

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Major Ethical Issues Arising From Environmental Degradation in Nigeria

¹Sotonye Big-Alabo, ²Etorobong Godwin Akpan, Ph.D.

¹Department of Philosophy, University of Port Harcourt, Rivers State, Nigeria <u>Sotonye.big-alabo@uniport.edu.ng</u> ²Department of Philosophy, University of Port Harcourt, Rivers State, Nigeria

ABSTRACT

Nigeria is experiencing changes in climate and these changes are made worse as a result of the despoliation of the environment as well as the pollution of the atmosphere and to make mattersworse and thought-provoking, the fast-growing population of the country is exerting serious pressure on our natural resources. These actions carried out by humans are having unforeseen consequences on this same environment that sustains us. The aim of this work is to look at some major ethical issues that arises from the degradation of the environment in Nigeria. The objective of this study is to look at some environmental issues degrading Nigeria's natural environment and also the ethical implications of these issues. Environmental issues like environmental pollution, drought and desertification, waste as well as the causes and impacts of these issues were looked at. The study employs the method of content analysis. The findings of this study exposes that the ethical issues arising from environmental degradation in Nigeria is as a result of human relations with the natural environment which is excessively anthropocentric in Nigeria. In conclusion, one will not be out of place to say that it is basically the human unethical relations with the natural environment.

Keywords: Environmental degradation, environmental pollution, desertification, waste, land ethic and virtue ethics

Introduction

Aldo Leopold was concise by saying that "a thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise" (Leopold, 1949). Rachel Carson's Silent Spring is not merely about poisons; it is about ecology or the relation of plants and animals to their environment and to one another. Ecologist are more and more coming to recognize that for this purpose man is an animal and indeed the most important of all animals and that however artificial his dwelling, he cannot with impunity allow the natural environment of living things from which he has so recently emerged to be destroyed. Fundamentally, therefore, Carson makes a well-reasoned and persuasive case for human beings to learn to appreciate the fact that they must understand its conditions of existence and so behave that these conditions are not violated (Carson, 2000).

Pope Francis submits that following a period of irrational confidence in progress and human abilities, some sectors of society are now adopting a more critical approach. We see increasing sensitivity to the environment and the need to protect nature, along with a growing concern, both genuine and distressing, for what is happening to our planet. Continuing, he stated that however, curiously, those questions which are troubling us today and which we can no longer sweep under the carpet. Our goal is not to amass information or to satisfy curiosity, but rather to become painfully aware, to dare to turn what is happening to the world into our personal suffering and thus to discover what each of us can do about it (2015).

In this regard, it will not be apt in following the view of Dalai Lama who said, ''the earth, our mother is telling us to behave. All round, signs of nature's Limitations abound...By protecting the natural environment...We show respect for Earth's living things'' (Dalai Lama, 1990).

Undoubtedly, we have destabilized nature and our climate is changing. Rising temperatures and shifting weather patterns are disrupting life on earth. Here in Nigeria, this climate changes are even made worse as a result of the destruction of the environment as well as the pollution of the atmosphere and to make matters even worst and thought-provoking the fast-growing population of the country is putting serious pressure on our natural resources.Our actions are having unforeseen consequences on this same environment that sustains us. It is as a result of this we will look at some major ethical issues that arises from the degradation of the environment.

Nigeria's Natural Environment

Nigeria lies approximately between Latitude 4° and 14° North and longitudes 3° and 15° East in West Africa. It has a landmass of about 923,768km² covering about 14 percent land area in West Africa. It is bordered by the very long territory of Benin to the west, the semi-arid country of the Niger Republic to the north, the sub-equatorial Cameroon to the east and the Atlantic Ocean to the south. Nigeria's coastline covers over 853km with the Niger Delta portion covering approximately 80 percent of the entire coastal length. A primary attribute of Nigeria's coastal and marine environment is the Niger Delta, spanning an area of 70,000km², thus, making it one of the largest wetlands in the world. Nigeria's mangrove forest is placed as the

