



The Implications of Environmental Abuse on Health and Socio – Economic wellbeing in Developing Countries: A focus on Pollution and Deforestation

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ABSTRACT

The earth produces clean air, nourishing food, fresh water and vegetation. However, environmental abuse of these natural processes is increasingly causing serious health risk and socio-economic challenges. This study examines the implications of environmental abuse on health and socio-economic wellbeing in developing countries focusing on pollution and deforestation. Tragedy of the common theory was used in analyzing the study. The study found that environmental abuse causes climate change which continue to increase threats to human health, impacts on thermal stress, death, injury, floods, and storm and indirectly through change in the ranges of disease vectors such as mosquitoes, water-borne pathogens, biodiversity deflection, erosion, water quality, air quality, and food availability and quality. The study also revealed that environmental abuse such as deforestation, wide spread hunting, air pollution and water pollution are the disastrous consequences or commonest effects associated with drought, desertification, frequent cases of floods, starvation as well as ill-health such as respiratory illness, heart disease, lung cancer, cholera, typhoid fever, food contamination and high rate of warm infection. The study recommended that there should be a coordinate global approach aimed at cutting down greenhouse gas. More so, there should capacity building to integrate climate change and its impacts into development planning involving local communities, raising public awareness and education on the implications of environmental abuse on the health socio-economic wellbeing. The study concludes that scientific attention, effective implementation of law against environmental abuse, and excessive campaign against environmental abuse should be the corner stone in eradicating all forms of pollutions and deforestation in developing countries.

Keywords: Implications, Environmental Abuse, Health, Socio-economic wellbeing, Developing Countries, Pollution, Deforestation

INTRODUCTION

Environmental abuse are issues that are causing worldwide concern in recent times. This is because the environmental problem caused by unbridled development has effects far beyond the places where they are created (Schaefer, 2008: Situ, 2000: Landsberge, 1970). In many parts of developing countries of the world, the environment has been affected adversely partly due to natural disasters and also as a result of human activity. There is no doubt that human activity is putting significant stress on the earth's life support system thereby creating serious environmental problems. Incidences of drought, soil erosion, desertification, deforestation, flooding, siltation, famine and food security problems, military activities and pollutions from our industries are issues of concern. Our agricultural, economic and industrial activities have been largely responsible for the destruction of rain forest. Agricultural expansion, timber or mineral exploitation, unsustainable hunting of wildlife, cases of air, water and soil pollution from industrial toxic wastes, pollution of sea, rivers, lakes and oceans as well as unsustainable hunting of marine life are arduous of continued human activity on the environment, mining and urbanization, represent man's greatest impact in the environment (Steinberge, 2000). The emission of various green-house gases by human activities has been held responsible for



the recent increase in average global temperature, the so-called “global warming” or greenhouse effect (Giddens, 2010). The hazardous consequences of this on the health and socio-economic wellbeing is that increase in green-house gases will raise global temperature which will result in a raise in sea level as oceans warm and glaciers melt, thereby threatening agricultural productivity (a major source of economy in developing countries) and human settlements. However, for this study, pollution and deforestation will be considered as forms of environmental abuse and their implications on health and socio-economic wellbeing will be examined within the context of developing countries.

Conceptual Clarity

For the purpose of this study, the following concepts would be clarified:

Environment and Environmental Abuse: Environment can be defined as the surrounding external conditions within which man or any organism lives. According to Pender (1987), environment is the social, cultural and physical context in which the life course unfolds. The environment can be manipulated by the individual to create a positive context of cues and facilitators for health enhancing behaviours. Human beings interact with their environment and shape it to meet their needs and goals. Man is surrounded by both natural and man-made elements. The two types of environment include: physical and social environment. Physical environment are those elements that naturally surround man. Its component include climate, vegetation, relief (lowlands and highlands found in a place), water bodies and mineral resources. While the social environment refers to other human beings found in the society (other people found around man). These other people can influence an individual by their behaviours, beliefs, attitudes, activities or even by the way they dress the food they eat, the furniture and utensils they keep in their homes. According to Charles et al (2011), social environment involves the conditions, circumstances and human interactions, which impinge on an act to influence the behavior of the individual. It encompasses the type of work a person does, the type of home man lives, the amount of money available at a time, the social norms and laws that must be obeyed, all individuals, groups, organizations and systems with which a person comes into contact (Charles, 2011). Components of social environment include religious institution, political institution, legal institution, education and economics. Man is at the center of the two environments. He is being influenced by the environment, and he also influences the environment by trying to control the environment. Environment, generally, is quite encompassing and includes both land and minerals in the rocks, the living organisms and life processes, water and aquatic life, etc. However, man depends on the resources in the environment to provide for his sustenance and meet his basic needs such as air, food, water, shelter and clothing. Unfortunately, in the process of obtaining and using these environmental resources, man may pollute or misuse or abuse the environment and consequently reduce the capacity of the environment to further provide the resources that he needs or may even cause damage to man’s health. Thus, “**the term environmental abuse** refers to several varied types of human activities, from dirtying the air to depleting irreplaceable resources” (Neubeck, 1979, p.221). Environmental abuse, especially air and water pollution poses enormous challenge and are thought to be contributors to global warming.



