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# Impact of Environmental Degradation induced by the outbreak of Insurgency in Adamawa State, Nigeria

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## **ABSTRACT**

The study assesses the impacts of environmental degradation induced by the outbreak of insurgency in Adamawa State, Nigeria. This study adopted survey design method using quantitative and qualitative tools to source data. The study population were contacted through a multi-stage sampling procedure and 390 community members in 6 LGAs that hosted Internally Displaced Person's IDP's were sampled. Questionnaire, Focus Group Discussion, In-depth interviews, observation, walkthrough survey and checklist were the instruments of data collection. Simple descriptive statistics was used to analyze the data. The findings revealed that many communities were affected as a result of the outbreak of Insurgency in Adamawa State, these areas of degradation include water, farmlands, environment and socioeconomic projects. Within the study period, 18 communities hosted the IDP's The results of the findings shows that 82.3% of the study participants reported that their communities were affected by the attacks of insurgency Also, 77.2% of the respondents agreed that their communities have hosted internally displaced persons as a result of the insurgency. The study revealed terrorism occasioned by Boko Haram through bombing have impacted on the built environment through vandalization of power plants, telecommunication equipment, educational institutions, military and paramilitary formations buildings and market structures. From 36 projects that were implemented by the various Government Agencies a total of 31 of the projects were completely destroyed by the activities of Boko Haram. Majority (98%) affirmed that Boko Haram were responsible for the destruction of buildings and depletion of the environment and Most (77.2%) of the respondents said they were aware of the environmental degradation induced by the dreaded Boko Haram and another (70%) respondents disagreed that Government has not make enough efforts towards improving the degraded environment. (82.8 %) respondents rated Government achievement towards strategies to improve the environment as low. Corruption (89.9%) and insecurity (80.5%) were the major problems encountered in the implementation of projects and policies that will help towards improving environment. Based on the findings of this study, it can be concluded that there is adequate awareness of the impact of environmental degradation induced by Boko Haram activities in the study area, and that the rural residents of the study areas have moved significantly from their communities to other communities for safety as IDP's. Government and related agencies should ensure and maintain strategies that will help to improve and sustain environment.

Keywords: Environmental, Degradation and insurgency

## **BACKGROUND OF THE STUDY**

Environmental degradation and the effects of global planetary warming seriously affect multiple ecosystems, causing problems such as food safety issues, animal extinction, and damage to plants. Environmental degradation is one of the most urgent environmental issues. Depending upon the damage,





some environments may never recover. The plants and animals that inhabited these places will be lost forever. In order to reduce any future impacts, city planners, industry, and resource managers must consider the long-term effects of development on the environment.

According to the World Bank estimate, between 1995 through 2010, India has made one of the fastest progresses in the world, in addressing its environmental issues and improving its environmental quality. Still, India has a long way to go to reach environmental quality similar to those enjoyed in developed economies. There are ways which can help to decrease the degradation of our environment. The most effective method to control pollution and depletion is through completing the legal framework and ensuring stable society.

However, the links between environmental degradation and conflict Communities experiencing insurgency can be overburdened by the combined pressures of climate change, population growth, urbanization, environmental degradation and rising socio-economic inequalities.

#### Statement of the Problem

The environment is something we are very familiar with. It's everything that makes up our surroundings and affects our ability to live on the earth. Environmental degradation is a very serious problem worldwide which covers a variety of issues including pollution, biodiversity loss, and animal extinction, deforestation and desertification, global warming, and a lot more (Abba 2020). The environmental degradation is deterioration of the environmental through depletion of resources which includes all the biotic and abiotic element that form our surrounding that is air, water, soil, plant, animals, and all other living and non-living element of the planet of earth human activity is the main driver's power (Abba 2020). Most environmental resources in Adamawa State are in a serious state of degradation as a result of the outbreak of insurgency induced by the Boko Haram and Farmers/Herders clashes, which consequently led to the migration of affected communities' members to other communities for safety, it is in the interest of the above that the research intends to study the assessment of the environmental degradation and impact made as a result of the insurgencies which previous studies have scarcely addressed the impact of insurgency on the environmental degradation.

## **Research Questions**

The following served as the proposed research questions of the study:

- 1. Where are the locations affected by insurgencies in Adamawa State?
- 2. What is the awareness level of community members on environmental degradation caused by insurgencies in Adamawa State?
- 3. What are the types and status of environmental degradation in the study area?
- 4. What are the roles of the Government and other agencies towards mitigating environmental degradation in the study area?
- 5. What are challenges encountered by the Government and other Agencies towards protecting environmental degradation in the study area?