544

largest in Africa and the third largest in the world (FGN, 2012). Nigeria is located within the lowland humid tropics and is featured by high temperatures almost all through the year. Down south, the average maximum temperature is 32^oC, whereas in the north about 13^oC thus, making the north to have a much higher yearly range than the south. The average yearly rainfall in Nigeria depends from a high of over 3,500mm along the coast to a low of less than 600mm in the Sahel region in the northwest and the north eastern parts of the country. The yearly variation of rainfall, especially in the northern part is very large. This regularly amounts to climate issues, most profound floods and droughts, which when happens results in suffering with devastating effects on food, production and the nation's economy (FGN, 2012). Nigeria is blessed with several rivers, coastal and inland sedimentary structures that store copious groundwater resources. FGN citing Federal Ministry of Environment (2008), the total surface water resources potential for Nigeria is speculated to be 267.3billion cubic metres whereas the ground water potential is approximately at 51.9 billion cubic metres, summing to 319.2 billion cubic metres (FGN, 2012). Nigeria can be seen as a land of two extremes in ecological terms. In the southern part, lush forest such as fresh water swamp forest, rainforest and mangrove forest dominate the natural vegetation or environment. This gives way to Guinea Savanna in the middle belt, while Savanna woodland and thorny vegetation dominate the semi-arid and arid regions of the Northern part of the country (FGN, 2012).

Nigeria is blessed with huge human and material resources that can and should guarantee sustainable economic growth and development. Nigeria has a very large resources of solid materials such as lignite, tin, coal, ore, talc, gypsum, topaz, bitumen and barite. The confirmed reserves of crude petroleum are well over 37 billion barrels whereas reserves of natural gas stand at over 187 trillion standard cubic feet (NPC, 2009 cited by FGN).

As at 2011, Nigeria's population was estimated to be about 164 million cutting across an area of 923,800km². This undoubtedly, make the country to be the most populated and as well one of the largest countries in Africa. It is estimated that Nigeria's population will grow by 3.2% annually and consequently, is projected to double by 2030. The over 250 constituent ethnic nationalities of Nigeria nevertheless, add a dynamic blend to the socio-political and cultural landscape of the country (FGN, 2012).

Environmental issues in Nigeria

The environment undoubtedly is the best accommodating planet amongst others for human and living organism's spatiotemporal existence. This simply means that the degradation of the environment will directly result in the degeneration of humans as well as living organism and the environment (Ogar and Bassey, 2019). Human awareness on the direct effect of environmental degradation brought about clamours that have resulted in campaign, sensitization, conferences and clamours by various intellectuals, governmental and non-governmental organizations and researchers both nationally and globally on this need of environmental sustainability cum preservation (Bassey and Leonard, 2018). The environmental issues in Nigeria are legion and these issues are basically as a result of the anthropocentric activities of man. The last decades of the last century gave birth to a movement of concerns for the human geophysical environment from a theme of social activism to a global agenda. This was because of the consciousness that one of the outcomes of human economic movement was the building up of greenhouse gasses (GHG) in the earth's atmosphere and this may bring about or lead to climate change and its negative effects. Hence, the environmental degradation emanating from that could affect humanity, biodiversity, fauna and flora, the ecosystems and many others (Baker, 2008; Ifeanyi, 2002).

Several of the generally acknowledge globally environmental issues such as greenhouse warming, soil erosion, acidic rain, ozone depletion, chemical management, pollution among other things is directly or indirectly as a result of the creation, operation or disposal of the built environment handled by man. It is as a result of the environmental challenges caused by man's anthropocentric activities that brought about the call for social action on environmental sustainability. According to Ogunloye (2002), the issue of environmental devastation in Nigeria shows itself at three major levels: water problems, forest degradation and solid waste management. Many of the environmental issues are the outcome of industrialization: cargo refuse dumps emanating from urban consumerism as well as air pollutant emitted from factories. The rural areas also have their own distinct environmental challenges such as indiscriminate collection of fuel woods, which results to the destruction of the forest as well as regular bush burning. Statistics gotten in the 1980's by two teams exposed that 70 to 90 percent of the residents of Benin City, Enugu, Ibadan and Kaduna failed to use the officially designated facilities for disposing of their refuse (Owenibie 2002).

The environmental issues in Nigeria are many as a result of this, we will be looking at key issues that border on the environment. Consequently, the following are the environmental issues in Nigeria; biodiversity loss, deforestation, drought and desertification, flood and erosion, land use, environmental pollution, waste and climate change. For the purpose of this study, we will be looking at environmental pollution, drought and desertification and waste.

