



ENVIRONMENTAL POLLUTION AND OIL SPILLAGE IN RIVERS STATE: AN INFRINGEMENT ON HUMAN RIGHTS

By

Nwamanah, Faith Uloakwu¹

Abstract

Environmental degradation and destruction brought on by pollution prevents people from taking advantage of resources. Environmental pollution is a problem that affects people everywhere. Its effects on human existence and welfare cannot be overstated. It could be caused by human actions or the aftereffects of natural catastrophes such as hurricanes, tornadoes, earthquakes, storms, and volcanic eruptions. The exercise and enjoyment of fundamental human rights depends on the environment. Therefore, environmental degradation and oil spills in Rivers State have an impact on both human rights and the ecosystem. This work examines environmental pollution and oil spillage in Rivers State as an infringement to human rights. It identifies and analyzes the different forms of environmental pollution in Rivers State, and assesses the degree to which environmental pollution and oil spills violate the human rights of the people of the State in accordance with the provisions of the Constitution of the Federal Republic of Nigeria 1999 (as amended) (CFRN). It would appear by a strict interpretation of the CFRN that environmental pollution does not constitute a violation of the rights of the people of Rivers State, despite the fact that environmental pollution and oil spillage have undeniable significant environmental effects. This paper found that careless and inadequate disposal of waste, oil spillage, gas flaring, and soot, are types of environmental pollution that violate the right to life guaranteed in the CFRN 1999 (as amended), as well as other human rights of the people of Rivers State.

Keywords: *Environmental degradation, oil spillage, human rights*

1.0 Introduction

By virtue of being citizens of Nigeria, the people of Rivers State have an unquestionable right to the human rights protected by the Nigerian Constitution. Not only are their rights guaranteed and protected under the Nigerian Constitution, they also enjoy robust rights provided by international human rights instruments that Nigeria has ratified. This work will discuss several forms of environmental pollution that are common in Rivers State and how they impact the rights that the residents of the state are guaranteed by the Nigerian Constitution and international human rights treaties.

2.0 Forms of Environmental Pollution in Rivers State

There are several forms of environmental pollution taking place in Rivers State of Nigeria. They include indiscriminate and inadequate disposal of wastes, oil spillage, gas flaring, and soot among others. All these are examined with particular reference to the human rights implications.

¹ Nwamanah, Faith Uloakwu, is a Legal Practitioner and an LLM Research Candidate at the Faculty of Law, Rivers State University, Port Harcourt. She can be reached at nwamanahfaith@gmail.com and 08037484112.

2.1 Indiscriminate and Inadequate Disposal of Wastes

Waste is made up of things that have no use or function; are considered an annoyance or a nuisance, and must be disposed of or thrown away by the trash producer.² Waste can be divided into two categories: solid waste/refuse, and sewage. Solid waste are products of both nature and human activity, and contains things like garbage, sweepings, cleanings, trash, rubbish, litter, industrial solid wastes or household solid wastes such as organic wastes or residues of animals, meat, fruit, vegetables, cereals, or seafood; animal excreta or animal carcasses. garbage including all wood, leaves, vegetation, tree trimmings, dead trees and shrubs, branches, sawdust, shavings, grass, paper goods, straw, rags, and garments; discarded materials made up of dirt, clay, sand, earth, gravel, fill, stones, bricks, plaster, glass, glassware, ashes, shells, metal, cans, containers, tires, garbage, auto parts, and other objects that have been collected as waste after the construction, demolition, repair, or alteration of structures or buildings; waste debris.³

The rise in careless garbage dumping in Nigeria has grown to be a major concern, and Rivers State is not exempted from it. There are several methods for getting rid of waste. Pulverization, pyrolysis, open dumping, burning, sanitary landfill, composting, hog feeding, incineration, and dumping in the sea, are all acceptable disposal methods. All of these techniques exist, but the primary ones being used in Rivers State are the open dumping, burning, and sanitary landfill techniques,⁴ which together constitute a source of contamination of the environment.

A landfill is an area of land that has been carefully planned and marked out, where waste materials are dumped, compacted, and buried in layers of soil, either in a valley or an excavation of low-value land, with the correct leachate and landfill gas (primarily methane and carbon dioxide) control.⁵ The creation of "sanitary" landfill began around the 1950s when it was decided that the daily deposited wastes needed to be put in order to avoid odors and access by vermin, mice, flies, birds, and pigs. Thus, waste was then covered with a layer of soil. It was not until much later that it was realized that the wastes in such sanitary landfills had the potential to contaminate groundwater and that the gas produced in the landfill posed a risk of off-site explosions as well as environmental issues that could affect public health.⁶ Some of the active landfills in Port Harcourt, Rivers State, fall short of regulations (they lack lining, leachate pipes, landfill gas pipes, daily top covers, and landfill supervision), which puts the public's health and lives in danger.⁷

It is unacceptable how carelessly and ineffectively rubbish is being disposed of in Rivers State. In the capital of Rivers State, Port Harcourt, trash generation was predicted to reach 210,934 tonnes annually

² I Tamunoberetonari and Others, 'The impacts on public health and the environment of Port Harcourt Municipality's solid waste management strategy in Rivers State, Nigeria' [2012] (4) (12) *Asian Journal of Science and Technology*;42.

³ Tamunoberetonari and Others (n1).

⁴ *Ibid.*

⁵ *Ibid.*, 49.

⁶ Tamunoberetonari and Others (n2) 49.

⁷ *Ibid.*

in 1982, 304,477 tonnes annually in 1990, and 352,853 tonnes annually in 2000.⁸ A study found that Port Harcourt, Rivers State produces a total of 1,505,106kg of solid trash every day.⁹ Another estimate put the amount of solid waste production in Port Harcourt, Rivers State, at 1.25 kg per person per day.¹⁰

This is shown by the mountains of carelessly dumped trash that are left in plain sight, as well as the illegal dumps that have been set up along major thoroughfares and on street corners.¹¹ Household waste is poured into gutters and dumped anywhere, converting drains and obstructing both drainage and vehicular traffic.¹² According to a poll by News Agency of Nigeria, most areas of the state capital are being used by locals to indiscriminately dump trash, which is then not picked up by the government.¹³ Burning is another way to get rid of trash. A quick and inexpensive approach to get rid of rubbish is to burn it; this is done by certain homeowners, farmers, and landowners. Some landfills are also routinely set on fire to get rid of the majority of waste at the sites.¹⁴ In the State's riverine regions, waste is discharged into rivers, lakes, and other bodies of water.¹⁵

In the Rivers State, household garbage, municipal wastes, hazardous wastes, etc. are all disposed of in the same dump without being separated. The quantities of contaminants, including heavy metals, volatile organic compounds, polychlorinated biphenyls (PCBs), and radioactive elements, among others, in the nearby soils, water, and air, increase when hazardous and municipal wastes are placed side by side without enough separation and processing.¹⁶ As these wastes build up, the ecology is damaged, and the dumping sites serve as havens for rats, flies, and other disease-carrying vectors,¹⁷ endangering both people and the environment.

⁸ Nigerian Environment Study/Action Team (NEST), 'Nigeria's Threatened Environment: A National Profile, NEST, Ibadan' in S O Abah and E I Ohimain, 'A Case Study of Eneka, Nigeria's Dumpsite Rehabilitation Potential Using an Integrated Risk-Based Approach' [2010] 8 (4) *World Applied Sciences Journal*;273 <<https://pdfs.semanticscholar.org/c92b/0c96276ef61b4f8ac1824e637ecaba273af0.pdf>> accessed 25 February 2018.