# **Objectives of the study:**

The Goal of this research is to achieved through the following specific objectives,

- 1. Identify the communities affected by insurgencies and IDPs host communities in Adamawa State.
- 2. Assess the awareness level of community members on environmental degradation caused by insurgencies in Adamawa State.

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- 3. Describe the types and status of environmental degradation in the study area.
- 4. Examine the roles of Government and other agencies towards protecting environmental degradation in the study area.
- 5. Identify challenges encountered by the Government and other Agencies towards enforcing environmental standards against degradation in the study area

## LITERATURE REVIEW

When warfare causes the mass movement of people, the resulting impacts on the environment can be catastrophic, This may include widespread deforestation, unchecked hunting, soil erosion, and contamination of land and water by human waste occurred. Thousands of humans are forced to settle in a new area, engage in dangerous work, poor housing conditions, urban sprawl, and poverty the impact can also affects our health which increase the risk of cancer, heart disease, asthma, and many other illnesses (Abba; 2020). These hazards can be physical, such as pollution, toxic chemicals, and food contaminants, or they can be social.

According to IOM Reports 2020, conflict arising from the Boko Haram insurgency More than 30 million people across Cameroon, Niger, Chad, and Nigeria live in the Lake Chad Basin. Over the past six decades, overgrazing, erosive agricultural practices, the increased use of water resources, desertification, and decreasing rainfall amounts have all led to the shrinking of the lake itself to shrink by some 90 percent. (Climate change is an unlikely contributor, in this case.) Because the basis of almost all household livelihoods in the region is a blend of agriculture, livestock, and fisheries, the toll on the lake's shrinking—paired with the protracted—on food security has been profound.

According to the report by the IOM the Boko Haram insurgency has contributed to a precipitous decline in agricultural production, as smallholder farmers have experienced the destruction of productive assets, lost access to farm inputs, and even faced displacement. A report by the IOM on Global Food Security Program notes, between 2010 and 2015, the production of sorghum, rice, and millet in Borno State declined by 82 percent, 67 percent, and 55 percent, respectively. An assessment conducted by the government of Nigeria in 2014-2015 concluded the total losses in the country's agricultural sector due to conflict amounted to \$3.7 billion, with the majority (64 percent) having occurred in Borno and Adamawa States. The Boko Haram's insurgency has sustained attacks on roads and bridges, electrical lines, and other forms of environmental destructions which have contributed to an overall loss of \$9 billion in northeast Nigeria, according to the United Nations (Musa, Abba, & Baba, 2016).

According to IOM reports, 2019, a large chunk of the insecurity around the world can be directly or indirectly linked to environmental issues such as pollution and desert encroachment. (NEMA)- Nigeria's Growing IDP 2015 Reports argued that environmental pollution adversely affects farmlands and water supply, and erodes the people's sources of livelihood, which in turn makes them susceptible to violence. The insecurity situation in Nigeria is concentrated in the Niger Delta and the North Eastern areas. While residents in Niger Delta have lost their farmlands and the water meant for drinking and fishing to widespread pollution as a result of oil exploration and exploitation by multinational oil companies, those in the northern states have lost farmlands to insurgency activity. Another environmentalist, Ukaibe (2014) believes that insurgency across the globe is environmentally induced. He said, "Over the years, youths in oil producing areas have posed serious security threat in the region, citing the destruction of their ecosystem by oil companies as their grievance.

The rate of desertification in the country is reported to be high with the attendant destruction of about 2,168sq km of range land and cropland each year in the north. In Yobe State, which is one of the states under emergency rule, a study revealed that, in 1986, the rate of desertification which stood at 23.71 per

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cent increased to 31.30 per cent in 1999 and, by 2009, it had covered almost half of the state (Hosea 2020).

UNDP Report in 2019 says that crop cultivation and animal rearing are no more productive in the state, because the soil has lost its fertility, while various infrastructures had collapsed as a result of the insurgency in the region.

In the literature, government is often ascribed a pivotal role in protecting the environment, for instance, through the implementation of environmental policies that protect the environment directly or solve environmental collective action problems (Mansbridge 2014). It is important that the government should have the will power to implement all its policies on creating a safe an environment conducive for the people to work and earn their living, in order to shun every temptation to disturb public

# **Environmental Degradation**

Environmental degradation is the deterioration of the environment through depletion of resources such as air, water, and soil, the destruction of ecosystems and the extinction of wildlife. (Ukpong, 2014))

When the environment becomes less valuable or damaged, environmental degradation is said to occur. There are many forms of environmental degradation. When habitats are destroyed, biodiversity is lost, or natural resources are depleted, the environment is hurt.