Environmental Pollution

The issue of environmental pollution is one that cannot be relegated to the background. The magnitude of environmental pollution in Nigeria is greater than in the past decades and this is because of the high rate of population growth and urbanization, modern ways of agriculture, mainly in the growing use of agrochemicals, the introduction of new technologies and consumer products and the ineffectiveness of the institutional, logistical and policy arrangements that have been put in place or established over the years to manage and tackle the menace. Consequently, if Nigeria intends to be one of the leading economies by 2020 these issues are important to resolve for a healthy environment on the basis of economic prosperity and sustainable development. Looking at the conception of pollution it was derived from the word "pollute" which means, to make something dirty or no longer pure, especially by adding harmful or unpleasant substances to it. According to the United States National Research Council (1965) pollution is "an undesirable change in physical, chemical or biological characteristics of our air, land and water that may or will harmfully affect human life or that of

other desirable species, our industrial processes, and living conditions, cultural assets that may or will waste or deteriorate our raw material resources". Looking at the above definition it is clear that pollution is a disorder within an environment. Closely, Jande (2005) sees pollution as "to make something dirty or no longer pure, especially by adding harmful or unpleasant substances to it".

According to Pope Francis (2015), some forms of pollution are part of people's daily experience. Exposure to atmospheric pollutants produces a broad spectrum of health hazards, especially for the poor, and causes millions of premature deaths. People take sick, for example, from berating high levels of smoke from fuels used in cooking or heating. There are also industrial fumes, substances which contribute to the acidification of soil and water, fertilizers, insecticides, fungicides, herbicides and agro toxins in general.

In Nigeria issues of environmental pollution ranges from poor urban planning and lack of basic waste management tools to poor industrial practices which relegates the environment in harm's way. Putting factors like population growth, poverty and rapid urbanization as well as the inability of the governments to make available working housing scheme has resulted to cities with increasing number of slums and yet no waste management system (Ezeabasili, 2009). According to Akinola, Ekpo and Haruna (2012), the persons dwelling in these slumps are poor and vulnerable and are as well exposed to communicable diseases and many other health issues.

As a result of the epileptic electricity situation in country there is need for individuals and organizations to look out for other sources of generating their own power. Consequently, to compliment the perpetual power outages people have resorted to the use of power generating sets/plants; these plants are dependent on the usage of fossil fuel and they do not only pollute the air but they as well cause noise pollution (Leke and Leke, 2019). Even with the high degree of environmental pollution that emanates from the above, it is less significant when put side by side to what is obtainable from industrial sources. Industries were the main sources of pollutants in Nigeria in the 80's and 90's when over 5000 industrial facilities and 10,000 small scale industries were operational on Nigerian landscape. Regularly, smoke from factory chimneys and dust are emitted into the air, untreated industrial effluent discharged directly into open drainage channels and same in industries go as far as burying chemicals and hazardous waste in their backyards and consequently threatening water quality in wells and rivers (FGN, 2012).

Ezeabasili (2013) points out that the discovery of oil in the Niger-Delta and other mineral resources like tin in Jos Plateau state and their exploration open the doors for environmental degradation in Nigeria. Many other industrial activities like timber and logging, the textile companies and oil exploration have resulted to increased water channel sedimentation, water contamination and loss of biodiversity (Ifeanyi, 2002).

The level of environmental pollution from oil exploration activities in the Niger Delta is of major concern to the government. Oil spills from underground pipelines and storage tanks are scattered around the Niger Delta region and this have resulted to the destruction and damage of a vast area of land and as well-made water bodies unproductive in these areas. According to National Oil Spill Detection and Response Agency (NOSDRA), it recorded in the first half of 2007 a sum of 424 incidents of spill involving 33,799 barrels of oil. It was recorded that 196 of these incidents were as a result of equipment or operation failure whereas 143 were caused by cabotage and then the other 85 were in contention. The government have severally postponed the deadline for flaring of gas and consequently the act of gas flaring continuous. The outcome of heat stress and acid rain continually degrades the ecosystem (FGN, 2012). It is not in doubt that Nigeria flares more gas than any other petroleum producing countries globally. According to Bassey (2008), in 2008, the country was responsible for 168 billion cubic fit of gas flared yearly around the world. According to Van Dessel, 1995; Ukegbu and Okeke, 1987 cited in Dokpesi, 2013, it is not in doubt that gas flaring emits high amount of methane gas, benzene and also carbon dioxide and all of these have climate warming properties and other soil contaminating features. Also, the regular usage of fertilisers for farming, dumping carelessly of expired and contraband chemicals and pesticides, improper disposal of waste has all led to air, water and soil pollution (FGN, 2012). Hence, we will look at a brief explanation of these types of pollution.