⁹ A H Igoni and Others, 'Municipal Solid-waste in Port Harcourt, Nigeria' [2007] (84) *Appl. Energy*;664; R B Timiebi and A Enwin, 'The State of Solid Waste Management in Port Harcourt City, Nigeria' [2017] 5 (4) *American Journal of Civil Engineering and Architecture*;4 <<http://pubs.sciepub.com/ajcea/5/4/4>> accessed 25 February 2018.

¹⁰ J M Ayotamuno and A E Gobo, 'Management of Environmental Quality and Obstacles in Municipal Solid Waste Management in Port Harcourt, Nigeria' in S O Abah and E I Ohimain, 'Assessment of Dumpsite Rehabilitation Potential Using the Integrated Risk Based Approach: A Case Study of Eneka, Nigeria' [2010] 8 (4) *World Applied Sciences Journal*;73 <<https://pdfs.semanticscholar.org/c92b/0c96276ef61b4f8ac1824e637ecaba273af0.pdf>> accessed 25 February 2018.

¹¹ S O Abah and E I Ohimain, 'A Case Study of Eneka, Nigeria's Dumpsite Rehabilitation Potential Using an Integrated Risk-Based Approach' [2010] 8 (4) *World Applied Sciences Journal*;73 <<https://pdfs.semanticscholar.org/c92b/0c96276ef61b4f8ac1824e637ecaba273af0.pdf>> accessed 25 February 2018.

¹² A S Chinwe, 'Environmental Pollution's Effects in Imo State: An Analysis of the Okigwe Local Government Area' [2013] (3) (5) *Journal of Educational and Social Research*;79.

¹³ Editorial, 'Residents Want Better Waste Management in Rivers State' *The News* (Port Harcourt, 26 January 2017) <thenewsigeria.com.ng/2017/01/residents-want-better-waste-management-in-rivers-state/> accessed 21 February 2018.

¹⁴ T R Binafeigha and A Enwin, 'The Situation with Solid Waste Management in Nigeria's Port Harcourt City' [2017] (5) (4) *American Journal of Civil Engineering and Architecture*; 160.

¹⁵ *Ibid.*

¹⁶ D R Rue and J B L Howell, *Hazardous Waste and Human Health* (Oxford: 1st edn, Oxford University Press 1991) 29; Tamunoberetonari and Others (n2) 42.

¹⁷ Chinwe (n12).

Ground water is impacted when it rains or when water seeps through trash. Geologically, Port Harcourt, the state's capital, has a shallow distribution of aquifers and groundwater bodies (between 20 and 30 meters in depth), which leaves the area open to contaminating or polluting substances that are carried down by percolating water.¹⁸ In comparison to the original state/properties, preliminary results of the microbiological examination of the groundwater and surface runoff indicate a greater population of microorganisms in the surface and groundwater within and surrounding dumpsites.¹⁹ Studies have also shown that the leachates from trash dumps have caused the soil at and around waste dump sites to become hazardous.²⁰

Burning of wastes also pollutes the land, the air, and the water. Burning solid trash releases particulate matter, some of which contain hazardous heavy metals and organic chemicals linked to cancer. A further effect is the formation of dioxins, which enter the food chain when they are applied to plants that are then eaten by humans, animals, and then humans. Over time, ingestion of these substances results in health risks due to bioaccumulation.²¹ The immunotoxicity, neurodevelopmental impacts, changes to steroid hormones, thyroid, and reproductive abnormalities, are all additional effects of these dioxins.²² Hexachlorobenzene (HCB), highly dangerous compounds, which are included on numerous management and control lists,²³ are also formed when municipal solid trash is burned. Exposure to HCB is linked to liver illness and can result in scarring on the hands and face, enlargement of the thyroid and lymph nodes, injury to the nerves, and malfunction of the central nervous system.²⁴

Household wastes are primarily disposed of by the roadside in Port Harcourt, Rivers State, where they are frequently combined with cartons, papers, animal waste, food, and other trash related to the home.²⁵ Similarly, it is common to observe overflowing storage facilities and uncontained garbage deposits in landfills, which practice permits waste to spread outside and around the facilities and landfills. In addition to negatively affecting the physical beauty of the environment, this indiscriminate roadside garbage dumping, and the spreading of landfill and waste from storage facilities onto access roads, prevents foot and vehicle traffic in these locations from moving freely. Due to air contamination/pollution brought on by the release of untapped landfill gases like methane, sulphides,

¹⁸ Tamunoberetonari and Others (n2) 42.

¹⁹ Abah and Ohimain (n11) 436.

²⁰ G O Anoliefo and Others, 'Establishment, Failure, and Phytotoxicity Assessment of Soils from the Abandoned Site in the Small-Scale Industrial Village in Benin City, Nigeria' [2001] (131) (1) *Water, Air and Soil Pollution*;169; Abah and Ohimain (n12) 437.

²¹ Binafeigha and A Enwin (n14) 161.

²² E Abad and Others, 'Dioxin Mass Balance in a Municipal Waste Incinerator' [2000] 40 (9-11) *Chemosphere*;1143 <https://www.researchgate.net/publication/12577340_Dioxin_mass_balance_in_a_municipal_waste_incinerator> accessed 21 February 2018; Binafeigha and A Enwin (n14) 162.

²³ K D Courtney, 'Hexachlorobenzene (HCB): A Review' [1979];15 <<http://www.sciencedirect.com/science/article/pii/001393517990001X>> accessed 21 February 2018; Binafeigha and A Enwin (n14) 166.

²⁴ C M McGinley and Others, 'Odor Basics: Understanding and Using Odor Testing' [2000] <<http://www.fivesenses.com/Documents/Library/33%20%20Odor%20Basics.pdf>> accessed 12 July 2017.

²⁵ L Baadom and Others, 'Environmental Issues in the Urban Fringe of Port Harcourt, Rivers State, Nigeria' [2015] 1 (1) *International Academic Journal of Educational Research* <www.africaresearchcorps.com/images/garc_journals/garc_journals_vol1_iss_1/GARC-jer-1-1-4-Baadom-Aselemi-and-Kpalap.pdf> accessed 12 July 2017.

carbon dioxide, nitrogen, volatile organic compounds, and others into the atmosphere, the air quality surrounding dump sites and landfills is also decreased.²⁶

2.2 Oil Spillage

There have been many oil spills in Rivers State since crude oil was discovered.²⁷ It has posed a severe danger to the ecology of oil-producing areas, particularly the Niger Delta in Nigeria, one of the planet's top 10 marine and wetland habitats. The Niger Delta region's environment is among the five worst in the world due to unsustainable oil drilling activity, despite the fact that the oil industry has greatly aided the wealth and development of the nation.²⁸

The biggest wetland in Africa, the Niger Delta, is home to a wide range of species, including mangrove swamps, freshwater swamps, and rain forests.²⁹ Due to environmental damage brought on by oil spills, the area is characterized by polluted streams and rivers, devastated trees, and lost wildlife, and it affects the manner of life and nourishment of indigenous people, whose survival depends on ecological services.³⁰ Oil drilling activities are thought to have damaged 5–10% of Nigeria's mangrove ecology. Mangrove forests are non-resistant and very vulnerable to oil.³¹ Due to oil drilling efforts, the Niger Delta rainforest, which once covered around 7,400 square kilometers of land, has also completely disappeared.³²

There are four categories of oil spills, and they include minor spill (occurs when the volume of spilled oil is under 25 barrels in inland water, under 250 barrels on land, offshore, or in coastal water, and it poses no threat to the public's health or welfare); medium spill, which occurs when there is an oil leak of 250 barrels or less in interior waters or 250 to 2500 barrels in offshore and coastal areas; major spills (whenever more than 250 barrels of oil are spilled into inland water from offshore or coastal waters); and catastrophic spills (any uncontrollable well blowout, pipeline break, or storage tank collapse that puts the public's health and welfare at grave danger).³³

²⁶ Tamunoberetonari and Others (n2) 44.