Environmental degradation can occur naturally, or through human processes. The largest areas of concern at present are the loss of farmlands, air pollution and smog, ozone depletion, and the destruction of the environment.

Pollution is occurring all over the world and poisoning the planet's oceans. Even in remote areas, the effects of environmental degradation are obvious. In some areas, the natural environment has been exposed to hazardous waste. In other places, major disasters such as oil spills have ruined the local environment.

#### **Effects of Human Activities on The Environment**

Human activities and the environment are inter-related. This is because any activity of man is done in the environment and the resultant effect is either positive or negative to man. Human activities are diverse. According to Uchegbu (2018), negative effects or man arise from these economic and domestic activities. For instance, agriculture requires pesticides that pollute the atmosphere or enter drainage system via run off and sewers. Other activities which lead to pollution include thermal power stations, burning of fossil fuels, exhaust fumes. All these emit harmful pollutants like sulphur dioxide, carbon monoxide, etc, that cause acid rain, global warming, and the malfunctioning of human haemoglobin, etc. Ukpong (2014) categorised human activities capable of causing environmental nuisance and the degradation as; Destructive logging of forests, overgrazing and over-cropping of arable lands, strip mining etc. This may be extended to include oil exploitation, industrialization, improper disposal of domestic solid waste and human excretal including liquid waste, over-utilization of non-degradable materials for packaging among others.

All these human activities have combined to deplete the earth's resources, degrade the environment and cause loss of biodiversity (Uchegbu 2018) .The environment in which these human activities takes place is the outer physical and biological systems of the earth in which man and outer organisms live. Although complicated, there are many interacting components (Adeniye, 2016).

According to encyclopaedia Britannica vol. 4, the environment is the complex of physical, chemical, and biotic factors that act upon organisms or an ecological community and ultimately determines its form and survival. Canter categorized the environment into air, water, noise, biological, cultural and socio-economic environment. These views are all embracing. However, in a physical sense, claim that the physical

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environment is made up of air, water, and land. From all indications, human activities impinge on the environment, which as noted earlier, may have either positive or negative effects on man. However, the positive effects would be well taken by man but what are of concern to man are the negative effects especially as the concern degradation.

#### **Pollution**

This phenomenon occurs whenever potentially harmful substances are released into the environment. Pollution on the whole is caused principally by human activities, though it can also be a natural process. It is usually classed according to the receiving agents of air as emission, water as effluent and land as dumps and disposal (Ukpong, 2014).

Pollution can be categorized into three major types: air pollution, water pollution and noise pollution.

#### **Air Pollution**

Air pollution is the contamination of the air with unwanted gas, smokes, particles and other substances. Air pollution is also considered as waste remaining from the ways we produce goods and generates energy to heat our environment. According to the World Bank Report (2019), air pollution is the presence in the outdoor atmosphere of one or more contaminants such as dust, fumes, gas, midst, odour, smoke or vapour in such quantities, characteristics and duration as to make them actually harmful or potentially injurious to human, plant or animal life or property, or which unreasonably interfere with the comfortable enjoyment of life and property

Environmental air pollution arises from people economic and domestic activities such as modern agriculture, which requires pesticides that pollute the atmosphere or enter water systems via run-off and sewage. Industrial activities are responsible for a wide range of pollution. Thermal power stations, burning fossil fuel and moving vehicles emit harmful pollutants like sulphur dioxides, nitrogen oxide and carbon dioxide that cause acid rain, global warming and malfunctioning of human / animal's hemoglobin's. In the Niger Delta, due to its oil rich region has a lot of pollution resulting from various human activities.

#### **Water Pollution**

According to Mba (2016) identified the major sources of water pollution in Nigeria to include industrial plants, decomposed waste, solid mineral mining activities as well as petroleum mining operations. In his own view, Odiette (2014) identified water pollution sources as arising from soil erosion, the discharge of industrial and household effluence wastes (untreated) into the water bodies and the growth of water hyacinth. Okorie (2012) identified the distributed of unchecked gully erosion as a source of water pollution as follows: 600 in Anambra; 300 in Imo; 59 in Akwa Ibom and 130 in Cross River State. According to him, gully erosion has destroyed extensive farmlands and development projects.