1) *Air Pollution:* this comprises of particles and chemicals in the air that can possibly harm or affect the health of humans, animals and plants pollutants in the air and they are in various forms such as gases solid particles or liquid droplets. The sources of these pollutants are caused from emission from factories, planes, cars or aerosol cans.

Soil pollution: this is a situation which involves the contamination of soil with abnormal concentrations of toxic substances. Soil pollution can be any chemical or contaminants that harm living organisms. The various types of soil pollution can be differentiated by the source of contaminant and its effects of the ecosystem (Rajesh et al. 2016). The various types of pollution include agricultural pollution, industrial wastes and urban activities.
Water pollution: this is the presence of excessive amounts of hazard (pollutants) in water that makes it not to be ok for drinking, cooking, bathing or other uses (Olaniran, 1995). According to Gbamanija (1998), water pollution arises from different activities such as oil spillage, combustion, animal wastes, mining, sewage leakages, littering, and heavy metal, pesticides etc. in summary water pollution is basically induced or caused by humans.

Ethical Implications of Pollution

The boomerang effects of pollution are mind blowing. The ethical implications of pollution will be analysed using Racheal Carson's standpoint. Carson in her book "Silent Spring" brought to the fore an organiscist standpoint of the environment in which every part or component of nature is mutually inter-connected in a symbiotic relationship through food chain. As a result of this, she perceived environmental pollution as actions that are self-destructive. She states that humans "seems to be going farther and farther into more experiments for the destruction of himself and his world". According to Carson (1962), pollutions that are as a result of science and technology, she feared, was moving on a trajectory than human kinds sense of moral responsibility. In her exact words:

The most alarming of all man's assaults upon the environment is the contamination of air, earth, rivers and sea with dangerous and even lethal materials. The pollution is for the most part irrecoverable; the chain of evil it initiates not only in the world that supports life but in living tissues is for the most part irreversible. (Carson, 1962)

She frowned and put forward an argument that the pollution of the environment by the profligate use of toxic chemical was the highest act of human hubris, a product of ecological ignorance and economic greed. She also accused the government of their insensitivity to this issue because of economic gains. Hence, applying Carson's views to the issue of pollution in Nigeria, the government is advised to sincerely and as well be actively involved in the fight against environmental pollution in Nigeria and this could be achieved by enforcing extant laws. Conclusively, Carson quoted Albert Schweitzer who wrote that "a man hardly even recognizes the devils of his own creation" (1962).

Drought and Desertification

Drought is one of the major causes of desertification. The inability to have a precise objective and direct definition of drought has been one of the key hurdles to the study of drought. As a result of this, it is pertinent to be conscious that various definitions might results to various conclusions with respect to the drought phenomenon. For example, if the definition is based on the amount of rainfall, it could be that the rainfall statistic summarized over a calendar year shows no drought, whereas the moisture supply in the growing season does. Relating to food security, drought could be defined as a phenomenon that occurs naturally (sometimes as a result of human activities) that consistently takes place over a period of time, in an area such that precipitation is obviously below normal recorded levels, reducing the quality of land productive systems and consequently low agricultural outputs (Olagunju, 2015). It is pertinent, however, to buttress that since drought affects several areas in the society, it is therefore important to have various definitions (Willute and Glantz, 1985). The very issue under study, the data availability and the climatic and regional attributes are among the factors influencing the choice of event definition (Olagunju, 2015). The following requirement can be used to define drought; meteorological, agricultural, hydrological and socio-economic requirement. From the meteorological view it happens only when precipitation level fall below the average long-term recorded level. The agricultural happens when soil moisture is not enough to meet the needs of agricultural crops at a certain time. The hydrological happens when there is a deficiency of water supply as a result of reduction of surface and subsurface water (Olagunju, 2015). Lastly, the socio-economic is a type of drought that is linked with human activities it occurs when these activities are impaired as a result of impaired precipitation (Olagunju, 2015).

