashe<sup>3\*</sup>, Okpong, Denis Edet<sup>4</sup>, Ekpe Wekeekayo Eteng<sup>5</sup>

<sup>1</sup>Department of Commercial and Industrial Law, Faculty of Law, University of Calabar, Calabar; [ekpoudo@unical.edu.ng](mailto:ekpoudo@unical.edu.ng) (A.E.).

<sup>2,3</sup>Dept of Public Law, faculty of law University of Calabar; [ebualex@unical.edu.ng](mailto:ebualex@unical.edu.ng) (A.A.E.) [shikpansbrain013@gmail.com](mailto:shikpansbrain013@gmail.com) (A.S.A.).

<sup>4</sup>Legal Officer Nigerian Navy; [okpong03@gmail.com](mailto:okpong03@gmail.com) (O.D.E.).

<sup>5</sup>Dept. of Jurisprudence and International Law; [princewekeekayo@yahoo.com](mailto:princewekeekayo@yahoo.com) (E.W.E.).

**Abstract:** Across the global community, many countries have been ravaged by the challenge of the COVID-19 pandemic. Nigeria is no exception. Since the country recorded its first index case in February 2020, the number of cases and fatalities has been on the increase. Although the authorities in Nigeria have endeavoured to adopt some meaningful response to the pandemic, with a fragile healthcare system, the pressure posed by this issue is enormous and the matter has persisted. COVID-19 is certainly a zoonotic or environmentally related scourge. In this work, the environmental aspect of the pandemic has been traced and their consequences highlighted. The study also considers the responses to the problem and from the environmental law perspective examines the regulations concerning these kinds of diseases. It is opined that the effective management of the environment by adherence to agreements, laws, and policies, investment in environmental restoration and new technologies, and general reorientation of citizens towards the exploitation and use of environmental resources are better approaches to checking the emergence of this kind of problem in future and generally sustaining a green environment.

**Keywords:** Biodiversity, Conservation, Coronavirus, COVID-19, Environmental, Law, Pandemic, Zoonotic.

### 1. Introduction

Early in the year 2020, the SARS-Corona virus scourge (COVID-19) which is indisputably one of the deadliest and most widespread health challenges hit the world. The first case of COVID-19 was reported from the city of Wuhan, the capital and major commercial hub of Hubei province in China in November 2019 (Ohia, 2020). In a short time, the disease which was first thought to be a regional or local epidemic spread across China and soon extended across the universe with an exponential increase in morbidity and mortality rates. On March 11, 2020, the World Health Organization (WHO) declared COVID-19 a pandemic by virtue of the disease meeting the epidemiological criteria of having infected more than 100000 persons in not less than 100 countries (Callaway, 2020). A pandemic relates to a disease or epidemic that affects a whole region or the entire universe (Webster's Universal Dictionary and Thesaurus). The pandemic has now reached 213 countries and territories (Worldometers, 2020). As of September 15, 2020, the number of confirmed cases worldwide has risen to 29,309, 546 58 while the death toll has reached 928,890,237 (European Centre for Disease Prevention and Control Report, 2020). Africa has recorded over one million cases of COVID-19 in the last six (6) months (allafrica.com 2020).

Nigeria, the most populous country in Africa reported its first case of COVID-19 on 27 February 2020. The index case was an Italian citizen who arrived in Lagos, the economic capital of the country from Europe and shortly thereafter became ill and tested positive for the virus. From the one reported case, in Lagos in February the number of infections has grown up to 56,388 on September 15, 2020, with 44, 337 persons beating the virus. Sadly, 1083 persons could not overcome the virus leading to ultimate death (Nigeria Centre for Disease Control-NCDC Report, 2020). It has been argued that these figures may be an understatement of the reality considering the low levels of testing across the country and the continent (United Nations Report, 2020). As at September 15, 2020, only 442, 075 persons had been tested in Nigeria, with a mammoth population of over 200, 000, 0000 persons (NCDC Report, 2020).

Undeniably, the outbreak and heavy casualties associated with the pandemic affirms the position of the World Health Organization (WHO) that up to 7 million persons die yearly from respiratory related illnesses (Asubiojo, 2016). Since the outbreak of the virus, governments at all levels have marshalled different strategies to contain its spread, while also mobilizing some supports to some persons in the localities worst affected. These measures include the issue of COVID-19 Regulations by the Federal Government, ordering of screening of suspected cases, contact tracing and testing; and isolation and treatment. Since its outbreak, the global community has been struggling against the overwhelming impacts of the infectious/contagious pandemic. Minimal successes have been recorded as the devastating effects left in its trails continue to rise in different dimensions worldwide. It is important to note that before now scholars have asserted that an intrinsic relationship exist between environmental protection and public health (Amokaye, 2014). Disruptions in the ecology through flood, pollution, deforestation, fire and poor land use usually tip the balance between humans and microbes in favour of microbes. Hence, any infliction of harm to the environment exposes mankind to opportunistic species in the mould of pathogenic microbes (Platt, 1996).

The developing COVID-19 crisis is a distress call for increased responsiveness from national and international institutions in all sectors in order to overcome this kind of challenge to the human race. This endeavor shall consider the environmental dimensions of COVID-19 in Nigeria in terms of the environmental causes and consequences of COVID-19. It shall also appraise the legal framework for environmental protection management and other aspects of policy and plans for the repression of COVID-19 and other similar pestilences. It is the position of the paper that the COVID-19 scourge is environment-related and the related law and institutions in Nigeria are so weak that they are not readily adaptable to managing global issues of this kind.

