



## MAN AS NATURE'S PRODIGAL: A STUDY OF ENVIRONMENTAL DEGRADATION IN SOUTH EAST NIGERIA, 1990-2022

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**ABSTRACT:** *Man's degradation and abuse of the environment has become accelerated and much more difficult to manage due to increased human population and industrialization. Against this background, the study examines the role of man in environmental degradation in South East Nigeria between 1990 and 2022. This research, by its nature, adopted the qualitative research methodology because it cannot be subjected to quantitative analysis. The research findings showed that there were several environmental degradation challenges facing South East Nigeria, including soil erosion, land and water pollution, solid waste disposal and air pollution. These were caused mainly by human factors, especially technology and industrialization. The work argued that the South East people had a healthy relationship with the natural environment before the advent of British colonial rule. This relationship changed as a result of colonialism and its attendant effects in the area. Thus environmental problems in South East Nigeria developed over time as human socio-economic relations changed in global context.*

**KEYWORDS:** Environment, Environmental degradation, Man, South East Nigeria, Colonialism.



## INTRODUCTION

The bond between man and the environment is inseparable. It is from the physical environment that resources for human needs are derived. Thus, as man affects the quality of the environment, so the environment affects the quality of man's life.<sup>1</sup> Consequently, in the contemporary international system, the value and fragility of the environment has been subjected to a lot more stress than ever before. This is as a result of such factors as rapid population growth, increased food production, the acceleration of energy and non-fuel mineral use, as well as the release of man-made chlorofluorocarbons into the atmosphere. The result is the continuing degradation of the environment and the resultant deterioration of the environment.

Man's degradation and, indeed, abuse of the environment is not new. But the pace has become accelerated and much more difficult to manage due to increased human population and industrialization. Consequently, humanity's assault on the earth has resulted in land degradation and desertification, water degradation, atmospheric pollution and climate change, as well as to specie and gene pool extinction.<sup>2</sup> The unchecked destruction of rainforests, especially in the Third World, threatens the livelihood of pastoralists and subsistence farmers. Atmospheric pollution has led to the so-called GreenHouse Effect, which refers to the dangers of global warming brought about by the concentration of carbon dioxide in the atmosphere. Similarly, many plant and animal species are now going extinct (and some are even extinct) due to humanity's continuing assault on the environment.

There is a nexus between environmental issues and international security. Wars between states have been caused by struggles over non-renewable resources, especially oil, minerals, and other resources. For example, the Iraqi invasion of Kuwait in 1990 was as a result of disputed oil fields. Similarly, the US-led invasion of Iraq in 2003 was motivated by the desire of the U.S. and her allies to ensure the unhindered supply of oil from the Persian Gulf.<sup>3</sup> However, renewable resources, especially water, have also generated inter-state conflicts especially when it is shared by a number of states. For instance, the decision by Ethiopia in 2011 to build Africa's biggest hydroelectric plant (the Grand Renaissance Dam) on the Blue Nile River has not been favorably received by Egypt and other countries through whose territories the river passes. Egypt fears that the project will enable Ethiopia to control the flow of water from the Nile. The same is true of other rivers like the Indus, Ganges, and Brahmaputra rivers in Asia, the Rio Grande, Colorado, and Parana Rivers in the Americas, and the Jordan and Euphrates rivers in the Middle East.<sup>4</sup> These rivers constitute the only significant sources of fresh water supplies to the millions of persons in the areas.<sup>5</sup> They are also a constant source of tensions between the countries whose populations depend on them for a variety of purposes.