The word "desertification" is connected to the word "desert". According to Hook (2008), the word desert is an area having less than 254 mm/10in of precipitation yearly, and that the evaporation levels they show goes beyond this amount. For Bellamy (2007), a desert is, "any area in which few forms of life can exist because of lack of water, permanent frost, or absence of soil. Continuing Bellamy opines that "a biome where evaporation exceeds precipitation for whatever cause with consequent paucity or vegetation less than 25cm of the rain will produce a desert in almost any temperature range. Such ecosystem has relatively little thorny plants and little number of animals. It has scattered settlement near the water (2007). Desertification could be defined as the process of desert encroaching and moving into place that were not deserts or areas that are regularly considered more habitable and productive. It can also be defined as expansion of deserts due to human activity. (Bellamy, 2007). According to the United Nations (2012 art 1), desertification is "land degradation in arid, semi-arid and dry sub humid areas resulting from different factors, including climatic variations and human activities. Obviously, there are several definitions of desertification. Ambalam (2014) citing Darkoh points out that the term desertification was coined by the French scientist and explorer Louis Lavauden in 1927, and mostly used by the French forester Andre Aubreville. According to Mark (2016), the issue of desertification is a problem for philosophy for every aspect of the environmental problem raises basic questions in moral philosophy or ethics. Desertification can be said to be an advanced stage of land degradation or a situation where soil has lost part of its capacity to aid human communities and the ecosystem at large.

The problem of desertification in Nigeria is a problem that is predominant in the northern part of Nigeria. This problem is a serious challenge and threat facing sustainable development in Northern Nigeria. This problem brings about a boomerang effect on the health of humans, economic activity, natural resources, food security, physical infrastructure and the environment, hence, national and global security is also affected by desertification (United Nations economic and social council, 2007).

There are several factors that causes desertification and these includes Drought, anthropocentric activities of human such as deforestation, overgrazing, bush burning, bad irrigation practices etc. one major factor that exacerbates desertification is poverty due to the continual exploitation of natural resources beyond the limits of sustainability (Asiru and Unekwu, 2017)

Causes of desertification

The rate at which forest is been depleted is alarming due to the high demand for timber used for domestic purposes as well as for export. The indiscriminate and illegal felling of trees is a common practice in Nigeria and when this is done without any form of replacement it can easily leads to desertification. Industrialization is another major contributor to forest depletion. When industries are been built an area of land is cleared to make ready the place for the construction of structure that will be used (Asiru and Unekwu, 2017).

Overgrazing: this occurs in places which socio-economic viability depends mainly on extrinsic system of animal husbandry. Nigeria's livestock economy gets much support from the country's dry land, which host about 90% of the cattle population, approximately two-thirds of the goats and sheep and almost every horses, camels and donkeys (Olagunju, 2015). Overgrazing takes away the vegetation cover that protects soil from erosion (UNCCD, 2011 and degrades natural vegetation that brings about desertification and decrease in the quality of rangelands). From 1950 to 2006, the Nigerian livestock population grew from 6 to 66million. Consequently, the forage needs of livestock went beyond the carriage capacity of its grass lands (Lester, 2006).

Bush burning: the practices of bush burning in agriculture and fire-hunting as well is a major cause of desertification in northern Nigeria. As a result of low humidity and very dry harmattan wind in the northern part of Nigeria. There is always a light probability of incidence of bush fires every year dry

season. The regeneration of the vegetation is at stake when all this happens regularly. Hence the soil is exposed to erosion and furthermore becomes degraded (Olagunju, 2015).

Bad irrigation practices: irrigation which is more like the artificial supply of water to supplement is a very important means to add to food production and to make crops accessible all through the year if done properly. The irrigation system is a very common practice in northern Nigeria. There are several irrigation projects in Nigeria today with various challenges. All this gingered the government to halt every irrigation project (Olagunju, 2015).

Impacts of desertification

The boomerang effects of desertification are far-reaching and enormous. Every area of human lives is either directly or indirectly impacted anywhere the phenomenon exists. It cuts across food insecurity, water security and social economic hardship to political interest (Olagunju, 2015). These impacts are

- (a) Ecological impacts
- (b) Health impacts
- (c) Geo-chemical impacts
- (d) Hydrological impacts
- (e) Socio-economic impacts

(a) *Ecological impacts:* according to Olagunju (2015), an environment is ecologically sustainable only when it conserves biological diversity and the life supporting systems for present generation use without compromising its use by the future generation. Continuing Olagunju (2015), desertification has brought about alteration of the ecosystems in the arid and semi-arid zones, which affects the abundance, habitat, distribution, habitat composition and relationships in the communities of living organisms. The Ecological impacts are;

- (i) Habitat destruction and biodiversity
- (ii) Changes in phrenology

(b) *Health impacts:* according to W.H.O (2003), health is the complete state of physical, mental and social well-being of an individual without necessarily the mere absence of disease. According to Olagunju (2015), desertification can impact on public health through increased heat waves which may result to skin cancer, vector-borne disease and loss of plants of medicinal importance.