Developing Countries: The term developing countries is used here to refer to countries that are not fully developed from an economic and quality of life standpoint or countries whose state of economic development is characterized by low national income, high rate illiteracy, disease and population growth, unemployment, poverty, dependence on commodity exports and unstable government. Such words like “third world”, “less developed countries”, “under-developed countries”, “periphery nations”, “developing world”, “nonaligned nations”, and “developing nations” are sometimes used interchangeable.

The Concept of Health: Health means different things to different people and different disciplines since it defies a precise definition that can command a general acceptance. Etobe (2005) confirms that this definitional problem has led some people to defining health as the opposite of disease or illness while others have understood health to mean living. Yet, to others health means more than not being sick. For Pender (2011), health is the actualization of inherent and acquired human potentials: through goal-directed behavior, competent self-care, and satisfying relationships with others, while adjustments are made as needed to maintain structural integrity and harmony with the environment. Health is an evolving life expectancy. From the philosophical and economic point of view, health is defined simply as wealth (i.e. health is defined based on its overt economic performance or production of wealth). This definition is correct because, it is when one is healthy that he/she can be engaged in meaningful economic production leading to an overt performance or output. When you are healthy, you happier and do better work. In sociological and psychological parlance, a “healthy individual is defined as a person who is able to have a harmonious functioning social and psychologically. In this perspective, health is seen in the light of a person’s ability to function harmoniously, psychologically and socially. Here, health is defined based on a person’s ability to balance the intra-psychic functioning, and also relate well with one another. This explains while a quarrelsome or deviant individual may be labelled as unhealthy sine he cannot harmoniously function intra-psychically or relate socially with others in an interactive process. Health helps you to enjoy sports, play and parties. It also helps to make friends. From the medial point of view, health is defined as a condition in which all functions of body and minds are normally active. Therefore, a person of low physiological activity (i.e. passivity) in medical perspective is said to be unhealthy. Thus, the World Health Organization (WHO, 1951) defines health as a state of complete physical, mental and social wellbeing of an individual and not merely the absence of disease or infirmity. From this submission, anything that interferes or disrupts the total attainment of health is seen as a health problem. This definition acknowledged the fact that health is more than non-disease. Though, WHO’s definition has be on criticized on grounds that, it proposes an ideal rather that a measurable goal for which strategies for achievement can be devised (Etobe, 2005).

In its modified definition, WHO (1986) conceives health as the extent to which an individual or group is able, on the one hand to realize aspirations and satisfy needs, and on the other hand, to change or cope with the environment. In this context, health is seen as a resource for everyday life, and not the objective of living. It is a positive concept



emphasizing social and personal resources as well as physical capabilities. It is in line with the definitions above that Bedworth & Bedworth (1978) claims that health is the quality of physical, psychological and sociological functioning that enables us to deal adequately with ourselves and others in a variety of situations. Thus, health as a whole involves physical, mental and social well-being. The truly healthy person is sound (well) in mind and body. The Greek philosopher, Aristotle called this "*Mens Sona Mens Corpora*". This implies being sound or healthy in mind and body. Health is therefore, related to every aspect of our lives. It means complete fitness of body, soundness of mind and wholesomeness of emotions which make it possible for us to live effectively and sever our family and society. Good health enables every organ of the body to perform its functions well. The health of an individual is the health of the nation and the health of the nation is the wealth of that nation, and the wealth of the nation is the development of that nation.

Socio-Economic Wellbeing: Socio-Economic wellbeing are indicators used in determining the extent of development and good quality of life of a person in a given society or country.

Theoretical Proposition

Tragedy of the Commons Theory is used in explaining the study. The theory of the tragedy of the commons was propounded in 1833 by the Victorian economist William Forster Lloyd and developed by Garrett Hardin (1968). It assumes that within a shared – resource system (common resources collectively owned), each individual users act independently to their own self-interest and behave contrary to the common good of all users by depleting or spoiling that resource through their collective action. The word 'common' here is taken to mean any shared and unregulated resource such as atmosphere, rivers, streams, oceans, land, etc. originally, it was referred to a resource owned by a community, and no individual outside the community had any access to the resource. However, the concept is presently used when describing a problem when all persons have equal and open access (<https://en.wikipedia.org/wiki/tragedy-of-the-commons>). Hardin (1968) used an example of grazing land when describing the tragedy (adverse effects) of overpopulation. According to Investopedia (2017):

The tragedy of the common is an economic problem in which every individual tries to reap the greatest benefit from a given resource. As the demand for the resource overwhelms the supply, every individual who consumes an additional unit directly harms others who can no longer enjoy the benefits. Generally, the resource of interest is easily available to all individuals: the tragedy of the common occurs when individuals neglect the wellbeing of society in pursuit of personal gain (p.1).