## 2. Environmental Causes and Consequences of COVID-19

The outbreak of COVID-19 is connected to the environment. This is so as humans who are the primary targets are constituents of the environment. Although some persons and authorities have made the spurious allegation that China manufactured the new biological coronavirus in its virology laboratory in Wuhan and unleashed same deliberately or accidentally on the world, emergent scientific evidence has disproved the theory. For example, Donald J. Trump (President of the United States of America) and Mike Pompeo (Secretary of State) hold this view and demand compensation from China (*The Guardian*, June 2, 2020). Researches conducted by scientists globally, including those in the USA have proved that the strain of the COVID-19 virus has natural roots from animals and are not man made. According to the renowned Professor of Chemical Biology at Rutgers University, Richard Ebright, the possibility that the virus was a deliberately released biological weapon can be firmly excluded (*The Washington Post*, February 26, 2020). Indeed, science has proved that the virus mutations are totally consistent with a jump of a species from an animal to a human being (Fauci, 2020).

It is important to note that before the outbreak of this particular virus, the earth has sent many signals and warnings about the possible eruption and manifestation of an epidemic of this kind. In the last few years, there have been reported cases of localized epidemics or deadly gifts from creatures in the animal kingdom (Damond, 1997). These include Bird Flu, Ebola, Lassa fever, and severe acute

respiratory syndrome (SARS), and the Middle East Respiratory Syndrome Corona Virus (MERS-COV) which was noticed around the Arabian Peninsula in 2013 (Ramadan and Shaib, 2019). Apart from these ones, the earlier disease on human populations associated with animals was trypanosomiasis (sleeping sickness) (Ford, 1971). Their prognoses were not as complex as the current pandemic nor was the effect as calamitous and extensive. As such, it was possible for the concerned national authorities to coordinate aggressive response strategies to control their spread.

Clearly, the current outbreak is a very serious and generic zoonotic disease. The term zoonosis refers to diseases that are transmissible between animals and humans. There are direct and indirect outcomes of zoonotic diseases on the environment. The direct effects on humans relates to the impacts of animal infections, during residues in treated animals, and the contamination of water sources with parasites and pathogens from animals. Indirect effects relate to the morbidity and mortality of livestock, loss of nutrients through undernourishment of livestock and frequent weakening of livestock to diseases and attendant lessening of their lifespan (Joshua, 2017). The epidemiology of COVID-19 is linked to the beta corona virus (SARS-COV-2). This single stranded positive RNA virus begins its life in bats. However, pangolins have been identified as the most common intermediate hosts (Dietz et al., 2019). It is first transmitted from its host to humans and thereafter from human to human. This has become the main mechanism for the spread of COVID-19. Besides, there is also some prove that the virus may be acquired through contact with abiotic Built Environment (BE) surfaces. Built Environment (BE) refer to collection of artificial environments created by humans such as buildings, cars, roads, public transportation, and other created accommodations (Joshua, 2017). The most common route of exposure to this kind of air pollutants is by inhalation. However, direct assimilation of respiratory infections through the skin or food intake and water is also possible (Asibiojo, 2016). This discovery and conclusion indicate that this pandemic is tied to the environment.

The outbreak of this and previous plagues are the consequences of human dependence and neglect of the environment. The livelihood of man is inextricably connected to the environment particularly in terms of food, recreation and vocation. In Nigeria, people in the different community's source their food stuff and condiments from resources in their immediate surroundings. The coastal and forest dwellers in Southern Nigeria obtain most of their food from the surrounding water bodies and forest while the savannah peoples in the northern part of the country get theirs from the massive grassland. Livestock is relevant to humans through the provision of meat and meat products for consumption. They equally support the livelihood of the rural population from the sale or hire of animals and sale of the products (Joshua, 2017). They are a source of income to communities and nations.

The cause of such involvement and exploitation of the environment has almost left the natural environment bare. Habitats of living organisms have been destroyed and the biodiversity lost. Trading and consumption of some pets and animals are not only injurious to man but can cause severe ailments ((Amokaye, 2014). Many of these animals are consumed by man wantonly without any caution. Ebola was linked to bats in the Congo region and COVID-19 has allegedly been linked to Pangolins in Wuhan, Hubei province in Central China. The reckless consumption of organisms is very common in Nigeria. For example, on April 25, 2000, a dead whale was discovered on the shores of a beach in Okpama community in Brass Local Government Area, Bayelsa State in Nigeria. Despite warning by the National Agency for Food and Drug Administration and Control (NAFDAC) that the animal may have been killed by chemical poisoning and may contain some contaminants, the people from the community butchered the animal, shared and took home for consumption. At about the same time, some dead fishes were found littered along the shoreline around Ifoko on the fringe of the coast of Bonny and Andoni Local Government Areas of River State in the Niger Delta (*This Daylive.Com*, April 17, 2020). Despite warnings from the government, the residents feasted on the dead organisms.

It could therefore be safely asserted that the COVID-19 pandemic and other alike zoonotic diseases are consequences of the disconnection between the environment and human activities. The search for resources and food by man leads him to desire and try on whatever is found in his immediate environment. Such activities are carried out in complete disregard to municipal and traditional legal

structures and barriers. They expose man to the negative aspects of animal pathogens and this can lead to dire consequences as is the case with this pandemic. This supports the position of Ugbe and Ekpouido that, the wasteful nature of man combined with poor management strategies has caused significant alteration to the natural state of the environment and these has caused multiple hazards to mankind (Ugbe and Ekpouido, 2018).