Such tensions arise from the fact that states which are located in the upstream of the rivers could use the damming of a given river (and thereby reducing the water that would flow downstream) as a means of punishing or provoking the countries downstream. They might, in so doing, create tensions in the international system, as was the case in 1986 when North Korea announced its plan to build a hydroelectric dam on a tributary of the Han River which it shares with South Korea. The same was true when Iraq, in 1974, threatened to bomb the al-Thawra dam in Syria because it claimed that its share of water from the river Euphrates had been reduced by the dam. Then there was also the threat by Turkey to restrict the flow of water to Syria following the completion of the Ataturk dam by Turkey in 1990. This too was a form of



coercive diplomacy by Turkey aimed at compelling Syria to end its support for Kurdish rebels operating from Syria's southern border with Turkey.<sup>6</sup>

It is heartwarming to state here that world leaders and environmentalists are aware of the dangers which human activities constitute to the environment. The depletion of the earth's ozone layer, global warming, loss of biodiversity, air and water pollution (including the May 2020 pollution in the Arctic caused by Russian oil-carrying vessels), as well as over-fishing, are some of the environmental problems that are global in nature. Thus, in the 1990s, the United Nations Environment Programme (UNEP) which was formed in 1972 became very active in providing technical and other forms of assistance to member-states. It also watches, checks, and reports on environmental conditions globally, as well as develops standards and recommends alternative sources of energy.<sup>7</sup>

In furtherance of the commitment to global environmental protection and management, the United Nations General Assembly, on December 22, 1989, called for a global meeting that would devise strategies to reverse the effects of environmental degradation. The United Nations Conference on Environment and Development (UNCED) adopted Agenda 21 at its summit held in Rio de Janeiro, Brazil, from June 3-4, 1992. Agenda 21 is a comprehensive programme of action which requires governments, development agencies, the UN itself, as well as independent sector groups in every area where human activities affect the environment, to implement it fully. The UNCED brought together both government and non-government actors to work out the modalities for protecting the environment.

Because of the globalization of environmental dangers, a number of international treaties have been signed by many states since the end of the Cold War, though there were other treaties entered into by states in respect of environmental issues. These include the UN Convention on the Law of the Sea (1982) and the Montreal Protocol (1987) which had provided, respectively, broad rules on the protection of the ocean and reduction in the use of ozone-depleting substances. Since the 1990s, more global efforts have been committed to issues relating to environmental protection. In 1992, for instance, the Framework Convention on Climate Change was adopted, and it required the industrialized nations to work towards reducing greenhouse emissions. The Convention on Biological Diversity also came into effect in 1992, and requires national strategies to be adopted towards the conservation of a variety of animal species and plants, genetic variations, and ecosystem. Then in 1997, the Kyoto Protocol called on the industrialized countries to reduce greenhouse gas emission,<sup>8</sup> though the U.S. refused to cooperate. China too has not been enthusiastic about signing some of these treaties.

A number of non-governmental organizations have been involved in the drive to save the environment for future generations.<sup>9</sup> While many are active within their respective countries, others like Greenpeace, operate across national boundaries. It seeks to influence the enactment of national and international environmental legislation to protect civil disobedience on the high seas.<sup>10</sup> Others include the Hong Kong-based EcoDrive which is taking proactive steps in raising global awareness of the dangers posed by plastic materials which are not biodegradable and are steadily polluting the world's oceans and rivers.



## Definition of Terms

It is necessary to begin this study by defining the key terms used in it. In this work, the term “South East, Nigeria” is used to describe the geographical area inhabited by the states of Abia, Anambra, Ebonyi, Enugu and Imo. The inhabitants of this area are the Igbo, one of the major ethnic nationalities in the Nigerian nation state. In this work therefore, the South East will be used synonymously with the Igbo. Although some groups of the Igbo live outside the South East, in Delta and Rivers states, they constitute a very small percentage of the Igbo people. The core Igbo people live in the South East geographical zone, the area covered in this study.

Another term requiring definition is “environment”, a term which refers to the outer physical and biological system in which man and smaller organisms exist. It is, in other words, the surroundings which human beings share with other creatures.