The implication here is that common land yields adequate food for herd's animals and farmers. However, as long as their population increases and the resource remain unregulated, the land will be unable to support the larger population and as such each person would act in his own selfish interest and consume as much of the scarce resources as possible, making the research even harder to find (Hardin, 1968). Relatedly, open pasture used by herdsmen allows their cattle to graze and each herdsman continue to add cattle to the pasture so as to expand the amount of proceeds coming from their herds. Thus, the common tragedy is the damage done to the atmosphere that causes global



warming, climate change and scarcity of resources shared by all and as the resources become scarcer competition over the resources increases leading to conflict (Audu, 2013).

Implications of Environmental Abuse on Health and Socio-economic Wellbeing in Developing Countries

Excessive consumption and pollution practices have produced profound climatic changes that impact on the environment and the health of human beings. Environmental degradation and pollution and their disastrous consequences of drought, desertification, floods, starvation and disease epidemics are some of the commonest effects of environmental abuse on health and wellbeing (Hannigan, 1995; Meremikwu, 1991). Air pollution from industrial machines, automobile and bush fire are responsible for many episodes of respiratory illness and may also worsen heart diseases. Such health problems as common cold, chronic bronchitis, bronchial asthma and lung cancer are associated with environmental pollution (Meremikwu, 1999). Pollution of domestic or industrial water supply by bacterial may result in epidemic of such diseases as cholera and typhoid fever. These diseases and different types of food poisoning may also follow food contamination, especially where poor personal/food hygiene co-exist with poor water supply. Improper disposal of human fecal matter would in addition to these diseases lead to high rate of worm infections in the developing countries.

Contamination of unprotected natural bodies of water (e.g. streams and swamp) with the urine of affected persons is the principal mode of transmission of schistosomiasis. Guinea worm, another parasitic disease common in many Nigerian rural communities is transmitted when an affected person step into a body of water meant for domestic use. Drinking the water from such an infected stream without filtering or boiling will result to guinea worm infection. Another implication of environmental misuse on health and socio-economic wellbeing is the fact that dirty drains in most urban areas in the least developed countries breed mosquitoes that transmit malaria. Poor solid waste disposal in the urban and rural areas alike encourage breeding of mosquitoes, flies and rodents which transmit diseases. The following types of environmental abuse and their implications on health and wellbeing will be examined as follows:

Pollution: This refers to an undesirable change in the physical, chemical or biological characteristics of air, water or land that will be or may be harmful to human beings and other life forms, industrial processes, living conditions and cultural asset. It is a disorder within an environment and is the by-product of energy conversion and the use of resources. Pollutants are substances which contaminate the environment. According to the World Health Organization up to 700,000 premature deaths per year could be prevented if pollutants were brought down to safer levels. Pollution depends on which component of the earth is contaminated. It could be air, water, land or vegetation that is affected. Thus, it is possible to make a distinction between two types of pollution namely: air pollution and water pollution.



Air Pollution: This refers to the contamination of the air we breathe. Contamination turns the odourless air into hazy smelling air. Pollution occurs when the natural state of the atmosphere is being altered by man when he injects contaminants into the air. "Worldwide, more than 1 billion people are exposed to potentially health damaging levels of air pollution" (Schaefer, 2008, p.515). Unfortunately, in many places, smog and polluted air are viewed as normal. According to Neubeck (1979):

Air is constantly being recycled and cleansed of contaminants through a complex process involving wind, rain, and changes in the temperature. Air pollution occurs when so many contaminants are released into the atmosphere that the recycling and cleaning functions begin to breakdown (p.222).

Air pollution may be caused by toxic emissions into the atmosphere. **Air pollution** also has its own implications. Air pollution is a major problem coming mostly from cars, buses trucks and industries. It has been reported that living in some developing countries like Mexico and China is equivalent to smoking 40 sticks of cigarettes a day.

Types of Air Pollutions

Giddens distinguished two types of air pollutions: Outdoor pollutions and indoor pollutions.

Outdoor Pollutions: This type of pollution is produced mainly by industrial pollutants and automobile emissions. There was a general conception that this type of pollution affects only industrialized countries due to their greater numbers of factories and motorized vehicles. However, developing countries are not left out (Giddens, 2010).