²⁷ K A Ayuba, 'Environmental Effects of Nigeria's Niger Delta's Oil Exploitation and Exploration' [2012] (12) (3) *Global Journal of Science Frontier Research Environment & Earth Sciences*;19.

²⁸ A AKadafa, 'Research on Civil and Environmental Issues Relating to Oil Exploration and Spills in the Nigerian Niger Delta [2012] (2) (3) *Civil and Environmental Research*;38.

²⁹ Ayuba (n27) 19.

³⁰ *Ibid.*

³¹ K N Agunobi and Others, 'An analysis of oil spill patterns and their effects on the environment in Nigeria's Rivers State's Etche Local Government Area' [2014] (4) (16) *Journal of Natural Sciences Research*;124.

³² *Ibid.*

³³ R E Egbe and D Thompson, 'Environmental Challenges of Oil Spillage for Families in Oil Producing Communities of the Niger Delta Region' [2010] (13) *JHER*;24.

In the Niger Delta, in Oloibiri in Bayelsa State, Shell British Petroleum (now Royal Dutch Shell) made the discovery of crude oil in 1956,³⁴ and since then, oil prospecting has continued. As at 2006, eleven (11) oil companies were running 155 oil fields and 1,481 wells in Nigeria's Niger Delta.³⁵ Umuebulu, a community in Etche Local Government Area of Rivers State alone, has 67 oil wells (all belonging to Shell).³⁶ Additionally, Shell owns 12 operational oil wells in Umusia, a small village in Rivers State's Oyigbo Local Government Area. Six oil wells are located in Akala-Olu, a remote village in Rivers State's Ahoada West Local Government Area that is home to Agip's Oshie Flow Station and is also traversed by Shell's "Trans-Niger Pipelines."³⁷ Bille, a small town in the state's Degema Local Government Area, is littered with 24 well heads and two Shell-owned flow stations,³⁸ while Isiokpo's Ogbodo village in Ikwerre Local Government Area has two oil wells.³⁹ The nation has been suffering from the unfavorable environmental repercussions of oil exploration, particularly in the Niger Delta region, where oil spills have negatively impacted the soil, forests, and water bodies⁴⁰ and the people in host communities.

In the Niger Delta which is littered with vast and intricate network of pipelines, numerous oil leak disasters have been brought on by pipeline and storage facility failures. According to the oil companies, these failures may have been caused by material defects, pipeline corrosion, ground erosion, or even sabotage.⁴¹ The installation of these gas and oil pipelines would improve the flow of products made from crude oil to other regions of the nation.⁴² They cross mangroves and rainforests, requiring extensive habitat destruction to make way for the pipeline routes, with inevitable instances of leakage, rupture, and unintentional releases.⁴³ Oil pipelines spanning thousands of kilometers are broken up by wells and flow stations, many of which are located close to homes, farms, and community water supplies; this describes the traits common to all oil-producing villages in the Niger Delta region, including those in Rivers State.

Records show that between 1976 and 1996, the Niger Delta region experienced oil spills in land, swamp, and offshore settings, accounting for, respectively, 6%, 25%, and 69% of the total.⁴⁴ When oil spills over water, the liquid and gaseous parts instantly disappear. Some of them dissolve in water and even start to oxidize, while others undergo bacterial alterations and finally sink to the bottom of water as a result of gravity. This contaminates the soil and has terrible impacts on life on land. While aquatic life

³⁴ B Anifowose, 'Assessing the Impact of Oil & Gas Transport on Nigeria's Environment' (U21 Postgraduate Research Conference Proceedings 1, University of Birmingham UK 2008) 1.

³⁵ Kadafa (n 28) 51.

³⁶ N Bassey (ed), *Knee Deep in Crude: Environmental Field Report: Vol1* (Kraft Books Limited 2009) 115.

³⁷ *Ibid*, 125.

³⁸ *Ibid*, 128.

³⁹ *Ibid*, 125.

⁴⁰ Egbe and Thompson (n 33) 34.

⁴¹ Kadafa (n28) 39.

⁴² F C Onuoha, 'Oil Pipeline Sabotage in Nigeria: Dimensions, Actors and Implications for National Security' [2008] (17) (3) *L/C African Security Review*;19.

⁴³ Ayuba (n27) 20.

⁴⁴ P C Nwilo and O T Badejo, 'Impacts and Management of Oil Spill Pollution Along the Nigerian Coastal Areas' <https://www.fig.net/resources/publications/figpub/pub36/chapters/chapter_8.pdf> accessed 13 March 2018.

is harmed by the dissolution of less volatile components in the emulsified water, volatile lower molecular weight components evaporate, which has an effect on aerial life.⁴⁵

Oil spills that happen close to or inside the drainage basin are caused to move up into vegetation by the hydrologic force of the river and the tides. This acidifies the soil on mangroves, halts cell respiration, and deprives plant roots of vital oxygen.⁴⁶ Spills in populous regions frequently cover a large area, contaminating the soil and groundwater and harming crops and aquatic life.⁴⁷ Additionally, when spillage happens close to the shore, nearby areas are invaded by an unpleasant smell due to the spread of volatile components by air current, which increases the risk of fire and prevents swimming and other recreational activities.⁴⁸

Niger Delta has seen a number of oil spills, with Rivers State having its fair share of oil leak occurrences. 500 barrels of oil spilled from the Ebocha-Brass pipeline in September 1979, killing a lot of crabs, fish, and shrimp. A larger spill of 5,000 barrels from the same pipeline occurred at Oshika Village in August 1983, flooding the lake and swamp forest.⁴⁹ On April 29, 2002, there was spillage from a pipeline at the Yorla oilfield in Ogoniland owned by Royal/Dutch Shell. Before the pipeline was repaired, oil spilled for days, traveling great distances into the air and ruining the neighboring plants and crops.⁵⁰

A February 1995 oil spill from the Ogada-Brass pipeline, which spilled roughly 24,000 barrels, traveled across freshwater swamp forest and into a brackish water mangrove swamp near Etiama Nembe.⁵¹ Between 2001 and 2007, there were a total of 29 oil leak events in the Etche Community: a total of 46.1 barrels were leaked in 6 incidents in 2001; 12 barrels were spilled in 5 incidents in 2002; 4171.5 barrels were spilled in 5 incidents in 2003; 12.83 barrels were spilled in 5 incidents in 2004; in 2005, 0.1 barrels were leaked in 2 incidents; 0.5 barrels were spilled in 2 incidents in 2006, and 27 barrels were spilled in 4 incidents in 2007.⁵²

Major oil leaks were reported at the Kala Sunju Flow Station in the historic village of Opobo in 1978, 1987, and 1992.⁵³ A significant oil spill happened at Shell's Railway Manifold in the rural village of Umusia in the Oyigbo Local Government Area in January 1999 as a result of a facility failure brought on by excessive oil and gas pressure. The disaster contaminated nearby wetlands and farmlands.⁵⁴ At Umuisogbo/Umuegi Swamp, there was an explosion in July 1997 that caused enormous amounts of

⁴⁵ Nwilo and Badejo (n44).

⁴⁶ S O Adelana and Others, 'Challenges and Management of Oil Spill in Nigerian Coastal Areas: Environmental Pollution and Remediation' [2011] (2)(6) *American Journal of Scientific and Industrial Research*;834.

⁴⁷ K N Agunobi and Others, 'An analysis of oil spill patterns and their effects on the environment in Nigeria's Rivers State's Etche Local Government Area' [2014] (4)(16) *Journal of Natural Sciences Research*;124.