It is pertinent to note that, the consequences of COVID-19 in Nigeria and in other climes are multi-sectorial. In the health sector, the pandemic has placed immense and unprecedented pressure on the country's wobbling healthcare system. It is important to note that over the years, the Nigerian government has under invested in healthcare delivery. The political and economic leaders in the country have no confidence in the existing healthcare system in the country but prefer to go for treatment in the Western and Asian cities in order to gain other economic and social benefits. By adopting medical tourism as a life style, national medical infrastructure is left in a dilapidated state without basic equipment and drugs. As a consequence of neglect and inadequate facilities, many Nigerian medical personnel have left for other countries where some of them are leaders and anchors of referenced healthcare delivery teams.

Following the outbreak of COVID-19, about 20 percent of identified cases require isolation and hospitalization (UNDP Report, 2020). However, the available facilities in the country were far below the number of persons requiring attention. Besides, the few available testing and treatment centres are not well equipped and this has generally led to the weak response to the challenges posed by the problem. The problem was compounded by the declaration of strike by the National Association of Resident Doctors (NARD) over issues bordering on inadequate provision of protective equipment, hazard allowance and other sundry welfare issues (aljazeera.com). Besides, many states authorities in Nigeria refused or neglected to prioritize the matter on grounds that the pandemic was unreal and their territory was unaffected. Cross River and Kogi States denied the existence of the pandemic in their territory for a long time before finally accepting its existence. In fact, the Nigeria Medical Association (NMA) Calabar Branch in Cross River State had to go on strike to compel the Government to declare the results of five cases sent for test (*The Vanguard, July 7, 2020*)

It is imperative to note that the pandemic affects different categories of people in a population in unequal ways (Richardson et al, 2020). It is equally important to state that despite the fact that social activities like marriages and burials were banned in many states in Nigeria at the onset of the pandemic, the people observed this regulation in total breach of the NCDC guidelines. This caused increased spread of the virus and other health hazards. Scientists, epidemiologists and other health advisors across the globe have advised on different preventive measures, among which are personal hygiene through regular hand washing, use of sanitizers, protective and disposable tools and social distancing to prevent the spread and contact of the virus. The use of plastic material as face shield is now the norm in many places.

Unfortunately, the menace of plastic pollutants is a universal global environmental problem. About a decade ago, Weisman had posited that about eighty percent (80%) of marine waste are made of plastic, a phenomenon that has increased in monumental proportion since the end of the Second World War (Weisman, 2007). In Nigeria the plastic menace is evident in its use as packing material for a variety of edible and non-edible products and the associated plastic litter. The need to use plastic face shield to contain COVID-19 compounds the problem in a country where there are few incineration facilities.

Socioeconomically, an issue that started as a public health crisis impacted the economy of the country adversely and thereby negatively caused social stress. COVID-19 caused a downward slide in the demand and price of crude oil, the mainstay of the Nigerian economy. The decline in oil export revenues led to a reduction in domestic oil production and adjustments in the national budgetary estimate (Bala-Gbogbo, 2020).

The impact of the pandemic has also manifested itself in the exchange rate of the national currency. It depreciates by over 1.0% in the formal market since mid-February 2020 and the depreciation of the Naira in the informal market is even by a larger margin (UNDP Report, 2020). Indeed, the outbreak

cause more disruptions in the financial services, labour and trade sectors. Following the pandemic, some financial institutions closed their branches and this resulted in loss of jobs for many non-staff (casual) workers. The hardship caused by the pandemic has also led to increased poaching of resources and materials available in the immediate surroundings for survival. This act is common in rural communities among daily paid workers and small-scale artisans whose vocation and earnings have been drastically affected by the lockdown occasioned by the pandemic. In the educational sector, the private school proprietors and staff suffered the worst. The closure of schools meant no income and no wages for those concerned, since parents and guardians will not pay fees when the school are not in session.

Another socioeconomic aspect of the COVID-19 outbreak is evidenced in the collapse or near absence of social welfare programmes in the country. Prior to the outbreak of the pandemic, Nigeria was bedevilled by many social and environmental problems. These include homelessness, mental health problems, armed robbery, unemployment, child abuse and abandonment, pollution, flooding, desertification, oil bunkering, gas flaring etc. These issues could be tackled by serious welfare and environmental policy and programme (Ozili, 2020). Regrettably, social welfare services in the country are generally underdeveloped, poorly funded and unavailable to the populace (Ahmed et al, 2017). There is no national or state social welfare programme that provides palliatives and support to persons, groups and communities in distress. The country does not have a Social Register or any statistics of the unemployed, out of work or vulnerable citizens. Besides, the government does not take environmental regulation seriously in terms of political commitment and deployment of resources. The effect of the neglect became evident at the outbreak of the COVID pandemic. The government and people had to scamp for available means and alternatives to manage the crisis. To an extent, this would not have been so, if the authorities had taken the issue of social services provision, environmental protection and management seriously.