Indoor Pollution: This type of pollution is caused by burning fuels in the home for heating and cooking. This type of pollution is associated with developing countries. According to Giddens (2010), more than 90 percent of death linked to air pollution occurs in the developing world. This is because many of the fuel that are burned by people in developing countries, such as wood and dung, are not as clean as modern fuels such as kerosene and propane.

Causes of Air Pollution

Air pollution in many countries may be caused primarily by the widespread burning of coal, a fossil fuel which emits sulphur dioxide and thick black smoke into the atmosphere (Giddens, 2010). Coal is widely (extensively) used to heat homes and is a source of power in many factories. Urban air pollution is caused primarily by emissions from automobiles and secondarily by emissions from electric power plants and heavy industries (Schaefer, 2008). Vehicle emissions are seriously harmful to the atmosphere. Giddens (2010) confirms that "cars, which account for some 80 percent of travel in Europe, have a particularly harmful impact on the environment". Other factors are caused by (i) **natural resources:** which include natural decay processes, winds and volcanic eruption, (ii) **lomdistroa** and among processes example, cement factory (iii) **Fuel combustion** (iv) and **Waste disposal**.

Implications of Air Pollution

Air pollution has enormous effects not only on the health of human and animal populations but also on the ozone layer, global climate, greenhouse effect, and acid rain. Air pollution



has been linked to a number of health problems among humans, including respiratory difficulties, cancers and lung diseases. Smog not only limits visibility, it can lead to health problems as uncomfortable as eye irritation (Giddens, 2010: Schaefer, 2008). According to Neubeck (1979):

Medical researchers have found a correspondence between air pollution and coughing, colds, and other respiratory diseases, lung cancer, cardiovascular diseases, infant mortality rates, death rates among the elderly, and the speed of recovery from illness (p.222).

Air pollution is very harmful to man's health; the pollutants emitted during the cause of oil spillage can irritate people's lungs and even create more problems for people with asthma and bronchitis. It can impair mental functions and aggravate cardiovascular or heart diseases. Acute exposure to hydroid carbons cause eyes, nose and throat irritation while chronic exposures causes cancer. For instance, workers on road construction industry cement asbestos breath toxic air and are vulnerable (prone) to health hazard. Air pollution also has a damaging impact on other element of ecosystem. Giddens (2010) reveals that:

One harmful consequence of air pollution is acid rain, a phenomenon which occurs when sulphur and nitrogen oxide emissions in to one country drift across borders and produce acidic rainfalls in another. Acid rain is harmful to forest, crops and animals life, and leads to the acidification of lakes (p.164).

However, the most fundamental effect of air pollution is on the ozone layer and global climate. The consequences of ozone depression are that they could:

- (1) Increase the number of skin cancer.
- (2) Increase the number of cases of severe burn.
- (3) Damage many living organism on earth.
- (4) Cause unpredictable change in global climate.

Moreover, air pollution may be creating a greenhouse effect-that might be causing an increase in worldwide temperatures that will melt the popular ice caps. Where or when this happens, the oceans would rise an additional twenty-seven feet, causing severe flooding, thereby ushering in a new ice age (Giddens, 2010: Neubeck, 1979: Walter, 1973).

Water Pollution: This can be defined as "the contamination of water supply by elements such as toxic chemicals and minerals, pesticides or untreated sewage" (Giddens, 2010.p, 165). In fact, one of the greatest environmental problems today is water pollution. Water is almost available everywhere: on land, underground, and in the space, yet, pure fresh water is in short supply. Water pollution remains a serious problem in many parts of the world. Although, water is one of the most valuable and essential natural resources, which people throughout history depended on to fulfil their important needs like drinking, cooking, washing, irrigating crops, fishing, for navigation, sanitation, transportation, generating electricity, recreation, industrial purposes (manufacturing and processing) but it has also suffered enormously at the hands of human beings. According to Giddens (2010), water occupies $\frac{3}{4}$ of the earth's surface and constitutes up to 90% of the body cell. Good quality water is water that is clear, tasteless, colourless and free from poisonous corroding and contaminating substance and diseases-causing organism. For many years, waste



products-both human and manufactured-were dumped directly into rivers, streams, lakes, dams and oceans which have been filled with organic and inorganic chemical waste. Thus, water became polluted when substances and extraneous elements were discharged into the river resulting in change in the composition or condition that rendered the water unsafe for domestic, agricultural and industrial use.

Causes of Water Pollution

Major causes of water pollution include: domestic sewage and waste dumping into water, the use of fertilizer for agricultural purposes, the use of pesticides and insecticides, industrial affluent, erosion and siltation, petroleum exploitation, bush burning, and gas flaring, etc.