⁴⁸ E M Okonkwo and A N Eboatu, *Environmental Pollution and Degradation* (Onis Excel 1999) 21.

⁴⁹ Ayuba (n 27) 22.

⁵⁰ I Aigbedion and Others, 'Prospect Assessment and Risk Analysis: Example from Niger Delta, Nigeria Basin' [2007] (2) (6) *World Applied Science Journal*; 569; Kadafa (n 28) 40.

⁵¹ Kadafa (n 28) 40.

⁵² Agunobi and Others (n 48).

⁵³ Bassey (ed) (n 36) 86.

⁵⁴ Bassey (ed) (n 36) 122.



crude oil to pour across vast farmlands and marshes.⁵⁵ When an oil spill occurred in 1992 at Agip's Oshie-Ogoda Manifold facility, it severely damaged the Oshikoloko/Agwolo virgin woods, swamps, lakes, streams, and farmlands.⁵⁶ On November 3, 1998, a flow line connecting Rumuekpe and Okodia Communities to Akala-Olu released significant amounts of crude oil into the environment.⁵⁷

A number of oil leak accidents occurred in Bille, a remote community in Rivers State's Degema Local Government Area, between 1997 and 1999. Awoba Flow Station (now Bille II) released a significant amount of crude oil into the Emo-Pepeleye Creek on January 20, 1997, which had an impact on the aquatic life there and the mangrove forests in the nearby streams. On January 10, 1998, there was another spill at Well 9 at Awoba Flow Station; the same Well 9 at Awoba Flow Station experienced a significant spill on May 29, 1998, when an outdated pipeline exploded and released significant amounts of crude oil into the environment; during an oil spill on August 27, 1998, a pipeline carrying oil from Well 13 to Awoba Flow Station exploded, setting the structure on fire and igniting the nearby mangrove forest; on January 10, 1999, a spill from corroded high-pressure crude oil pipes at Awoba Manifold poisoned the mangrove vegetation; the Well 12 Awoba (Bille I) experienced a spill on May 18, 1999, and the Well 7 Awoba Flow Station experienced a significant oil spill on November 15, 1999, which released significant amounts of oil into the surrounding environment.⁵⁸ The oil spill occurred in the Amuruto Community in the Abua/Odual Local Government Area on October 27, 1999.⁵⁹ A huge blowout and subsequent explosion occurred on June 25, 2001, in the Ogbodo Community of the Isiokpo clan of the Ikwerre ethnic group, as a result of which the Miniamu River was completely coated in toxic crude oil and enormous areas of oil sludge.⁶⁰

On August 28, 2002, a significant blow-out took place in the Mgbuodo Community in Rumuekpe, Emohua Local Government Area, causing significant amounts of crude oil to leak into the community and its surroundings.⁶¹ In Ikata, Ekpeye ethnic nationality in Ahoada- East Local Government Area, there was an oil spill incident on June 28, 2002, which flooded rivers, lakes, and farmlands with crude oil. Earlier, in 1983 and 1996, there were oil spills at Agbeupa and Isioku regions in the same community.⁶² The Rumuekpe-Adebawa pipelines owned by Shell, located in the Imogu Community of the Emohua Local Government Area, experienced a significant oil spill on July 9, 2003, which contaminated the air, streams, and agricultural fields.⁶³ On December 3, 2003, an oil spill in Mini-Ihie in the Rukpokwu Community of the Obio/Akpor Local Government Area led to a massive explosion that damaged trees, crops, and even homes; the same facility experienced more spillages on May 20, 1996, and July 18, 2003, according to investigations, for which Shell, the plant's owner, did nothing.⁶⁴

⁵⁵ *Ibid*, 125.

⁵⁶ *Ibid*, 126.

⁵⁷ *Ibid*.

⁵⁸ *Ibid*, 128.

⁵⁹ Bassey (ed) (n36) 132.

⁶⁰ *Ibid*, 25.

⁶¹ *Ibid*, 52.

⁶² *Ibid*, 55.

⁶³ *Ibid*, 91.

⁶⁴ *Ibid*, 108.

Large amounts of oil from Bomu Oil Well 2 shot up extremely high above the soil through the oil well head on March 23, 2006, before pouring down like heavy rain on the Gokana people of Ogoniland, continuing unchecked for three days, the oil rain covered the road and a wide section of farmed land.⁶⁵ Shell's Wells 40 and 50 in Kegbara-Dere Community (K-Dere) in the Gokana Local Government Area continuously spilled oil for several months beginning in late 2006 before catching fire in February 2007.⁶⁶ Five distinct locations in the Gokana Local Government Area experienced spills that led to fire in July 2017 (two in the K-Dere Community, one near Shell's Bomu manifold, and two within the Bodo Community).⁶⁷

It is important to know that when oil spillage occurs, it spreads beyond the particular spots/points to other communities, through neighboring and linking lands and waters. The Rukpokwu oil spill, for example, affected other communities like Mgbuche and Elikpokwuodu.⁶⁸ The Ikata spill also affected communities in the Central Abua Central Local Government Area, including Omelema, Omokua, Odaga, Emoh, and Elok Communities, as well as the Olobo, Owu, and Ochiba lakes, which empty into the upper Orashi River.⁶⁹ Even after spreading oil through the coastal states from Akwa Ibom State all the way up to the coast in Lagos State, the Idoho oil spill left an oil sheen on the coastlines of Cross River State, Akwa Ibom State, Rivers State, Bayelsa State, Delta State, Ondo State, and Lagos State.⁷⁰

Oil spills also have long-lasting repercussions, particularly if thorough cleanup and remediation are not carried out. Even with remediation, the ecosystem can take up to 15 years to recover, and additionally, the geology of the region and the type of oil that was spilled, how much oil was spilled, and the sort of cleanup technique used, will affect this time span.⁷¹

2.3 Gas Flaring

The largest deposits of natural gas in Africa are found in Nigeria, which also boasts of one of the top ten largest reserves in the entire world.⁷² Most of Nigeria's oil and gas reserves are found on land and in shallow and deep waters in the Niger Delta.⁷³ Natural gas is available in Nigeria in two forms: associated gas and non-associated gas. Natural gas known as associated gas is found in the same reservoir as crude oil.⁷⁴ Non-associated gas can be stored underground until it is required, whereas associated gas, which is extracted alongside crude oil, must be used up or disposed of on-site.⁷⁵ For

⁶⁵ *Ibid*, 118.

⁶⁶ Bassey (ed) (n36) 134.

⁶⁷ *Ibid*, 140.

⁶⁸ *Ibid*, 110.

⁶⁹ *Ibid*, 56.

⁷⁰ Nwilo and Badejo (n44).

⁷¹ Ayuba (n27) 19.

⁷² I Aigbedion and S Iyayi, 'Diversifying Nigeria's Petroleum Industry' [2007] (2) (10) *International Journal of Physical Science*;266; U Udok and E B Akpan, 'Gas Flaring in Nigeria: Problems and Prospects' [2017] 5 (1) *Global Journal of Politics and Law Research*;16 <<https://www.eajournals.org/journals/global-journal-of-politics-and-law-research-gjplr/vol-5-issue-2-march-2017/gas-flaring-nigeria-problems-prospects/>> accessed 10 February 2018.

⁷³ G U Ojo, *Envisioning a Post Petroleum Nigeria: Leave Oil in the Soil* (Kraft Books Limited 2010) 1.

⁷⁴ U Udok and E B Akpan, 'Gas Flaring in Nigeria: Problems and Prospects' [2017] 5 (1) *Global Journal of Politics and Law Research*;16 <<https://www.eajournals.org/journals/global-journal-of-politics-and-law-research-gjplr/vol-5-issue-2-march-2017/gas-flaring-nigeria-problems-prospects/>> accessed 10 February 2018.