The above is not to state that the environmental effects of COVID-19 exists only in the negatives. The green aspect of the pandemic can be gleaned from the falling rate of carbon emissions worldwide. Indeed, the approaches adopted to counter the pandemic although seemingly expensive in manifold dimensions, have resulted in a significant fall in the rate of environmental deterioration by pollution universally. The pandemic has reduced pollution as a result of reduced economic and social activities. Following the pandemic local and international traffic of persons and goods have reduced and some industries have either suspended production or reduced the volume of their activities ((Mohammed et al, 2020). Consequently, automobiles, locomotives and plants no longer operate on full scale and release large quantities of carbon monoxide and other fumes into the atmosphere. The result is better air quality for the world. The reduction in the volume of industrial activity has also caused a drop in water pollution in some parts of the world. This development accentuates the need to adopt measures towards a shift from fossil fuels, hydrocarbons and coal to better renewable energy forms in line with the measures proposed to combat climate change.

Generally, the current measures have allowed many countries to attain certain environmental objectives hitherto considered burdensome in view of the economic arrangements involved (Watts and Kommendo, 2020). Another benefit of the heavy restrictions on travel and other activities occasioned by the pandemic lies in the shift in values at work and other places (Rowell, 2020). Physical presence of workers in offices and shops has been drastically reduced. The new norm is that which allows more work from home and less movement of people (Etty *et al*, 2020). Another positive aspect of the virus is that it has incidentally generated some environmentally friendly benefits such as instilling less consumption patterns and reducing the wastage of foodstuffs. Ultimately, although there are some explicit environmental gains from the current plaque, it is not quite clear what the long-term outlook may be. The requirement of social distancing, for instance, may require more public buses and new and larger blocks/halls in public venues. It is doubtful whether the vast number of economic resources required in these areas shall be sustainably available.

### 3. Appraising the Responses to COVID-19 Through the Environmental Law Periscope

Environmental law consists of “the body of laws concerned with the protection of living things (including humans) from the harm that human activity may immediately or eventually, cause to them or their species either directly or to the media and the habitats on which they depend (Burnett-Hall, 1995). This set of laws focus on “protecting the natural resources of land, air, and water (the three environmental media) and the flora and fauna which inhabit them (Thorton and Beckwith, 1997). They generally provide the legal basis and stage for environmental protection and conservation and the sustainable use of resources in the environment.

There are a myriad of problems confronting the environment and environmentalists. These issues include biodiversity, conservation, climate change, desertification, flooding gas flaring, harmful and hazardous waste disposal, oil spills, pollution, soil fertility loss, etc. These problems to a large extent, are connected to individual and community attitudes and activities which might not be clearly associated with a specific collective event and which can also be affected by inertia in the making and execution of public policy (Paoli, 2020).

There are many laws, regulations, guidelines, conventions, and protocols covering different areas of environmental concern. However, the outbreak of COVID-19 presented a challenge unique, unimaginable, and uncovered by existing rules. The nature of the pandemic demanded swift thinking and measures by constituted authorities. In China, where the virus was first noticed, the government adopted some hard quarantine measures which could be regarded as crude, draconian, extreme, and of a kind that could only be tried in a centralized and totalitarian country (Kupferschmidt and Cohen, 2020). As the pandemic spread across the world to African countries, America, and Europe (in some cases like the U.S.A and Italy in proportions greater than that of China) some serious concerns were raised about the capacities of existing health facilities to cope with the rising tide of the associated illnesses and mortality rates. This led to the introduction of different measures to close the cities and towns and allow only essential services.

In Nigeria, the President proclaimed the COVID-19 Regulations 2020 (Issued on 30-03-2020) in exercise of the powers conferred on him by the Quarantine Act, Cap. Q2 LFN 2004. The highlights of the Regulations include the restriction of movement in parts of the country (pursuant to Section 8), suspension of flights by passenger aircraft except by the grant of special permits, and the making of provisions for relief materials/palliatives. The government also established the Presidential Task Force on COVID-19 to coordinate the response strategies on a national scale. Nigeria is a federation comprising 36 units (called states) and a Federal Capital Territory (FCT). In the respective states, commensurate steps were also taken to check, curb, and contain the spread of the virus and/or manage its impact. The Lagos State government for instance, issued the Infectious Diseases (Emergency Prevention) Regulations 2020 on March 27, 2020 pursuant to the Lagos State Health Law 2015 and the Quarantine Act. By the Regulations, the Governor was empowered to: Direct the screening and assessment of a potentially infections person (a person who is sick with COVID-19 or has had contact with an infected person/area within 14 days before he entered into the state) and the isolation of such person. The regulations in the states generally restrict movement within, into, or out of the states. Residents were ordered to stay at home and interstate borders were closed or closely monitored. These measures to a large extent align with those adopted by other countries universally. The maintenance of physical distance from others is now the global norm. For instance, in the province of Ontario, Canada, the government declared an emergency on COVID-19 under the Emergency Management and Civil Protection Act. One of the features of the regime was the closure of all parks in the province. The closure extended to all non-essential workplaces (Lombardi, 2020). This measure affected car camping, backcountry camping, roofed accommodations, and the use of public buildings. Also, all outdoor recreational facilities such as sports fields, playgrounds, and all outdoor recreational systems are affected by the physical distancing rules. The same steps were also applied in most parts of the U.S.A. and other countries. It is estimated that about 2.6 billion people (one-third of the 7.58 billion world population) are currently under some form of lockdown (Jankowicz, 2020).