(c) *Geo-chemical impacts:* the impact of desertification is not only on the biological environment but also the chemical and geological environments are also distorted. The geo-chemical effects include;

(i) Global warning

(ii) Increased erosion

- (iii) Soil Stalinization.
- (d) *Hydrological impacts:* desertification has also impacted on the hydrology of arid zones. These impacts include;
- (i) Reduced water supply and over-exploitation of ground water (Olagunju, 2015).
- (e) Socio-economic impacts: the socio-economic impacts are enormous they include;
- (i) Reduced agricultural productivity and food insecurity.
- (ii) Economic loss and reduced economic growth.
- (iii) Migration
- (iv) Resource use conflict
- (v) Unemployment etc. (Olagunju, 2015).

Ethical Implication of Desertification

Using the work of Aldo Leopold to make my point clear, Leopold in his hand Ethic puts forward an argument that man's relationship with the land is basically an ethical one implying privileges and responsibilities. According to him, the Land Ethic simply merges the scope of community to include soils, waters, plants, and animals.

According to Ezedike (2020), Leopold envisioned an expanding circle of morality that may one day lead us to see ourselves as eco-citizens of the "Land Community" instead of been conquerors of it. Leopold further campaigned for the cultivation of ecological conscience that will make us interact with other members of the land community as members of one moral community. Leopold stated that "Obligations have no meaning without conscience, and the problem we face is the extension of the social conscience from people to land" (Leopold, 1970).

The central message of Leopold's Land Ethic is that "a thing is right when it tends to preserve the integrity, stability and beauty of the biotic community and is wrong when it tends otherwise". Looking at this position of Leopold and applying it as yardstick to the issue of desertification one will obviously condemn the anthropocentric activities of Nigerians which is said to be a major cause of desertification in the Northern Part of Nigeria.

Waste

The disposal of solid waste is one of the environmental issues that the government is facing. As at the year 2000, it was approximated that the Lagos metropolis alone was generating about 998,081 tonnes of solid waste per year. Osibanjo (2008) observes that the sum of domestic waste yearly in Nigeria is approximately 63 million tonnes (0.45ka/capital/annum). As a result of amount of waste urban administrators are overwhelmed and hence have issues on how to go about the evacuation and disposal of waste. In almost every part of Nigeria there is high level of indiscriminate disposal of waste by individuals such that solid waste dump dots the urban landscape. Osibanjo (2008) observes that in Nigeria, only within 30-50% of waste is collected. Obviously, several urban areas in Nigeria do not have effective system of collection of refuse. Consequently, several urban households involve in open dumping of refuse, whereas just a few involve private refuse collectors or resort to burning and burying of solid waste. In few urban areas, the common arrangement is that waste management authorities usually collect refuse from households and as well public containers frequently (FGN, 2012). The issue of waste is worsened by some factors like (i) indiscriminate dumping of waste instead of waste management; (ii) unplanned sitting of waste dumps (iii) prevalence of non-biodegradable materials like plastic bags and containers is waste material (iv) widespread sewage leakages and (v) increasing dumping of e-waste and medical waste in the country (FGN, 2012).

Waste management

This is a process that includes the collection, transportation and recycling or disposal of waste. It involves management process and resources that make possible the adequate handling of waste production. The management and organisation of all these resources needs servicing of the waste transport trucks and the disposal equipment to enable them follow strictly environmental directives as well as health codes (Sotonye, 2019). Continuing Sotonye observes that the major reason of waste management is to by all means avoid the boomerang effects of waste on human health and the environment. Waste material are in different forms which are; liquid, gaseous, solid and radioactive form of matter. Methods of waste management includes; (i) dumping (ii) recycling (iii) collection and transportation and (iv) creation of awareness.

- (i) *Dumping method:* this method is the most used method. It includes landfill and incineration.
- (ii) *Recycling method*: this is used mainly to waste materials that are organic in nature.
- (iii) *Collection and transportation:* this process is used in organized areas where waste are well packaged and picked up by waste managers.
- (iv) *Creation of awareness:* this is very pertinent for the persistence of the security of the humankind and global health (Kio and Deker, 2014).

Effects of Waste

The effects of waste cannot be overemphasized thus the following can be seen as the effects of waste in Nigeria (i) environmental effects (ii) health effects (iii) economic effects (iv) social effects.

(i) *Environmental effects:* man is a member of earth's community (environment) and this same environment is what man depends on for sustenance. The pollution from waste results to serious issues for both humans and animals. Other effects include the depletion of the ozone layer top. The area where these wastes are been disposed are also endangered areas, consequently, it is only when waste is properly managed that its effects can be controlled.