⁷⁵ *Ibid*.

smaller volumes of associated gas, venting or flaring are the traditional on-site disposal methods.⁷⁶ It is important to remember that oil extraction produces byproducts like the oil that is vented in Nigeria's Niger Delta.⁷⁷

The exploration and development of oil and gas in Nigeria is dominated by about thirteen multinational corporations. These businesses have constructed pipelines for gas and oil as well as other infrastructure all over the Niger Delta, endangering the lives of people, animals, and plants.⁷⁸ In Nigeria, the majority of associated gas is flared, a practice that has been ongoing for more than 40 years, affecting both the human population and plant, animal, and aquatic habitat. In contrast, associated gas is regulated in other parts of the world so that only a very tiny proportion is flared.⁷⁹

Flared gas contains a variety of pollutants that are extremely harmful to both people and the environment, including nitrogen, carbon dioxide, methane, ethane, propane, iso-butane, normal butane, and iso-pentane. It also contains trace amounts of water, methanol, argon, oxygen, glycol, and corrosion inhibitor.⁸⁰ There is evidence that gas flares in Nigeria contribute to the annual emission of more than 400 million tons of carbon dioxide into the atmosphere.⁸¹ Carbon dioxide (CO₂) and methane are greenhouse gases that trap heat in the atmosphere. This changes the climate and contributes to global warming, which has a number of detrimental effects including flooding, loss of biodiversity, longer heat waves, drying up of lakes and rivers, less freshwater and more saltwater, general water shortages, destruction of forests, among others.⁸²

Hydrogen sulfide (H₂S), particulate matter, hydrocarbons, ash, and oxides of nitrogen, carbon, and sulfur (NO₂, CO₂, CO, and SO₂) are only a few of the air pollutants that are produced when gas is flared.⁸³ Gas flaring, to put it bluntly, pollutes the air and is a substantial cause of air pollution in the Nigerian region of the Niger Delta.⁸⁴ It has been discovered that the majority of Niger Delta's flare locations are situated near populated areas.⁸⁵ For instance, at Rumuola, a community in Port Harcourt, Rivers State, where Shell Company flares gas, the closest residence is just about 300 meters away.⁸⁶

Acid rain is another effect of flaring gas. When gas is flared, large amounts of poisonous gases are released into the atmosphere, where they combine with oxygen to generate various types of acid⁸⁷ which

⁷⁶ F I Ibitoye, 'Ending Natural Gas Flaring in Nigeria's Oil Fields' [2004] 7 (3) *Journal of Sustainable Development*;28.

⁷⁷ N Bassey, 'Defending the Environment: The Role of EIA' [2013] <<https://www.theafricareport.com/5659/defending-the-earth-our-lives/>> accessed 10 February 2018.

⁷⁸ Ojo (n73).

⁷⁹ *Ibid.*

⁸⁰ Ojo (n73).

⁸¹ Udok and Akpan (n74).

⁸² Ojo (n73).

⁸³ W D Kindzierski, 'Importance of Human Environmental Exposure to Hazardous Air Pollutants from Gas Flares' [2000] (8) *Environmental Reviews*;41.

⁸⁴ Udok and Akpan (n74).

⁸⁵ *Ibid.*

⁸⁶ K Ebeku, *Oil and the Niger Delta People in International Law: Resource Rights, Environmental and Equity Issues* (Rudiger Kopper Verlag, Koln 2016) 509.

⁸⁷ Ojo (n76).

in turn fall as rain. There are a lot of detrimental effects of acid rain. Corrugated iron sheets in the towns and villages surrounding Nigeria's Agip Oil Company's Ebocha Gas Plant began to rust, which prompted an inquiry that discovered how gas flares affected the area's rain acidity: NO_x emitted by gas flares produces dilute nitric acid which is vitriolic and quickens to a large extent, the rusting of corrugated iron sheet roofs; acid rain damages aquatic life by washing heavy metals from soils into lakes and streams when it hits soil or rocks that cannot neutralize the acidity. This increases the acidity of surface water and interferes with fish reproduction cycles; accelerated deterioration of construction materials including limestone, marble, and concrete; removal of forest trees; soil acidity resulting in subpar crop yields; soil heating rendering land unusable for agriculture or other uses; pollution of water sources, among others.⁸⁸ According to current data, for every 1% decrease in ozone, the incidence of skin cancer would rise by about 2%.⁸⁹ In other words, the risk of skin cancer rises by 2% for every 1% drop in the ozone layer.

2.4 Soot

Soot is a contemporary environmental pollution problem in Rivers State, especially in Port Harcourt, the state's capital. In November, 2016, the news concerning the emission of 'black soot,' also referred to as 'fine black dust' or 'cancerous hydrocarbon elements' broke out in the city of Port Harcourt,⁹⁰ as residents of the city woke up one morning to find out that they were enwrapped by a toxic garb of particulate matter.

Particulate matter (PM 2.5), or pollution-causing particles with a diameter of 2.5 micrometers or smaller, includes soot. These particles, which are around 1/30 the size of a human hair, are even smaller than those in dust and mold.⁹¹ It is among the most lethal types of air pollution. A mass of impure carbon particles known as soot is described as the outcome of the incomplete burning of a hydrocarbon that contains sulphur dioxide and nitrogen dioxide.⁹² Burning fossil fuels, especially coal, produces soot as a byproduct.⁹³ It is made up of a range of contaminants, such as chemicals, acids, metals, soils, and dust, all of which are released into the atmosphere and become suspended there.⁹⁴

Many processes release soot into the air, including manufacturing, oil refining, burning coal for electricity or industrial fuel, and operating motor vehicles.⁹⁵ The three most likely causes of soot pollution in Rivers State are gas flaring, open burning of tyres to obtain scrap copper, burning of rubbish because there are no municipal waste services, and unlicensed refineries or oil mining operations.⁹⁶

⁸⁸ Ojo (n76).

⁸⁹ T Henriksen and Others, 'Untraviolet-Radiation and Skin Cancer: Effect of an Ozone Layer Depletion' [1990] 51 (5) *Photochemistry and Photobiology*; 579 <<https://onlinelibrary.wiley.com>> accessed 29 May 2018.

⁹⁰ U Chioma, 'Concerns About the Black Soot in Port Harcourt, Air Pollution and Environmental Law in Nigeria' [2018] <thenigerialawyer.com/concerns-about-the-black-soot-in-port-harcourt-air-pollution-and-environmental-law-in-nigeria/#> accessed 31 March 2018.

⁹¹ J Weidman and S Marshall, 'Soot Pollution 101: What You Need to Know and How You Can Help Prevent It' [2012] 101 <<https://www.americanprogress.org/issues/green/news/2012/08/10/12007/soot-pollution-101/>> accessed 1 April 2018.

⁹² Chioma (n 90).

⁹³ Weidman and S Marshall (n 91).

⁹⁴ *Ibid.*

⁹⁵ Weidman and S Marshall (n 91).

⁹⁶ Chioma (n 90).

Industrial effluents, which appear as smoke, dust, and hazardous gases containing sulphur dioxide, carbon monoxide, nitrogen dioxide, and other gasses or metallic dusts and particles, are the chemicals or pollutants released into the air.

It has become a norm in Port Harcourt since the last months of 2016, that soot takes the place of dew: in the morning the atmosphere is covered in dark fog. Step out in the morning, swipe your hand over any surface, it would seem as though you just did a charcoal mask. During the day, the sun seems to be struggling with dark clouds over the skies. It has become so difficult to tell when it is about to rain, because the clouds get dark and it is no different from soot in the air. When it rains, rainwater that used to be clear is now tinted black. This 'tinted' rainwater leaves black marks and stains on anything outside it drops/falls on. Can you imagine that you wash your car now and it is sparkling clean, and then it rains the next minute and the same car is all covered in dirt? Clothes washed clean and spread outside become dirty and stained when rainwater touches them. Indoors are not spared from this particles' pollution either; even with doors shut, soot manages to find its way into houses. Floors and surfaces are covered in soot, so much so that you clean or mop now and the surface is black almost immediately. Residents of the city have resorted to mopping their houses at least four times every day, but that does not seem to help. Walk around the house barefooted and you would find the soles of your feet all black.