Types of Water Pollutions

Several types of water pollution have been reported. These include:

Industrial Waste: One of the major contaminants is industrial waste. According to Neubeck (1979), industry accounts for a significant percent of water pollution. Many factories discharge water containing wastes, many of which are known to be toxic, over half of the wastes come from the organic chemicals, steel, and petroleum industries.

Thermal Pollution: This is one of the most serious types of water pollution. This type of pollution is associated with electric power industry, which uses great amount of water for coolant purposes. The used water is then poured back into rivers, streams, lakes, dams and oceans, raising their temperature and adversely affecting aquatic life (Neubeck, 1979). Example of this type of pollution in Nigeria is the Kainji dam.

Municipal Waste: This also constitutes a considerable amount of water pollution. The waste generated in homes, commercial establishments, and industries remains at primitive level in most urban areas.

Agricultural Waste: This type of waste includes animals and chemical wastes. On a daily bases, animals produce high amount of organic waste, where their waste becomes highly concentrated and are imperious in natural decomposition. The elements of that waste are then seeped into underground water channels and surface waters. Similarly, the heavy use of chemicals, fertilizers and pesticides on farm areas is the same source of concern. Giddens (2010) observed that cases of water pollutions are often caused by the over use of fertilizers in agricultural area.

Land Erosion and Sediments: Water is being widely contaminated by land erosion and sediments. Oil and other hazardous substances are often (frequently) spilled by accidents or on purpose in water ways and mine drainage (especially from strip mining) fills streams and rivers with toxic metals and acids (Neubeck, 1979).

Implications of Water Pollution on Health and Socio-Economic Wellbeing

The effects of water pollution are very harmful. The high levels of bacteria that result from untreated sewage lead to a variety of water-borne diseases, such as diarrhea, dysentery, hepatitis, cholera, typhoid, guinea worm infections, bilharzia and filariasis. According to Giddens (2010), "some two billion challenges of diarrhea are caused annually by contaminated water: five million people die each year from diarrhea diseases" (p.165).



Regular dumping of waste into rivers and streams also has enormous health cause. The consequences of this assault are being felt since these toxic waste are absorbed by fish and other forms of aquatic life; the chemicals dumped often appear on human foods. In many areas, beaches have been spoiled and recreational activities disrupted. Oil and other substances dumped are thought to have implications for climate. Organic chemicals in the form of many types of pesticides, fertilizers, industrial affluent get washed into water bodies where they may kill marine or aquatic life or be absorbed by them up the food chain until they may become toxic to men. The effects of water pollutants transcend national boundaries as they are carried in streams, rivers, oceans and even by air away from source. **Control measures** may be through (i) Soil conservation to reduce sedimentations in streams and maintaining soil fertility (ii) Sewage treatment.

Noise Pollution, an associate of overcrowding, has also been found to have a very negative effect on human beings. Noise generally put people in a bad mood. Noise also makes people to narrow or loss their focus or attention (Cohen & Weinstein, 1981, Broadbent, 1971). Noise pollution is the disturbing noise with harmful impact on the activity of human or animal life. Machines and transport systems, motor vehicles engines and trains may cause noise pollution. Noise pollution is an undesirable sound that is nuisance or harmful to persons. It is the contamination of pleasant sound or any sound undesired by the recipient.

Causes of Noise Pollution: Noise pollution could be attributed to many causes including the sounds of home appliances (loudness of television, music and generator), factory and office machinery (bulldozer operators, generators, grinding engine, timber site machines, etc), air craft, boats, sirens, market noise, barking of dogs, lousy cry of babies or children, honing from taxican drivers, motor park, mechanic sites, night club music, beating of drums, noise from mining blast devices, gun shot, knockout, blacksmithing or iron bending, noise from cheering sports fans and exchange of words. Other primary causes may include; poor urban planning which gives rise to noise pollution. The situation where residential buildings are placed side-by-side with industrial building may cause noise pollution. Vehicle, air craft, prolonged exposure to laud music and industrial noise causes noise pollution.