The COVID-19 condition poses a lot of challenges that were not in the contemplation of any specific policy. However, the issues can be tackled by keying into the broad framework of existing enactments and deducing some outline. The Constitution provides the starting point. The Constitution of the Federal Republic of Nigeria 1999 (as amended) is the Supreme law of the land by Section 1 of the law. It contains some environmental stipulations. By Section 20 of the Constitution, 'the State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria'. The document in Section 14(2) (b) goes on to assign the responsibility of catering for the welfare of the people in the government. However, as lofty and sublime as the constitutional provision on environment may be, they are non-justifiable by their placemen in Chapter II of the Constitution, particularly, Section 6(6)(C) (Fagbohun, 2002). This can be gleaned from the wording of Section 14(2)(b) of the said document. Despite the limitation, the mere inclusion of this provision in the constitution imposes a moral burden on the government to seek other alternatives in these perilous times.

Aside from the constitution, there are a few other legislations that are relevant in the regulation of the environment to check outbreaks of disease and environmental degradation. Foremost in this regard is the National Environmental Standards and Regulations Enforcement Agency (NESREA) Act Cap N. 164 LFN 2010. This Act was enacted in 2007 in succession to the Federal Environmental Protection Agency (FEPA) Act. The Agency is empowered to enforce compliance with all laws, guidelines, policies, and standards on environmental matters. It is also its responsibility to ensure compliance with other related international instruments as contained in Section 7(a) (c) (L) and (m) of the NESREA Act.

Among the enforcement tools of the NESREA is the authority to conduct investigations to ascertain the source and nature of the degradation, create mobile courts to deal expeditiously, with such violations and advise the government on these matters, pursuant to Section 8(g) (f) and (k) of the NESREA Act. It facilitates and enhance and well-coordinated programme to contain the emergence of environmentally induced calamities.

The Environmental Impact Assessment Act (EIA) Cap E 12 LFN 2004 is another important legislation. Section 2(1) provides that:

The public or private sector of the economy shall not undertake, embark or authorize project or activities without prior considerations, at an early stage, of their environmental compliance. Where the extent, nature or location of a proposed project or activity is such that is like significantly to affect the environment, its environmental impact assessment shall be undertaken...'

The objective of the EIA is to empower the government through the National Environmental Standards and Regulations Enforcement Agency (NESREA) to properly assess the likely effects of the intended project on the environment and alternative courses (Akintayo and Akinbola, 2012).

Another important national legislation is the Endangered Species (Control of International Trade and Traffic) Act Cap E9 LFN 2010. This Act is the Nigerian version of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). The Act provides for the conservation and management of Wildlife in Nigeria and the protection of some endangered species. It prohibits the hunting or capture of or trade in certain animals (living or dead). A contravention of the provisions of the Act is a criminal offence attracting pecuniary sanctions although whether the fines attached to the infringements can still be effective in deterring a potential trafficker is a different matter. The fines range from N500.00-N1000.00 (Okorodudu-Fubara, 1998). It is important to note that this legislation is not unique to Nigeria alone. In the UK, there is the Wildlife and Countryside Act 1991 which, give effect to the Birds Directive of the European Union (EU). The Act generally prohibits activities which endanger certain species of plants, birds and animals, such as killing, taking, selling or attempting to sell (Beckwith, 2000). The provisions of the Acts ensure that wildlife is not dealt with in a manner that endanger their wellbeing but also to ascertain that human health will not be adversely affected in the event of any careless contact or consumption.

Nigeria has some parks where some games are preserved against extinction. Some national parks in Nigeria are Yangari Game Reserve, Bauchi, Borgu Game Reserve, Cross River National Park, Upper

Ogun, Gulli-gilli, Koinji Lake National Park, Mambilla, Obudu Game Reserve etc. The National Park Service Act Cap N 65 LFN 2010 was enacted to oversee the parks. The central objective of the Act is the conservation of wild plants and animals and biological diversity. All forms of illegal poaching and trading in animals in the vicinity of the park are prohibited. Section 31(1) of the Act makes it an offence to and or abet or procure to hunt, possess, remove, and capture, destroy, collect or do anything which may harm or destroy the fauna or flora or wild animals in the park. The fines attached to any breaches here are reasonable although they could still be raised to have some meaningful bite.

Issues of environmental safety and wellbeing of persons are also very germane to authorities in the states of Nigeria. In this regard, some states have enacted their versions of Environmental Protection Law and Wild Animal Protection Law Wild Animal Protection Law, Cap W1, Laws of Lagos State, 2003; Environmental Protection Agency Law, Cap. E5, Laws of Cross River State, 2004. These laws complement the national instruments in the protection of the environment and preservation of wild animals, birds and fishes in the respective state territories.

In the wake of the COVID-19 pandemic and in a bid to curb the effects of the deadly disease, a bill titled: Control of Infectious Diseases Bill was sponsored by some members of the House of Representatives led by the then Speaker Rt. Hon. Femi Gbajabiamila in April, 2020. It sought to repeal the Quarantine Act of 1926 which is considered to be obsolete. Although the bill sailed through the first and second reading in the lower house, it was stiffly opposed by some interests group and the Nigerian Governors Forum. The bill was opposed on the ground that it vested much powers on the National Centre for Disease Control (NCDC), tampered with the powers of the states and Local Governments and may likely infringe on the fundamental rights of citizens. The bill provides for a penalty of between N200, 000.00 and N500, 000.00 and jail terms for violators instead of the N500.00 fine contained in the Quarantine Act (Olurounbi, 2020). If passed into law, it will go a long way to contain COVID-19 and allied pandemics as it will strongly deter future violators and people whose conduct are likely to lead to the spread of such infections.