It can be ideated how much of this soot that penetrates the human body. Ingestion of tainted food, skin contact, and air inhalation (both indoor and outdoor) are the three main entry points into the human body. When air is polluted, the air that is breathed in is also polluted. This has been verified by Port Harcourt locals in a number of ways: If you clean the inside of your nostrils with a white cloth for instance, the white cloth soon turns black; Even when you cough, the phlegm or sputum has a black hue, and when you blow your nose, the mucus that comes out is mixed with a black material. When it enters the body, the implications on health are unfathomable.

Environmental effects of soot also exist. The chemical makeup of the affected medium changes as a result of its deposition on soil and water. The effects of this are: lakes and streams are more acidic; ecosystem diversity disruption; nutrient depletion in the soil; and adjustments to the nutrient balance in rivers and coastal waters.⁹⁷ It has a significant impact on acid rain. The sulfur dioxides and nitrogen oxides that generate haze when soot reacts in the air combine with atmospheric moisture to make rain that falls to the ground acidic.⁹⁸

2.5 Construction of Roads and Pipelines

Oil company-built roads and pipelines may cause immediate harm. Roads have been constructed on water causeways in a number of instances across periodically flooded plains, whose ecology depends on the dynamic hydrological circumstances.⁹⁹ In such cases, the drainage of the areas is severely

⁹⁷ O H Yakubu, 'Particle (Soot) Pollution in Port Harcourt Rivers State, Nigeria—Double Air Pollution Burden? Understanding and Tackling Potential Environmental Public Health Impacts' [2018] 5 (1) *Environments*; 2 <<http://www.mdpi.com/2076-3298/5/1/2/pdf>> accessed April 1 2018.

⁹⁸ Weidman and S Marshall (n 95).

⁹⁹ Human Rights Watch, 'The Price of Oil: Corporate Responsibility and Human Rights Violations in Nigeria's Oil Producing Communities' [1999] *Human Rights Watch*;70.

hampered, resulting in persistent floods that adversely affect the lives and living situations of the populations of those places, unless proper culverts are constructed, which is frequently not the case with oil companies in Rivers State.

3.0 Environmental Pollution and Human Rights Infringements

Environment,¹⁰⁰ entails a condition of affairs that is based on human behavior in his natural surroundings and his interactions with the environment, including water, air, land, animals, and plants.¹⁰¹ In order to enjoy nature and living, a certain level of environment must be maintained.¹⁰²

Agriculture, industry, fishing, food, water, wood, housing, medicine, employment, and beauty are just a few of the ecological and environmental services that many people in Rivers State, especially those who live in rural regions, depend on to exist. When these services are compromised, the populace is put at risk and rendered defenseless. Environmental pollution and oil spills have had a detrimental effect on the soils, forests, and water bodies of the State. Oil exploration and extraction have a severe impact on the ecology and the local biodiversity in every aspect,¹⁰³ preventing man from appreciating his surroundings.

Since these rights cannot be exercised at all if the environment is destroyed beyond a certain critical threshold, environmental pollution and the exercise of human rights are closely intertwined.¹⁰⁴ The environment, in other words, is essential to ensuring both human welfare and the realization of fundamental human rights. Human rights are becoming more and more tainted as the environment gets worse.¹⁰⁵ Man's actions either safeguard, advance, or violate some human rights. Some human rights must be fully complied with in order to be fully realized. In other words, if there is environmental pollution, some human rights cannot be claimed to be exercised. The following discusses some of the rights that are impacted by environmental contamination.

3.1 Right to Life

One of the fundamental freedoms protected under Chapter IV of the Constitution of the Federal Republic of Nigeria 1999 (as amended) (CFRN) and other international and regional documents, the right to life, is guaranteed by documents like the African Charter on Human and Peoples' Rights. All other human rights are based on this right, which is fundamental to humanity. Unfortunately, Nigeria lacks a clean atmosphere for exercising this privilege, particularly in Rivers State and the Niger Delta as a whole. In actuality, a wholesome, unpolluted environment is essential for a dignified life. Based on this, the right to a healthy, clean environment is equivalent to the right to life.¹⁰⁶

¹⁰⁰ National Environmental Standards and Regulations Enforcement Agency (Establishment) Act 2007, s 37.

¹⁰¹ L Atsegbua and Others, *Environmental Law in Nigeria: Theory and Practice* (Ababa Press 2004) 130.

¹⁰² *Ibid*, 131.

¹⁰³ Ayuba (n 27).

¹⁰⁴ V Vukasovic, 'Human Rights and Environmental Issues' [2017] <<http://unu.edu>> accessed 23 April 2018.

¹⁰⁵ *Ibid*.

¹⁰⁶ A Mendie, 'Right to Life in the Nigerian Niger Delta: Living with Environmental Pollution' [2014] 4 (7) *Journal of Educational and Social Research*;47 <<http://www.mcser.org/journal/index.php/jesr>> accessed 19 May 2018.

The right to life, according to the Human Rights Committee, entails taking proactive steps to lower infant death rates, prevent industrial accidents, safeguard the environment generally, and take into account the needs of indigenous peoples.¹⁰⁷ In the matter of *Mohini Jain v State of Karnataka*,¹⁰⁸ the Indian Supreme Court ruled that “the phrase ‘right to life’ is the most comprehensive way to describe all the legal requirements that must be upheld by the court in order for people to live honorably.”¹⁰⁹ Similarly, in the Nigerian case of *Gbemre v Shell Petroleum Development Company & Ors*,¹¹⁰ the court found that the respondents' actions violated the applicant's fundamental rights to life and dignity, which are intrinsically tied to the rights to a clean, poison-free, and pollution-free environment, and their continued use of gas flares during their oil exploration and production activities, harms the ecosystem around the applicant and his community's home, thus, represents a blatant violation of their right to life (including a healthy environment), and the protections afforded by the 1999 Nigerian Constitution regarding human dignity. The court in this case construed the protection of the right to life provided by the 1999 Nigerian Constitution broadly to include the right to a healthy and clean environment.¹¹¹

The right to life may be directly and immediately affected by an oil spill. Numerous people have died as a result of oil spills in Rivers State. According to the United Nations Environmental Programme (UNEP), oil spills in Ogoni, Rivers State, claims ten lives per week.¹¹² Reporters have been told by the locals that Saturdays are now largely reserved for the burial of locals who perished due to an oil spill.¹¹³ The environmental risks the oil leak present are said to be causing a sizable section of the local population to have health problems.¹¹⁴

In Oyigbo, a local government area in Rivers State, an explosion that happened when some locals were attempting to scoop up spilt product resulted in the deaths of 80 people. According to reports, Pipeline Product Marketing Company, a subsidiary of Nigerian National Petroleum Corporation, owns the pipes from where the product flowed.¹¹⁵ In addition, a tanker oil leak in 2018 in Okobe, Ahoada Local Government Area of Rivers State, claimed the lives of 95 people. A truck carrying crude oil collided with three other cars, causing the horrific catastrophe.¹¹⁶ Residents ignored safety precautions and scooped Premium Motor Spirit; the result was an explosion that killed close to one hundred people. Gas

¹⁰⁷ C Dommen, ‘Claiming Environmental Rights: Some Options Provided by the Human Rights Mechanism of the United Nations’ [1998] (1) *The Georgetown International Environmental Law Review*;11.