The Implications of Noise Pollution on Health and Socio-economic Wellbeing may include: induced hearing loss or hearing impairment, hypertension, ischemic heart disease, annoyance, sleep disturbance, induced tinnitus, cardiovascular adverse effects; it creates stress, stimulates aggression and other anti-social behaviours, higher risk in developing dementia, especially among those living within 50 meters from a road. The effect of noise on people vary, because not all individuals are equally sensible to sounds. However, there is serious concern about its danger to human hearing. For instance, noise work environments may pose the threat of hearing disability. Excessive levels of noise are known to have a bearing on physiological functioning. Experiments show that noise pollution has caused the constriction of arteries, increased pulse and respiration rates, involuntary muscle reactions, and abnormal fatigue (Neubeck, 1979). More so, noise is often distracting and annoying. Extreme loud noises, such as the one created by jet



aircraft may not only interfere with the peace and comfort of a person but may cause physical damage to buildings and other structures as well as trees. Constant noises May cause stress, fatigue and irritability. Being tormented by noise not only takes the joy out of life, it can wear person down physically and emotionally. Noise pollution may provoke depression as well as organic diseases. Constant exposure to noise can affect one's personality. Excessive noise pollution can affect one's sense organs, cardiovascular system, glandular and nervous systems. It prevents people from enjoying their rest periods. It impairs or reduces one's rate of concentration and disturbs the thinking faculty. It is a high risk factor for high blood pressure.

Visual Pollution: This refers to aesthetic issue and the pollution that impairs one's ability to enjoy a vista or view. It is the whole of irregular formations, which are mostly found in natural and built environments. Visual pollution disturbs the visual areas of people by creating harmful changes in the natural environment. Visual pollution is worst when there are many signs in a smaller area (Phillips, 1996). Visibility is a measure of how far and how people can see into the distance. Examples of visual pollution include: bill boards, antennas, electric wires, building and automobiles. Causes include: an overcrowding of an area is the primary cause of visual pollution. Insensitivity of local urban administrators is another cause of visual pollution. Urban administrators sometimes lack control over what is built and assembled in public places. For instance, poorly planned buildings and transportation systems create visual pollution. The increase in high- rise building can cause adverse change to the visual and physical characteristics of a city, which reduce the readability of the city and destroy the environment. Other sources of visual pollution are: Haze due to dust and air pollution, garbage heaps and landfills, telecommunication and electric wires and poles signboards, barren lands and deforestation, house constructed with bad design, smoke spewing chimneys of factories, etc. Visual pollution can also occur when light is absorbed or scattered by pollution particulars such as sulfates, nitrates, organic carbon compounds, soot, and soil dust. Wood smoke is another contributor.

Effects: Adverse consequences of visual pollution are multiple. Effects of exposure to visual pollution include: distraction, eye fatigue, decreases in opinion diversity, and loss of identity (Schnaiberg, 1994). Visual pollution ruins the beauty of nature and cities. **It discourages tourists.** If an area has a very large amount of visual pollution, tourists might not want to go there, and this implies the loss of state revenue. Depression such as stress and anxiety may be accompanied due to bad views. High rate of crime; Crime rate is lower in areas with less visual pollution. However, crime rate often increase due to high level of visual pollution. Visual pollution causes accidents; billboards and advertisement in highway roads distract driver's attention and cause accidents. In addition, a building that is constructed entirely by glass reflects sunlight, which is dangerous for the people driving. Government can pass laws that can limit or reduce the amount of billboards along high ways. Educating people to understand the importance of beautiful surroundings, the faster change will be seen. Education will help people improve the visual environment in their communities.

Light Pollution: Photo pollution or light pollution refers to artificial light that is excessive, misdirected and obtrusive. It occurs in urban areas because of the increased number of



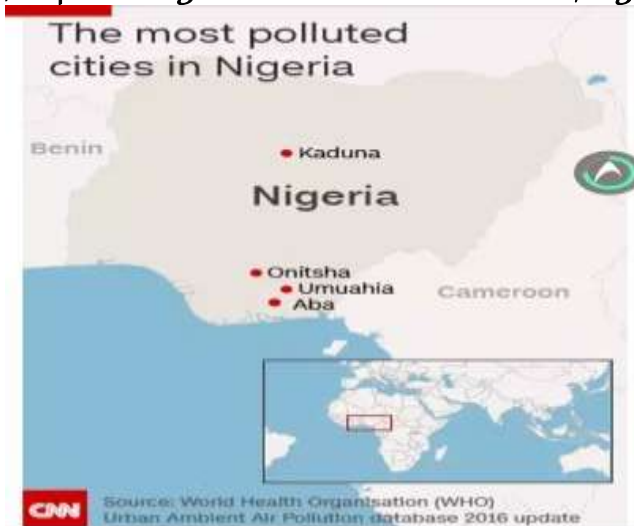
street light poles, bill boards, commercial activities and many events that take place during the night.