In terms of administration, the Federal Ministry of Environment established in 1999 has the mandate to execute the environmental objectives of the country in terms of environmental conservation, utilization, degradation and regeneration (Fagbohun and Nwadukwe, 2015). In the current situation, the ministry will necessarily liaise with other units and agencies of government such as agriculture, education, health and science and technology etc.

Apart from the above stated municipal enactments, there are some treaties having some connection with infectious diseases like COVID-19 from the zoonotic perspective and periscope of environmental law. These instruments are applicable in Nigeria upon their ratification by the National Assembly. This is in consonance with Section 12(1) of the 1999 Constitution. Among these are the Convention of Biological Diversity, and its protocols (The Cartagena Protocol on Biosafety to the Convention on Biological Diversity of 29 January 2000 (2226 UNTS 208; and the Nagoya Protocol on Access and Benefit Sharing to the Convention on Biological Diversity (the Nagoya Protocol) of 29 October 2010); the Convention on the Conservation of Migratory Species of Wild Animals (the Bonn Convention), adopted on 23 June 1979 aims to conserve terrestrial, aquatic and avian migratory species their habitats and routes (Olawuyi, 2015); and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

At the regional level, there is the 2003 Revised African Nature Convention (though not yet in force). The purport of the Convention is to enhance environmental protection, to foster conservation of nature and natural resources and to harmonize and coordinate related policies (Sands and Peel, 2012). Article V in Annex 1 and Art X (1) of the Revised African Nature Convention provides for Special protection for threatened species and habitats. This objective is not just to protect and prevent their extinction but also to ensure that they are not used carelessly by humans to their detriment. Consequently, where a specie is found in a particular area of a state which is a party to the convention, the party is obliged to protect and preserve them. The Convention, in Art. XI (1) also imposes a duty on parties to regulate trade in and the transport of plants, animals and microorganisms to ensure that they conform to



domestic and international obligations pertaining to trade in those species. All of these tasks are expected to be integrated into national and state plans.

Nigeria has acceded to these conventions and the National Assembly have also acted them. A diligent adherence and enforcement of their stipulations will lead to better control and use of biological resources and wildlife and curb the associated health hazards. In this connection, Amokaye has advocated the adoption of genuine national strategies to comprehensively confront and address any threats (Amokaye, 2014).

#### 4. Enforcement Dynamics

The increase in the outbreak of Zoonotic diseases (of which COVID-19 is a kind) demands that extra and proactive measures be adopted in the administration and enforcement of environmental protection instruments. As noted herein, there are penal provisions in the related legislations against infringements although the sanctions stipulated are too paltry to punitively check the activities.

It is apt to note that in Nigeria, the judiciary is a dynamic institution that can always breathe life into the law in the process of exercising its function (Ogbodo, 2017). Where the need arises; the courts will not hesitate to expound the letter and spirit of the law, whether such arises from the rules of common law, statutes or the treaties. In the sphere of environmental jurisprudence, the ground for this dynamism was laid in the case of *Adeniran v Interland Transport Ltd (1991) 9 NWLR (Pt. 214) 155*, wherein the right of a person to take steps to protect himself from harm or threat of harm where the public authority fails to initiate action was affirmed.

At the outbreak of the corona virus pandemic, the state acted proactively by ordering some restrictions/cessation of movement in parts of the country (See Regulation 1, COVID-19 Regulations, 2019). This was later turned into complete lockdown of the interstate borders and restriction of international travel. However, the complicity of the security personnel responsible for enforcement of the regulations at the border posts defeated the objectives of the lockdown. The same also applies to the use and disposal of face masks, sanitizers and other Personal Protective Equipment (PPEs). As for rules concerning social distancing and size of gatherings, some senior officials of state convened and attended political and social meetings and events in these times total breach of the rules. Despite the COVID-19 Regulations on social distancing, the political parties are gathering for electioneering campaigns in Edo and Ondo States where thousands of people including officials from the Presidency, Governors, Legislators and Ministers are in attendance

The unprecedented nature of the challenges of this period require that all people and institutions should operate in compliance with extant and approved environmental guidelines. Permits, licenses and approvals must be diligently sought and obtained and statutory reporting standards followed. Where the circumstances are clearly unfavourable some procedures may be suspended or waived but the regulators should not be coerced by COVID-19 related factors to grant unwarranted exemptions.

Under the COVID-19 Regulations, the ameliorative provisions couched as directives did not contemplate the environmental aspects of the disease. The authorities overlooked or glossed over the salient state of environmental abuse whereas the problematic virus originated from the vicinage of the index case in China. The COVID-19 Regulations should have assigned specific roles to environmental officers in the Ministries of Environment and Health. Undoubtedly, such delineation of responsibilities would have focused on some peculiar environmental issues which could ameliorate the conditions generating the virus e.g decontamination of the surroundings, poaching for consumables, handling infected corpse/burials, disposal of PPEs etc.

The powers of the federating units (states) in Nigeria to legislate and apply environmental regulators has become manifest in the face of this pandemic. In some instances, some state authorities took extreme steps to stem the spread of the virus (in Rivers State in South-South Nigeria, the government demolished private properties to the hardship and discomfort of their owners and other citizens who had to cope with the loss dwellings/income generating properties and the noise and littering of the area with the debris) while in other cases state officials were complicit in handling of

palliatives. All of these attitudes compounded the problem and made it difficult to coordinate the response and enforcement programmes.