One more term requiring definition is “environmental degradation”. It refers to the process or a situation of depreciation in quantity and/or quality of the resources of the environment such as air, water resources, mineral resources, land, flora and fauna.<sup>11</sup>

## Causes of Environmental Degradation in South East, Nigeria

There are numerous environmental degradation issues besetting South East Nigeria in particular and Nigeria in general. These problems are multifaceted by the emergence of other environmental challenges which are global in nature and whose impacts threaten the very survival of mankind. These global environmental challenges have been discussed briefly in the introductory section. In this section, the concentration will be on the South East, Nigeria environmental issues.

In the pre-colonial era, the Igbo relied more directly on nature for their sustenance. The Igbo people’s relationship with the environment was in the direction of conservation, good husbandry and well-organized use of natural resources. This is evident in the traditional land use and human settlement patterns, and in various technologies that rely on environmental resources. The Igbo general agricultural practices were aimed to improve the fertility of the soil. These agricultural techniques included shifting cultivation and bush fallowing. According to Barry Floyd, shifting cultivation or migratory agriculture, involves periodic movement of fields or plots of crop land (land rotation), and also the relocation of hamlets or villages after the area in the immediate vicinity of the settlement has been worked over for agricultural purposes.<sup>12</sup> Short periods of land occupancy (one to three years) by domesticated plants are followed by long periods of natural bush fallow (ten to fifteen years). Shifting cultivation was a remarkably effective and wise response to the natural setting. Regeneration of the soil could only be accomplished under the long-term restorative effects of nature. Farmers equipped with the simplest of implements could wrestle an elementary living from forest.

Explaining bush fallowing, Floyd noted that the description of shifting cultivation is equally applicable to bush fallowing, except for the periodic uprooting of settlements and the relocation in areas of untamed rainforest. According to Ejitu Ota:

The duration of bush fallow reflected the pressure on land. In pre-colonial times, it fluctuated between ten and fifteen years or even more because many farmers grew crops mainly for subsistence and a little surplus for sale to meet other commitments.<sup>13</sup>



Folkloric taboos and rituals were also used as tools of conservation. In most Igbo communities, there are bush humans who are not allowed to enter. It was commonly known as “ajo ohia’ (bad bush). Corpse of men who committed suicides or killed by the gods are seen as evil, and as such cannot be buried but thrown into such bush. This was the case of Okonkwo in Chinua Achebe’s *Things Fall Apart*, when Obierika told the District Commissioner that:

It is an abomination for a man to take his own life. It is an offense against the Earth, and a man who commits it will not be buried...<sup>14</sup>

The regulation of hunting, fishing and fire wood collection, and the linking of these activities to festivals or some cultural rites were other devices for conservation of natural resources. For instance, in most communities in northern Igboland, there is a belief that “sickness may be caused by felling trees; in fact, cutting down an iroko may cause the death of someone unless the doctor divines and sees what is to be done; and generally if a man falls sick through a felled tree he goes to a doctor, who names the sacrifices and names the tree.<sup>15</sup> In the area of hunting, there are rules guiding it in pre-colonial era (and even still practiced in some areas). There are animals that cannot be hunted, and there are designated areas to carry out hunting activities. For instance, in Nnewi, Orlu and some other Igbo communities, there are snakes that cannot be killed; in Ihube, Awka among others, monkeys cannot be hunted. In Ikwuano and some parts of Nsugbe, snails cannot be picked. These animals are revered in those places. Olaudah Equiano, the first Nigerian (and Igbo) successful author recalled in 1789 that:

I remember two of those ominous snakes, each of which was as thick as the calf of a man’s leg, and in color resembling a dolphin in the water, crept into my mother’s night house, where I always lay with her, and coiled themselves into folds, and each time they crowded like a cock. I was desired by some of our wise men to touch these, that I might be interested in the good omens, which I did, for they were quit harmless...<sup>16</sup>

There is also regulation in the industrial activities of the Igbo, such as the salt industry. The industry was limited to the North-Eastern and Eastern areas of Igbo, namely, Uburu, Okosi and Abakaliki, because they had brine lakes. The industry was dominated by women and was hedged with taboos. Example was that only indigenous and non-menstruous women could fetch and evaporate the brine. To ensure the observance of this rule, women had to approach the brine lakes stark naked.