Map showing the most Polluted Cities of the World



Source: World Health Organization (2018)

Map showing the most Polluted Cities in Nigeria



Map showing Global Pollution Level



Deforestation. Globally, forest are being depleted at the rate of one acre per second, depriving the world of a gigantic natural storage capacity for harmful carbon dioxide. Forest are unique in their capacity to convert $C.O_2$ during photosynthesis into carbon compounds that are then stored in wood, vegetation, and soil humus, a process called "carbon sequestration". Though this natural process, the world's forests store about one trillion tons of carbon – about one – and a half times the total amount found in the



atmosphere. Deforestation, the clearing of these forests for crops and development, accounts for about 25 percent of all human – made emissions of carbon dioxide in the atmosphere. Deforestation is often accomplished by burning, contributing to as much as 10 percent of the greenhouse effect. Deforestation indicates the removal of forest and other forms of vegetative cover from a site without its replacement. According to Giddens (2010), “deforestation describes the destruction of forested land, usually through commercial logging” (p.171). Although the extent of deforestation is difficult to estimate; however, it is reported that only 13% of the world’s tropical rain forest and 10% of Nigerian rain forest are intact. Giddens (2010), observes that deforestation claimed 15 million hectares of land in the 1980s, with the largest amounts occurring in Latin America and the Caribbean (losing 7.4 million hectares) and sub-Saharan Africa (losing 4.1 million hectares). Forests are important elements of the ecosystem. They played an important role in the society generally. They help to regulate water supplies, release oxygen into the atmosphere and prevent soil erosion. In addition, forest also contributes to many people’s livelihood as sources of fuel, food, wood, oils, dyes, herbs and medicine. They are home to many of the plants and oils from which medicine is developed. Despite these contributions, “more than a third of the earth’s original forest has now disappeared (Giddens, 2010; Klinenberg, 2002).

Causes of Deforestation: forest are destroyed yearly due to logging or timber exploitation, demand for fuel wood, agricultural expansion, bush burning, over-grazing by animals, infrastructural development and unsustainable farming practices.

Effects of Deforestation: deforestation has both human and environmental costs. In terms of human costs, the socio-economic effects are quite disturbing. Deforestation causes acute shortage of fuel-wood, shortage of industrial timber, loss biodiversity and genetic resources, destruction of wildlife habitats, and decline of water-shed. In view of this, some poor communities that were previously able to sustain or supplement their livelihoods through forests will quite be unable to do so. Giddens (2010) noted that deforestation can impoverish marginal populations which rarely share in the enormous revenues generated from the granting of logging rights and sell of timber. On the environmental costs, deforestation may cause soil erosion and flood as well as droughts. According to Giddens (2010), when forests are intact, especially mountainous forest, they perform a crucial function of absorbing and recycling much of the water from forest. Once the forest are missing, rain cascades off the slopes, causing flood and then droughts.



Map showing top Ten Countries with Highest Deforestation



Map Showing Highest Deforestation Countries in World



Depletion of tropical rain forest is particularly disturbing because they cover only 7 percent of earth's surface but account for up to 80 percent of the world's plant species, most of which have not been tested for medicinal effect. Deforestation also results in the loss of top soil because the cleared land is quick to erode. Covering huge stretches of land with concrete buildings and roads also increases erosion because there is nowhere for rain water to go but onto undeveloped land. An estimated 26 billion tons of top soil is being lost per year, transforming arable land into desert. The process of desertification can be seen in many parts of the world, especially sub-Saharan Africa (Kimmel & Aronson, 2009). Desertification, combined with the increased water use necessary for an increased population, means that the world is quickly losing ground water – water tables are falling in large swaths of many countries around the world. Some of the most disturbing phenomena relating to the continued disappearance (deforestation) of the world's forest are their contributions to global warming or greenhouse effects, and the endangerment and extinction of species. Over population is a fundamental problem caused by deforestation.



The United National Environmental Programme (1992) identified unsustainable high rates of human population growth and natural resources consumption as the first of the sixth fundamental causes of biodiversity. A final natural resources that we are quickly depleting is animal and plant species. Species are becoming extinct at a rate 1,000 per day, usually as their natural environment is destroyed and they cannot adapt to their new surroundings. Animal species are disappearing because of rapid deforestation. Wild animal species have become extinct as a result of changes in their natural habit. These animals include: lions, tigers, leopard, elephant and gorillas. As a result of heavy hunting for game and partly because of the widespread destruction of Nigeria's rain-forests, a lot of our wildlife have abandoned us and fled to neighbouring Cameroon and the Republic of Benin for sanctuary (NEST, 1991). **Solution to deforestation** will depend on the conservation of existing forests through sustainable agricultural practices, controlled and limited logging, tree planting and reforestation. Reduction in fuel-wood consumption, control of grazing practices, conservation education, creation of National parks and Buffer zones, legislation, and adaptation of agro-forest practices. There is need, therefore, to conserve our plant and animal species through conservation education, selective killing of wildlife, control of bush burning and creation of national parks and forest resources.