(ii) *Health effects:* it is pertinent to state clearly that the health effect of poorly managed waste are legion. The effects of this comes with different types of sickness like irritation of the nose/throat, chest pain, blood disorder, convulsion, anaemia, lung cancer, skin burn and even death; obviously it is the environmental effects that leads to the health effects.

(iii) *Economic effects:* businesses in environment or areas around or close to dumpsites do not strive and many involved end up losing their customers as well get low patronage as a result of refuse around their business area. The smell from such area chases customers away thus making them look elsewhere to buy the goods they need.

(iv) *Social effects*: there are several cases of persons that reside around dumpsite and such persons are usually seen as dirty persons whereas they may not be. Some persons too that live around such areas find it difficult to invite friends to their homes in other not to be categorized as been dirty (Sotonye, 2019).

Ethical Implication for Poor Waste Disposal

The issues of waste disposal have grave effects on the environment. We will be applying the environmental virtue ethics to analyse these issues. The primary question for virtue ethics is "what sort of person should I become"? what virtue ethics does is to look at those traits of character that makes a person good and then seeks to promote distinguished individuals who will act rightly out of a spontaneous goodness which at the long run inspires others.

Consequently, the moral life is a matter of trying to ascertain or understand the kind of people we are supposed to be and of attending to the development of character within our communities and ourselves. (Sotonye, 2019). Continuing, Sotonye observes that understanding of the traditional virtue ethics has set the pace for understanding environmental virtue ethics. Notably, we must have to develop the right attitude and disposition in our relations with the environment. Additionally, the environmentally virtuous person is open to respond emotionally as well as through action to the environment in a good way. Sandler see environmental virtue as follow;

Environmental virtue is not merely instrumentally valuable in itself. It is life affirming and life enhancing. Those who possess it are better off than those who do not for they are able to find reward, satisfaction and comfort from their relationship with nature; and it is their character, their capacity to appreciate, respect and love nature that opens them to these benefits. To those who are receptive to it, nature is a source of joy, peace, renewal and self-knowledge (Sandler, et al. 2005).

In summary, the emphasis here is the concept of virtue. Hence, if doing good is habitual it therefore means the person possesses practical wisdom because he or she is a virtuous person. In other word, this individual knows what to do at every point in time when he is confronted with issues of two extremes. Furthermore, applying this to poor waste disposal in Nigeria, we will obviously see that if everyone or person involved in the process of waste (individuals and industries) are virtuous persons, there will be no difficulty or problem in doing what is right to assist in waste management and control. In other words, virtuous persons will easily obey extant environmental laws of Nigeria consequently keeping the environment clean and free from pollution.

Conclusion

This work looked at some major ethical issues that erupted as a result of the degradation of Nigeria's environment. The environmental issues looked at include drought and desertification, environmental pollution and waste. The work exposes the causes, impacts and the ethical implications of these issues and that these issues are part of what is degrading the environment in Nigeria. Hence, one will be correct to say that it is basically human unethical relations with the natural environment in Nigeria that is degrading the environment. In conclusion, the work suggests that the choice and activities of human beings as moral agents need to be continually subject to moral evaluation in other to uphold the ethical stability that have to exist for appropriate flourishing of life.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorshipand/or publication of this article.

Funding

The authors received no financial support for the research, authorship and/or publication of this article.