However, Igbo relationship with the environment changed with the advent of colonialism. Colonial rule involved the economic exploitation of the resources of the colonies for the benefit of the metropolis in Europe. It was established to protect the “free trading communities producing tropical raw materials and consuming British manufactures” which the British had created in the nineteenth century. South east Nigeria was an important part of the Nigerian market. The area lay in the rich oil palm belt the products of which were very important for British industries. Also long association with the people of the area through the coast had produced a large number of indigenous inhabitants who had developed a taste for European manufactures - beads, cloths and gin, among others. It was only logical that Britain proceed to expand this market. And it was to this objective that social economic policy was directed. The essential conditions necessary for the expansion of trade were: the establishment of law and order in the wider context; the construction of transport and telecommunication facilities – roads, railways and harbors.



Thus, the natural environment was abused in order to achieve this aim. There was heavy cutting of the trees and the bushes were cleared to make roads and railways through the town; many of the waterways were also cleared. Coal mine was opened in Enugu for exploration for petroleum. Oil plantations were also established across Igboland. There was also the introduction of mechanized agriculture, including the use of pesticides and herbicides for crop cultivation. Indeed, land was extensively coerced from their traditional employment and turned over to production for export to Europe. According to Ademola Tokunboh Salau:

There was a mental shift in the perception of natural environment from being a factor to work with to secure sustenance to being a factor that had to be overcome, subdued or transformed to promote human welfare.<sup>17</sup>

The British colonialist, thus, set the foundation for the destruction of the environment for man's economic interest. The post-colonial regime saw the sustenance of this abuse of nature; and with increased population, expanded urbanization, discoveries of more oil fields and the activities of multinational corporations, especially, in the exploration and mining of oil, man's abuse of nature was raised to the highest level.

### **Types of Environmental Degradation in South East, Nigeria**

There are many environmental degradation woes facing South East Nigeria today. These include:

#### **i. Soil Erosion, Land and Water Pollution**

Soil erosion is one of the terrible forms of environmental degradation in South East, Nigeria. Among the forms of soil erosion in the area are gully types that are noticeable because of their significant effect on the landscape. According to G. E. K. Ofomata, "70% of South-eastern Nigeria is affected by one form of erosion or another".<sup>18</sup> Abia, Anambra, Enugu and Imo States are the worst affected and gullies had reportedly washed away many farmlands totaling over 25,000 ha, homes and had even caused few deaths. Major gullies are found in different parts of these four States, especially in Agulu-Nanka, Alo, Nnobi, Nnewi, Orlu, Ozuitem, Abiriba, Ohafia, Uruala and Isuikwuato.

There is minimal land and water pollution in South East, Nigeria. Few industrial cities like Aba and Onitsha are witnessing pollution from industrial effluents and urban sewage disposal. Most of these industries discharge their waste matter without prior treatment into rivers, streams, or the sea. Most of the industrial effluents are toxic. For instance, some of the dyes used in the textile factories are believed to be carcinogenic. Another major factor of land and water pollution in South East Nigeria is the oil exploration and exploitation. This is restricted more to the areas of operation of the oil companies, such as Ohaji/Egbama communities in Imo states. These communities have experienced the worst environmental impacts from the oil industry. These include:

(a) Destruction of vegetation and farmlands during exploration and for sitting of locations as well as laying of pipelines. (b) the continuous presence of light, heat, noise and in some cases sooty emission from flares (c) oil pollution of the environment through accidental blowouts, leakages of oil pipeline and storage tanks and effluents from production and refinery operations.<sup>19</sup>



There have been many incidents of oil spillage in some parts of South East Nigeria, including Ohaji/Egbema, Ukwa, and communities where pipelines crossed such as Isuikwuato, and has caused terrific damage to fishing and farming which are the major occupations of the inhabitants.