CONCLUSION AND RECOMMENDATIONS

It flows from the realization that there is a strong or significant relationship between environmental abuse and ill-health and socio-economic wellbeing. This study illustrate the fact that health and socio-economic wellbeing can only exist in a well-preserved and properly managed environment. The various environmental problems arising from the impact or implications of human activities on the environment are the manifestations of the disharmony between development and environmental abuse. Environmental problems of various types and intensities have emerged to threaten man's health and socio-economic well-being and the natural environment which serves as his life support system. Development can only be sustained if the environment is protected and managed. There is therefore urgent need for scientific attention, effective implementation of law against environmental abuse and excessive campaigns against environmental abuse should be the corner-stone in eradicating all forms of abuse on the environment including pollutions and deforestation in developing countries. From the foregoing, the following recommendations are made:

1. Government should pass laws that can limit all forms of environmental abuse including pollution and deforestation.
2. There should be a coordinated global approach aimed at cutting down or reducing air pollution and deforestation.
3. Capacity building should be developed in order to raise public awareness and education of communities on the hazardous implications of environmental abuse on the health and socio-economic wellbeing.



REFERENCES

- Audu, S.D. (2013). Conflict among Farmers and Pastoralist in Northern Nigeria Induced by Fresh Water Scarcity. *Journal of Developing Country Studies*. Vol.3, No.12, pp.25 – 32.
- Bedworth, D.A., & Bedworth, A.E. (1978). *Dictionary of Health Education*. Oxford: Oxford University Press.
- Broadbent, D.E. (1979). Human Performance and Noise. In C. Harris (Ed), *Handbook of Noise Control*. New York: McGraw – Hill.
- Broadbent, D.E. (1981). The Effects of Moderate Levels of Noise on Human Performance. In J.V. Tobias & E.D. Schubert (Eds), *Hearing Research and Theory*. New York: Academic Press.
- Charles, J.O, Charles, A.O, Ikoh, M.O., & Iyamba, E.I. (2011). *Human Environment, Behaviour and Child Welfare: A Social Work Approach*. Calabar: University of Calabar Press.
- Cohen, S., & Weinstein, N. (1981). Non-auditory Effects of Noise on Behaviour and Health. *Journal of Issues*, Vol. 37 No.1, pp. 36 – 70.
- Giddens, A. (2010). *Sociology*. New Delhi: Polity Press.
- Hannigan, J. (1995). *Environmental Sociology: A Social Constructionist Perspective*. New York: Routledge.
- Hardin, G. (1968). The Tragedy of the Commons. *Peer Review Journal of Science*, vol.162, No.3859, pp.1243 – 1248.
- Investopedia (2017). Tragedy of the Commons. Accessed from: <http://www.investopedia.com/terms/t/tragedy-of-the-commons.asp>.
- Kimmel, M., & Aronson, A. (2009). *The Essentials: Sociology Now*. Boston: Allyn and Bacon.
- Klinenberg, E. (2000). *Heat Wave: A Survey Autopsy of Disaster in Chicago*. Chicago: University of Chicago Press.
- Landsberge, H.E. (1970). Man-made Climate Changes. *Science*, 170, pp.1265 – 1274.
- Meremikwu, M.M. (1999) "Public Health and Wellbeing" (Eds). In G.O, Ozumba, O. Eteng., & M, Okom. *Nigeria: Citizenship Education* (pp.309 -318). Aba: AAU Vitalis book Company.
- NEST (1991). *Nigeria's Threatened Environment: A National Profile*. Ibadan: Intec Printers.
- Neubeck, K.F. (1979). *Social Problems*. New York: Foresman and Company.
- Pender, N.J. (2011). *Health Promotion Model Manual*. Michigan: University of Michigan Press.
- Pender, N.J. (2011). *Health Promotion Model Manual*. Michigan: University of Michigan Press.
- Phillips, E.B. (1996). *City Lights: Urban – Suburban Life in the Global Society*. New York: Oxford University Press.



- Scheafer, R.T. (2008). *Sociology*. New York: McGraw – Hill Companies.
- Schnaiberg, A. (1994). *Environment and Society: The Enduring Conflict*. New York: St. Martin's Press.
- Situ, Y., & Emmons, D. (2000). *Environmental Crime: The Criminal Justice System's Role in Protecting the Environmental*. London: Sage.
- Smith, A.P. (1991). *Noise and Aspects of Attention*. Accessed from <https://www.researchgate.net/publication>.
- Steinberge, T. (2000). *Acts of God: The Unnatural History of Natural Disaster in America*. New York: Oxford University Press.
- Walter, A.R. (1973). *The Politics of Environmental Concern*. New York: Praeger Publisher, Inc.
- Wikipedia (2017). *Tragedy of the Commons*. Accessed from: <http://en.m.wikipedia.org/wiki/tragedy-of-the-commons>.