¹⁰⁸ (1992) AIR 1858.

¹⁰⁹ *Ibid*, at p. 114).

¹¹⁰ (2005) AHRLR 151.

¹¹¹ E Kaniye, ‘Constitutional Right to a Healthy Environment and Human Rights Approaches to Environmental Protection in Nigeria: Gbemre v. Shell Revisited’ [2007] (16) (3) *RECIEL*;318; O G Emamuzou, ‘Environmental Pollution in the Niger Delta Of Nigeria: Human Rights Vis a Vis Ecocide Law – Which Way Out?’ [2017] *Ajayi Crowther University Law Journal*<<https://aculj.acu.edu.ng/index.php/cjpas/article/>> accessed 19 May 2018.

¹¹² ‘The UNEP Environmental Assessment of Ogoniland’ <<https://www.shell.com.ng>> 27 September 2019.

¹¹³ *Ibid*.

¹¹⁴ *Ibid*.

¹¹⁵ C Akasike ‘10 Killed as Pipeline Explodes in Rivers Community’ <<https://punchng.com/at-least-ten-killed-in-oyigbo-oil-pipeline-blast/>> accessed 23 October 2019.

¹¹⁶ *Ibid*.

flare-ups trigger early death.¹¹⁷ Similar to this, it is believed that water contamination is the number one killer of people worldwide.¹¹⁸

The health of individuals has a significant impact on their right to life. In other words, where health is compromised, it cannot be argued that the right to life is being exercised. Long-term ailments like melanoma have been the lot of the inhabitants of the state as a result of oil leakage, in addition to the fatal oil explosion episodes that have established a recurrent pattern in Rivers State. Over the past three decades, there has been an increase in concern about how environmental contamination affects public health on a global scale.¹¹⁹ The release of harmful substances into the environment has a substantial negative impact on the health of communities in the Niger Delta.

In Ogoniland, it was found by the United Nations Environment Programme (UNEP) that "when humans breathe air, bathe, eat fish, drink water, or accidentally consume or come into contact with oil-contaminated soil or sediment, petroleum hydrocarbons may enter their systems;" and that Ogoniland has higher hydrocarbon concentrations in the air and water than other parts of the world, which could have long-term impacts including cancer and neurotoxicity.¹²⁰ Exposure through inhalation might result in headache, disorientation, shortness of breath, coughing, watery eyes, itchy throat, and other symptoms. Dermal exposure might result in skin rashes, blisters, oedema dermatitis, and redness. Ingestion of hydrocarbons can cause nausea and diarrhea.¹²¹ Many of Nigeria's oil-producing villages have high rates of respiratory illnesses, asthma, and birth deformities, which have been linked to oil pollution. Studies have also revealed that Niger Delta locals have poor eyesight as a result of years of living and working too near to gas flaring facilities and plants. Additionally, many report to have "become half-deaf" as a result of the gas flares' constant din due to the immense heat and deafening noise they emit.¹²² Humans that are exposed to gas flares have respiratory conditions that can result in kidney and neurological diseases, and even more fatal conditions.¹²³

The health of the populace is negatively affected by soot. It enters the lungs deeply and causes a variety of catastrophic health effects such as acute bronchitis, worsened asthma in youngsters, heart attacks,

¹¹⁷ Agency for Toxic Substances and Diseases Registry (ASTDR), 'Nitrogen Oxides' [2002] <<https://www.atsdr.cdc.gov/toxfaqs/tfacts175.pdf>> accessed 24 September 2017; Agency for Toxic Substances and Diseases Registry (ASTDR), 'Interaction Profile for Toxic Substances: Benzene, Toluene, Ethylbenzene and Xylene' [2002] <<https://www.atsdr.cdc.gov/interactionprofiles/ip05.html>> accessed 24 September 2017.

¹¹⁸ L Lin, 'Effects of Water Pollution on Human Health and Disease Heterogeneity' [2022] 10 *Front. Environ. Sci.*, <<https://www.frontiersin.org/articles/10.3389/fenvs.2022.880246/full>> accessed 3 May 2022.

¹¹⁹ N G Kimani, 'Environmental Pollution and Impacts on Public Health: Implications of the Dandora Dumping Site Municipal in Nairobi, Kenya' [2007] <<https://file.ejatlans.org/docs/dandora-landfill-nairobi-kenya/dandorawaste-dump-reportsummary.pdf>> accessed 25 February 2018.

¹²⁰ 'UNEP Report' <<https://shop.un.org/books/unep-annual-rpt-1999-23861>> accessed 13 September 2017; W Taleb, 'Environment-Related Human Rights Violations in the Niger Delta in Nigeria' [2017] 4 (3) *International Journal of Humanities and Cultural Studies*;3 <<http://www.ijhcs.com/index.php/ijhcs/index>> accessed 19 May 2018.

¹²¹ W Taleb, 'Environment-Related Human Rights Violations in the Niger Delta in Nigeria' [2017] 4 (3) *International Journal of Humanities and Cultural Studies*;3 <<http://www.ijhcs.com/index.php/ijhcs/index>> accessed 19 May 2018.

¹²² Ibid.

¹²³ A L Ndubuisi and I O Asia, 'Environmental Pollution in Oil Producing Areas of the Niger Delta Basin, Nigeria: Empirical Assessment of Trends and People's Perception' [2007] (1) (1-4) *Environmental Research Journal*;18; Ayuba (n27) 21.

strokes, and even early death.¹²⁴ Additionally, according to the American Lung Association, breathing in soot may lead to cancer, as well as reproductive and developmental problems.¹²⁵

Air pollution shortens the lives of those who live in cities.¹²⁶ Explosions caused by landfill gas have been known to inflict property and human casualties as well as harm to plants.¹²⁷ When the environment that sustains life is contaminated and degraded, what function does the right to life serve? Of course, without a clean and safe environment, existence is meaningless.

3.2 Right to Human Security

Chapter II of the CFRN 1999 covers the right to human security. The idea of human security encompasses more than just ensuring physical life; it also includes advancing social and economic welfare, as well as preserving human dignity and rights.¹²⁸ There are various sorts of security, including economic security (people have the ability to work and make a living as well as the opportunity to get support from society if they are unable to do so for some reason); food security, which is when people have a variety of foods that are excellent for their health and are also economically able or empowered to access them; health security, which is when people are less likely to contract a sickness and have enough access to medical care when they need it; personal security, which is defined as independence from governmental or individual-executed physical or psychological harm; environmental security, referring to measures and activities that lessen the consequences and repercussions of both natural and man-made ecological issues; political security (respecting human rights); and community security (belonging to a group or community whose identity and values one may share, and which is strengthened if there is no threat against it from the inside or outside).¹²⁹

There are a variety of environmental variables that can jeopardize the right to security. First off, violent conflicts have been caused by or contributed to by environmental pollution and oil spills, which cause the depletion of natural resources like oil, clean water, food (aquatic, land animals, and crops), etc. This includes the Niger Delta and particularly Rivers State. Second, a healthy environment is necessary for access to clean air, water, and sustainable access to food that is sufficient in both quality and quantity. These factors contribute to human security and the realization of human rights. Thirdly, when people are removed from their homes and communities in order to make room for development projects or

¹²⁴ United States Environmental Protection Agency (USEPA), 'Particulate Matter (PM) Pollution: Health and Environmental Effects of Particulate Matter (PM)' [2023] <<https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>> accessed 2 August 2017.

¹²⁵ American Lung Association, 'State of the Air 2017'—Despite Progress, 4 in 10 Americans at Risk from Air Pollution' [2017] <<http://www.lung.org/about-us/media/top-stories/state-of-the-air-2017.html>> accessed 25 July 2017.