## ii. **Solid Waste Disposal and Air Pollution**

There are piles of refuse and garbage in most urban centers in South East Nigeria, especially, Aba, Umuahia, and Onitsha. Population growth as well as increase in industrial activities has led to a phenomenal increase in the volume and complexity of solid wastes being generated daily in South East Nigeria. According to a Federal Government publication, the problem of solid waste disposal “has today become the number one serious environmental problem facing the country with its consequent effects on the pollution of water, air and land, not to mention its hazards to health and other natural resources of social and economic importance”.<sup>20</sup>

Air pollution is another form of environmental degradation in South East Nigeria. Though, it is still a minor crisis. Major sources of air pollution in the area include exhaust emission from automobiles, harmful gasses from industrial machinery and from refinery wastes, as well as bush burning.

### **Impacts of Environmental Degradation in South East, Nigeria**

There are many negative impacts of environmental degradation in South East Nigeria. These range from human health issues to poverty. On health aspects, there is a high rate of harmful air in the atmosphere in South East Nigeria, causing several illnesses and deaths. For instance, the town Onitsha, in Anambra State was ranked the worst city in the world for the unbelievable levels of PM10 particulate matter in its air. Other South East urban centers with high concentrations of PM10 are Aba and Umuahia. PM10 refers to coarse dust particles between 10 and 2.5 micrometers in diameter, while PM2.5s are smoother and more dangerous when inhaled. PM2.5 settles deep in a person’s lungs and causes complicated health issues”.<sup>21</sup>

The city of Onitsha’s mean annual concentration was recorded at 594 micrograms per cubic meter by the World Health Organization – tremendously higher than the WHO’s yearly guideline limit for PM10s of 20 µg/m<sup>3</sup>.<sup>22</sup>

Also, there are a lot of water-born diseases in the study area. Streams are the major sources of drinking water in the rural areas. Polluted water bodies are breeding grounds for disease-causing pathogens. There are also infectious diseases caused by flooding. In 2022, about five people were reported dead from flooding in Anambra state.

More so, there is a direct link between environmental degradation and poverty. The major occupation of the people residing in the rural areas is agriculture. Agricultural production has been low due to land or soil degradation, and the effect of climatic change. Also, resources that would have been channeled to infrastructures and human capital are sometimes directed in the control and management of environmental degradation, such as erosion. For instance, in 2017 the Federal Government of Nigeria approved 5.56 billion naira (over \$1 5400 000) for erosion control in six states of Southeastern Nigeria.<sup>23</sup>



## CONCLUSION

This work is an investigation of environmental degradation in South East Nigeria from 1990 to 2022, looking at the role of man in the degradation of the natural environment. It found out that most environmental degradation is caused by the activities of the industrialized countries which emit the most carbon dioxide in the environment. These countries seem to prefer national interest to humanity. Nigeria is also not doing enough to stop some forms of environmental degradation. Because of poverty, they care little about issues like global warming. Multinational corporations in the country owned by groups and individuals from the industrialized nations are in the habit of polluting the environments where they operate. The South East region of Nigeria, especially, the Ohaji/Egbema communalities has remained a victim of the callousness of multinational oil companies.

It is hoped, however, that the world's conscience will one day be touched by the activities of young environmental activists like Greta Eleonora Thunberg of Sweden and Licypriya Kangujan of India. These young girls took their campaigns to the United Nations Climate Conference of 2018 and 2019, respectively. Both have continued to urge world leaders to expedite action to legislate on protecting the environment. While Thunberg has received numerous awards including being listed by the Time Magazine as one of its 1000 most influential people and the youngest Time Person of the Year and Forbes's list of the world's 100 Most Powerful Women (2019), as well as nominations for Nobel Peace Prize, Kangujan was awarded the World's Children Peace Prize and the India Peace Prize, both in 2019. There is, therefore, hope that the world of today will bequeath a better and sustainable environment for future generations.

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