References

- Akinola, B., Ekpo, E. & Haruna, I. (2012). Poverty eradication: Panacea for environmental sustainability in Nigeria. Continental Journal of Environmental Sciences 6(3), 42-47.
- Ambalam, K. (2014). United Nations Convention to Combat Desertification: Issues and challenges. Retrieved February 16, 2016, from http://www.e-ir.info/2014/04/30/united-nationsconvention-to-combat-desertification-issuesand-challenges/
- Asiru, M. A. &Unekwu, H.A. (2017). Greening the desert areas of northern Nigeria: A practical approach to Food Security. *Innovare Journal of Sciences*. Vol 5, Issue 6.
- Bassey, N. (2008). Gas Flaring: Assaulting communities, jeopardizing the World. A paper presented at the national environmental consultation hosted by the Environmental Rights Action in conjunction with the Federal Ministry of Environment, Abuja.10-11 December.
- Bassey, S.A, & Leonard, N. (2018). "Environmental ethics: From philosophy to movement." Journal Bulletin Social-Economic and Humanitarian Research. Pg. 39.
- Becker, Gerhold K. (2009). "Je suis le Grand Tout: Respect for nature in the age of environmental responsibility" in Environmental Ethics: CulturalPerspectives,ed. King-TakIp. New York: Amsterdam.
- Bellamy, P. (2007). Academic's dictionary of the environment. New Delhi: Academic Publishers.
- Big-Alabo, S. (2019). The garden city now a tattered city: Effects and ethical implications of poor waste management in Port Harcourt, Rivers State. *International Journal of Geography Information System*. Vol.14 (4).
- Carson, R. (2000). Silent Spring. England: Penguin Books.
- Dalai, L. (1990). Foreword to Dharma Gaia: A harvest of essays in Buddhism and ecology. London: Thames and Hudson Ltd.
- Dokpesi, A. (2013). Poverty and government in Nigeria: Breaking the vicious circle. Sacha Journal of Environmental Studies 3(1): 81-92.
- Ezeabasili, N. (2009). Legal mechanisms for achieving environmental sustainability in Nigeria. African Research Review, 3 (2): 369-380.
- Ezedike, E.U. (2020). Environmental ethics and sustainability: An introduction to environmental philosophy. Nigeria: University of Port Harcourt Press.
- Gbamanja S. P. T., (1998). STAN. Journal Environmental Education Series (2)43.
- Hook, P. (2008). The little book of environmental principles. London: New Holland Publishers (UK) Ltd.

- Ifeanyi, E. (2002). Environmental impact assessment as a tool for sustainable development: The Nigerian experience. *Proceedings of the FIG XXII International Congress*, April 19-26, Washington D.C., USA 1-13.
- Jande, G.G. (2005). Legal mechanisms for the control of pollution on the high seas. *African Journal of Environmental Law and Development Studies*. Vol 1. Pp.1 13.
- Kio.L, Dekor J.B (2014). Port Harcourt, the garden city: A garden of resident's nightmare. *World Environment*, 4(3): 111-120, DOI:10.5923/j.env.20140403.03.
- Leke, J.O. & Leke, E. N. (2019). Environmental sustainability and development in Nigeria: Beyond the rhetoric of governance. *International Journal of Development and Management Review*, Vol. 14 No. 1.
- Leopold, A. (1949). A sand country almanac and sketches here and there, illus. Charles W. Schwartz. New York: Oxford University Press, vii.

Leopold, A. (1949). A sand country almanac and sketches here and there, illus. Charles W. Schwartz. New York: Oxford University Press, vii.

- Lester, R.B. (2006). The Earth is shrinking: Advancing deserts and rising seas squeezing civilization. *Earth Policy Institute*. www.earthpolicy.org/update.
- Ogar, J. N, & Bassey, S.A. (2019). African environmental ethics. Journal for Social Sciences 3.1. Pg. 71-81.
- Ogunleye, S. (2002). "Environmental protection: A requisite in Nigeria for the new millennium."In democracy and sustainable development in Nigeria, edited by AkinjideOsuntokun. Lagos: Friederich Ebert Stiftung.
- Olagunju, T. E. (2015). Drought, desertification and the Nigerian environment: A review. *Journal of Ecology and the Natural Environment*. Vol 7(7), pp.196-204.
- Olaniran N.S. (1995). Environment and health: An introduction, in Olaniran, N.S. et.al (Ed) *Environment and Health*. Lagos. Macmillan Nig. Pub. Co for NCF, 34-151.0
- Osibanjo, O. (2008). Pollution and waste: Issues and management strategies. Paper Presented at the First National Summit on the Environment, Abuja, Nigeria.
- Owens Ibie, N. (2002). "Governance, development and environmental awareness in Nigeria."In democracy and sustainable development in Nigeria, edited by AkinjideOsuntokun. Lagos: Friederich Ebert Stiftung.

Pope Francis. (2015). Eneydicallaudato Si': On the care for our common home. Nigeria: St. Paul publication.

United Nations Economic and Social Council (2007). Africa review report on drought and desertification. Fifth meeting of the Africa Committee on Sustainable Development (ACSD-5) Regional Implementation Meeting (RIM) for CSD-16 Addis Ababa.

Van Dessel, J.P. (1995). Internal Position Paper: The environmental situation in the Niger Delta, (February).

Wilhite, D.A. & Glantz, M.H. (1985). Understanding the drought phenomenon: The role of definitions. Water Int. 10 (3):111-120. http://dx.doi.org/10.1080/02508068508686328.