¹²⁶ *Ibid.*

¹²⁷ Tamunoberetonari and Others (n2).

¹²⁸ S Korhonen, 'A Change of Paradigm- Towards Human Security?' in O Alm and T Juntunen (eds), *Human Security- Perspectives and Practical Examples* (The Civil Society Conflict Prevention Network KATU 2011) 16 <https://www.researchgate.net/profile/Tapio_Juntunen> accessed 30 March 2019.

¹²⁹ *Ibid.*

because of environmental threats brought on by pollution of any kind or oil spills, human security is jeopardized,¹³⁰ such as dredging, road building, and oil exploration activities.

The activities connected to industrialization and environmental pollution have in many ways jeopardized and violated human security. For instance, Ken Saro-Wiwa, an environmental and human rights campaigner, was hung in November, 1995 alongside eight other Ogoni tribe members, as a result of the negative impacts of oil production in the Niger Delta, which caused them to carry on nonviolent campaign to protest the destruction of the Ogoni land and people known as the struggle of the Movement for the Survival of the Ogoni People (MOSOP), in opposition to the environmental, economic, and social disruption brought on by Shell's oil drilling, in Ogoniland in Rivers State, in spite of pressure from international human rights organizations, states like America and the United Kingdom, and the Commonwealth.¹³¹ This and other examples lead to the conclusion that people cannot be claimed to enjoy personal security when dominant patterns of production and consumption, particularly those involving oil, are unsustainable from an ecological and environmental point of view.¹³² A right to specific environmental goods that are necessary for security, such as clean water, a reliable source of food, and the right not to be uprooted or forced off of land due to development projects, is a guarantee of the right to security.¹³³

By making essential resources more scarce (such as water, food, land, and other natural resources), eroding livelihoods, compromising culture and identity, causing more migration and displacement, and making it more difficult for states to provide the conditions necessary for human security, environmental pollution poses a threat to human security. Each of these effects has the potential to directly impede human security and to fuel political unrest and armed conflict.¹³⁴ Additionally, since oil extraction creates riches, it frequently leads to violence.

Oil spills stifle crop germination, growth, and yield, because they alter the physicochemical characteristics of the soil, including its temperature, structure, nutrient status, and pH. As a result, the majority of the State's agricultural fields have been degraded, and previously productive areas have been transformed into wastelands. Farmers have been compelled to leave their land in search of other nonexistent sources of income due to the growing soil sterility brought on by the eradication of soil microorganisms and declining agricultural production.¹³⁵

3.3 Right to Own Property and Earn a Living

¹³⁰ J Barry and K Woods, 'The Environment' in M Goodhart (ed), *Human Politics and Practice* (Oxford University Press 2009) 316.

¹³¹ *Ibid.*

¹³² Barry and Woods (n165).

¹³³ *Ibid.*

¹³⁴ Climate Change and Human Rights, UNEP 2015 <<https://columbiaclimatelaw.com/files/2016/06/Burger-and-Wentz-2015-12-Climate-Change>> accessed 17 March 2017.

¹³⁵ A C Chindah and S A Braide, 'The Impact of Oil Spills on the Ecology and Economy of the Niger Delta' (Proceedings of the Workshop on Sustainable Remediation Development Technology held at the Institute of Pollution Studies, Rivers State University of Science and Technology, Port Harcourt, 2000).

This right is provided for in Article 14 of the ACHPR and Section 43 and chapter II (particularly section 17) of the CFRN 1999 (as amended). The natural resources that Rivers State residents rely on for their livelihood have been significantly impacted by environmental contamination, particularly oil spillage.¹³⁶ Farmlands that belong to the locals in the area are devastated. This occurs when oil sponges collect oil from soil, the spill's receptor, blocking the ability of crops' lenticels to take in oxygen. This causes the crops to dry out and wither, turning the land barren and unusable.¹³⁷ The disastrous impacts of oil pollution, which have ruined farmlands and rendered the land unproductive, are wreaking havoc on the local population in the Gokana area of Ogoni territory in Rivers State.¹³⁸ Abii and Nwosu studied the consequences of oil spills on the soil of Eleme in Rivers State and discovered that these spills are hastening the degradation of farms and vegetation.¹³⁹ Due to the oil's ability to render the majority of crucial nutrients inaccessible to plants and crops, the fertility status of the soil is decreased.¹⁴⁰ Also heavily contaminated are the bodies of water where people go to fish and make a living.

The right to own property is not left out, as properties are destroyed by environmental pollution, especially oil spillage, and in some cases, people of the State are forced to abandon their properties for better and safer environment. Also, some people have to give up their property or part of it sometimes, for developmental projects. Properties are also lost and destroyed as a result of oil spillage, flooding, and so on.

3.4 Right to a Healthy Environment

Environmental contamination severely restricts the right to a healthy environment in Rivers State. Communities in the State that produce oil have been severely damaged by oil pollution. Environmental protection is specifically listed as a state objective in Chapter II of the CFRN 1999 (as amended), where it is included under the Fundamental Objectives and Directive Principle of State Policy. Section 20 of the CFRN aims to protect Nigerian citizens' right to a healthy environment.¹⁴¹

Human rights can only be fully exercised in a pollution-free environment, making environmental conservation essential for their actual realization.¹⁴² Accordingly, maintaining a pollution-free environment would be achieved by protecting the air, water, land, and wildlife mentioned in section 20 of the CFRN. The question of whether an aggrieved person or individual has a right or the authority to seek for the execution of the constitutional provision from the court, demands an answer, despite the admirable provision of section 20 of the CFRN.¹⁴³ In response to this query, it has been determined that

¹³⁶ T A Abii and P C Nwosu, 'The Effect of Oil Spillage on the Environment on the Soil of Eleme in Rivers State of the Niger-Delta Area of Nigeria' [2009] (3) (3) *Research Journal of Environmental Sciences*;316.

¹³⁷ *Ibid*, 317.

¹³⁸ 'Gokana, Eleme worse hit by Oil Spills' <<https://thenationonline.net>> accessed 12 October 2019.

¹³⁹ Abii and Nwosu (n136) 319.

¹⁴⁰ *Ibid*.

¹⁴¹ G Ogbodo, 'Environmental Protection in Nigeria: Two Decades After Koko Incidence' [2010] (15) (1) *Annual Survey of International and Comparative Law*;18.

¹⁴² A B Abdulkadir and A O Sambo, 'Human Rights and Environmental Protection: The Nigerian Constitution Examined' [2009] *Journal of Food, Drug and Health Law*;61.

¹⁴³ (n1).



section 6(6)(c) of the CFRN 1999 (as amended) does not grant the court the authority to rule on any matter pertaining to the enforceability of section 20 of the same Constitution.¹⁴⁴

Thus, the said section 20 of the CFRN 1999 (as amended) is non-justiciable, thereby serves as a barrier to Nigerians' ability to fully exercise their right to a healthy environment because the court that could have ensured its enforceability has been stripped of the authority to hear any case involving the infringement of the right. Nevertheless, notwithstanding the exclusion provision, there is still some hope for securing environmental protection. This is in light of various options that the public has to fight for environmental justice and defend their right to a healthy environment.¹⁴⁵

¹⁴⁴ M A Olong, 'Human Rights, the Environment and Sustainable Development: Nigerian Women's Experiences' [2012] (5) (1) *Journal of Politics and Law*; 108.

¹⁴⁵ A B Abdulkadir, 'The Right to a Healthful Environment in Nigeria: A Review of Alternative Pathways to Environmental Justice in Nigeria' [2014] (3) (1) *Afe Babalola University: Journal of Sustainable Development Law and Policy*; 125.