## 5. Conclusions/Recommendations

The COVID-19 outbreak caught all persons and authorities throughout the universe unawares. It has led to the transmutation of lifestyle in all dimensions. Due to its crippling effects, effort have been intensified at different levels to mortify the problem. In this work, we have tied the emergence of the causative to environmental factors and stressed the need to address the challenge from that angle using extant environmental laws and regulations.

Since 1988, Nigeria has taken positive steps to check environmental degradation. Accordingly, there are many legal instruments addressing different aspects of environmental management which could be adapted to check Zoonotic induced illnesses like COVID-19. Some of these have been highlighted in this work.

As a post COVID-19 strategy, we recommend that the people and authorities must positively address the inadequacies in the environmental regulations in order to put our neighbourhood in a sustainable state for the wellbeing of all. This of necessity will involve adherence to laid down policies and the will to enforce the laws. It may also require some tinkering with existing legislations for them to give the desired results. It is in this light that it is suggested that the Control of Infectious Diseases Bill which was recently killed in the House of Representatives may be revisited and reintroduced in the near future taking the observations of the stakeholders into consideration.

Also as it is a fact that humans spend a larger part of their time in Built Environments (BE) it is essential that future action should focus on understanding the potential transmission dynamics of the virus within the BE ecosystem. Attention and efforts should be directed at inventing safer BEs or instituting mechanisms that will impede and mitigate the spread and transmission of COVID-19 (or any other epidemic of its kind) in BEs. Such effort may include the putting up of structures that encourage physical distancing, periodic fumigation of public facilities, provision of sanitizers/PPEs, ensuring the availability of public water supply etc. In addition, since COVID-19 has tacitly brought about a new working attitude from home and less travel, this should be encouraged by mass training of people in new technologies. This will advance and assure the virtual conduct of human activities as much as possible and reduce the physical contact of persons and spread of infectious diseases.

Undoubtedly, COVID-19 has occasioned many reversals in different dimensions. The new era will require more investments in environmental restoration through technologies and the education and re-orientation of citizens towards the sustainable exploitation and use of environmental resources. Such effort will reduce or curb the outbreak of diseases and afflictions of this kind and other similar ones in future.

## Copyright:

© 2024 by the authors. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## References

- [1] Ohia, C, Bakarey, S.A and Ahmad, T (2020), 'COVID-19 and Nigeria: Putting the Realities in Context', International Journal of Infectious Diseases, 95 279-281. Available at <https://doi.org/10.1016/j.ijid.2020.04.062>. Accessed 14/06/2024.
- [2] Barrrenco, R. and Ventura, F. (2020), 'COVID-19 and Infection in Health Care Workers: An Emerging Problem', Medico-Legal Journal, Vol. 88(2) 65-66. <https://journals.sagepub.com>, accessed on 19/8/2024.
- [3] Samuel, J. S., 'COVID-19 Economic Crises: When Foreign Loan is Detrimental to Local Economy', The Nation, June 10, 2020, 14.
- [4] Alagbe, J. 'Africa Records One Million Cases in 6 Months', Sunday Punch, August 16, 2020, 5.

- [5] Asubiojo, I. O. (2016), "Pollution Sources in the Nigerian Environment and their Health Implications", *Ife Journal of Science*, Vol. 18, No. 4, 977.
- [6] Amokaye, G. O. (2014), *Environmental Law and Practice in Nigeria*, Lagos, MIJ Professional Publishers, 2014, 502.
- [7] Platt, A. E. *Infecting Ourselves: How Environmental and Social Disruptions Trigger Diseases*, *World Watch Paper* No. 129, April 1996, 31-32;
- [8] Adeyemi, A., "The US Blame-Game against China Increasing the Invaluable Cost of COVID-19", *The Guardian*, June 2, 2020, 11
- [9] Damond, J. (1997), *Guns, Germs and Steel: The Fates of Human Societies*, 1997.
- [10] Ramadan, N. and H. Shaib, H. (2019), "Middle East Respiratory Syndrome Coronavirus (MERS-COV): A Review, *Germs*, 9, 35-42. Doi: 10.18683/germs.2019.1155. Accessed 13/07/2024.
- [11] Ford, J., *The Role of Trypanosomosis in African Ecology: A Study of the Tsetse Fly Problem*, Oxford, Clarendon Press, 1971
- [12] Bourn, D.R et al. (2001), *Environmental Change and Autonomous Control of Tsetse and Trypanosomosis in Sub-Saharan Africa*, Oxford Research Group, 2001
- [13] Dietz, L. et al., (2020), "2019 Novel Coronavirus (COVID-19) Pandemic: Built Environment Considerations to Reduce Transmission" *Msystems*, An Open Access Journal of the American Society for Microbiology, *Msystems*. asm.org. Accessed 12/07/2024.
- [14] Asibiojo, I.O, (2016), "Pollution Sources in the Nigerian Environment and the Health Implications", *Ife Journal of Science*, vol. 18, no. 4, 973-980.
- [15] Ugbe, R. O., and Ekpoudo, A., "Legal Approach to Causes and Consequences of Oil Spillage in Nigeria", *The Nigerian Law Journal*, vol. 20, No. 1, 20187, 148.
- [16] Richardson, S., et al., "Presenting Characteristics, Comorbidities, and outcomes among 5700 Patients Hospitalized with COVID-19 in the New York City Area", (2020), *JAMA* 1. Available at <https://www.ncbi.nlm.nih.gov/pubmed?Term=32320003>. Accessed 18/07/2024
- [17] Weisman, A., *The World without Us*, Thomas Dunne Books, 2007, 4
- [18] Bala-Gbogbo, E., "Nigeria Plans Budget Review after COVID-19 Hits Oil Prices", <https://www.bloomberg.com>. Accessed June 11, 2024.
- [19] Ozili, P.K, "COVID-19 Pandemic and Economic Crisis: The Nigerian Experience and Structural Causes" *SSRN Electronic Journal*, August 2020, DOI. 10.2139/ssrn.3567419, Accessed 08/06/2024.
- [20] Ahmed H.G, Alhassan, S.M, and F. D. Alshammaric (2017), "Social Welfare Scheme: A Neglected Component of Public Health Care Services in Nigeria", *MOJ Public Health* 5(3), 101-104.
- [21] Mohammed, S., Long, X., COVID-19 Pandemic and Environmental: A blessing in disguise < [www.sciencedirect.com](http://www.sciencedirect.com)>accessed11/8/202024.
- [22] Watts, J., and Kommendo, N., 'Coronavirus Pandemic Leading to Huge Drop in Air Pollution,' *The Guardian*, 23 Mar. 2020, available at <https://www.theguardian.com/environment/2020/Mar/23/Coronavirus-pandemic-leading-to-huge-drop-in-air-pollution>. Accessed 16/May/2024
- [23] Rowell, A., "COVID-19 and Environmental Law", 22 Apr. 2020. Available at SSRN: <https://ssrn.com/abstract/3582879>. Accessed 16/May/2024.
- [24] Etty, T.F.M. et al., "Transnational Environmental Law in a Transformed Environment", Cambridge University Press, 2020, Available at <https://doi.org/10.1017/S2047102520000175>. Accessed 18/07/2024
- [25] Burnett-Hall, R., *Environmental Law* (London, Sweet and Maxwell, 1995), vii.
- [26] Thorton, J. and Beckwith, S., *Environmental Law* (London Sweet and Maxwell, 1997), 2.
- [27] Amokaye. G. O. *Environmental Law and Practice in Nigeria*, (Lagos, University of Lagos Press, 2004), 3.
- [28] Paoli, L.S.D, "COVID-19 Symposium: The COVID-19 Pandemic and the Limits of International Environmental Law". [Opiniojuris.org/2024/03/30/COVID-19-Symposium-the-COVID-19-Pandemic-and-the-Limits-of-International-environmental-law/](http://Opiniojuris.org/2024/03/30/COVID-19-Symposium-the-COVID-19-Pandemic-and-the-Limits-of-International-environmental-law/)accessed 19/05/2024.
- [29] Kupferschmidt, K.,and J. Cohen, J. (2020), "Can China's COVID-19 Strategy Work Elsewhere 367 (6482), *Science*, 1061-2; L. Kuo, 'Liberation" as Wuhan's Corona Virus Lockdown Ends after 76days", *The Guardian*, 7 April, 2024, available at [https://www.theguardian.com/world/2020/apr/07/liberation-as Wuhan's-Corona-Virus-lockdown-ends-after-76 days](https://www.theguardian.com/world/2020/apr/07/liberation-as-Wuhan's-Corona-Virus-lockdown-ends-after-76-days). Accessed 19/07/2024
- [30] Lombardi, P., Impact of COVID-19 on Environmental Law (13/4/2020). Available at [www.siskinds.com](http://www.siskinds.com) Accessed 17/07/2024.
- [31] Jankowicz, M., 'More People Are Now in Lockdown than Were Alive During World War II', *Business Insider*, 25-Mar-2020. Available at <https://www.businessinsider.com/more-people-are-now-in-lockdown-than-were-alive-during-world-warII/2020-3>. Accessed 19/08/2024
- [32] Thornton, J., and Beckwith, S. (2004), *Environmental Law*, London Sweet and Maxwell, 2004, 249-251.
- [33] Igomu, T., "Infectious Diseases Bill is Undemocratic, Conflicts with Constitution-Govs Forum"< <https://healthwisepunching.com>>Accessed 11/05/2024
- [34] Olurounbi, R., Coronavirus: Nigeria's Proposed COVID-19 Law tears the Country Apart' <<https://www.theafricareport.com>>accessed 11/08/2024.

- [35] Fagbohun, A.O., and Nwadukwe, A., *Law and Policy in Nigeria: The Challenge of Biodiversity*, Lagos, Environmental Law Research Institute, 2015, 73.
- [36] Olawuyi, D.S., *The Principles of Nigerian Environmental Law*, Ado Ekiti, Afe Babalola University Press, 2015, 301
- [37] Philippe Sands, P., and Peel, J., *Principles of International Environmental Law*, Third ed; Cambridge University Press, 2012, 481.
- [38] Ogbodo, S.G “Environmental Protection in Nigeria: Two Decades after the Koko Incident”, *Annual Survey of International and Comparative Law*, vol. 15, Issue 1, Article 2, Available at [Http://Digitalcommons.Law.Ggu.Edu.Annlsurvey](http://Digitalcommons.Law.Ggu.Edu.Annlsurvey). Accessed 20/06/2024
- [39] Chianu, E., “The Horse and Ass Yorked: Legal Principles to Aid the Weak in a World of Unequals”, *Inaugural Lecture Series 91*, Benin City, University of Benin, 11.