In addition to the above discourse, another major environmental problem is flooding. According to The UNDP (2019), Lagos flooding arises from rivers and streams overflowing their banks. The occurrence is seasonal and is usually during and after the raining season. In some areas it is an annual occurrence. Rain fall has been identified as a primary causative factor for flooding. In addition, clay soils are more prone to flooding and many states in the Niger Delta Region are liable to flooding.

#### **Noise Pollution**

Noise is most often defined as unwanted sound. Noise is usually measured in decibels (dB) and is generated mostly in high-density urban areas or even in the industrial areas that usually use industrial plants as their sources of energy.





In fact, other environmental degradation factors which affect both men's and women's health and other socio-economic well-being of the people of the Niger Delta and Nigerians at large include the following: desertification and deforestation, water hyacinth, loss of biodiversity, global warming and ozone layer depletion. These are issues that have cut across international boundaries and have posed special serious problems to Nigerian women's health and their socio-economic status.

## Other Sources of Environmental Degradation:

#### **Solid Waste**

Solid waste has 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 women's health and their social well-being (Uchegbu 2018)

The problem of solid waste in our urban rural areas can be said to be a recent development. The oil boom era with its high pace of consumption and population opened the floodgate for serious waste generation. At the moment, virtually all our major cities and towns across the country are faced with the problems of solid waste management. In Lagos State, for instance, these heaps limit the roads to single narrow lanes, resulting in perennial traffic jams as well as the production of offensive odour. Apart from that, a number of communicable diseases such as typhoid, dysentery, cholera, yaw; malaria, yellow fever, and relapsing fever that affect women are associated with improper disposal of wastes.

The mode of transmission can either be through biological vectors, physical and mechanical means, airborne disease, water supply, food supply, direct contact or other means related to socio-economic status of women and her households. In addition water supply by leaching and run-off during rains and others may kill valuable and rare vegetation of wildlife (Uchegbu, 2018)

As women who are engaged in street markets spend most of their time at home where these eyesore litter, there is every likelihood that this may affect their health and socio-economic well-being. In realization of the fact that environmental and public health implications of inadequate solid waste management are considerable. Nigeria urgently needs institutional, attitudinal and infrastructural reforms in order to tackle effectively the problems of solid waste.

## Effects of Environmental Degradation on Human, Animals and Plants

Environment dying is global perilous point which catastrophically the human, animals and plants. Air pollution results are Cancer (European Public Health Alliance, 2019),

According to Gardiner (2006) acid rain destroys fish life in lakes and streams and kill trees, destroy the leaves of plants, can permeate soil by making it inappropriate for reasons of nutrition and habitation, unwarranted ultraviolet radiation through the ozone layer eroded by some air pollutants, may cause skin cancer in wildlife and damage to trees and plants, and Ozone in the lower atmosphere may damage lung tissues of animals and can prevent plant respiration by blocking stomata (openings in leaves) and negatively affecting plants' photosynthesis rates which will stunt plant growth; ozone can also decay plant cells directly by entering stomata.

Polluted drinking water or water polluted by chemicals produced waterborne diseases like, Typhoid, Liver and kidney damage, polluted beach water contaminated people like stomach aches, encephalitis, Hepatitis, diarrhoea, vomiting, gastroenteritis, respiratory infections, ear ache, pink eye and rashes(Water Pollution Effects, 2016).





Loss of wild life is directly related to pollution (Progressive Insurance, 2005) and according to Water Pollution Effects (2016) on animals i) Nutrient polluted water causes overgrowth of toxic algae eaten by other aquatic animals, and may cause death; it can also cause eruptions of fish diseases, ii) Chemical contamination can cause declines in frog biodiversity and tadpole mass iii) Oil pollution can increase susceptibility to disease and affect reproductive processes and negatively affect development of marine organisms and it can also a source of gastrointestinal irritation, damage to thenervous system, liver and kidney damage iv)

Mercury in water can cause reduced reproduction, slower growth and development, abnormal behavior and death) Persistent organic pollutants may cause declines, deformities and death of fish life and Fish from polluted water and vegetable/ crops produced or washed from polluted water could also make impact on human and animal health. More sodium chloride (ordinary salt) in water may kill animals and plants, plants may be killed by mud from construction sites as well as bits of wood and leaves, clay and other similar materials and plants may be killed by herbicides in water.

## RESEARCH METHODOLOGY

# **Description of the study Area**

Adamawa State is located in the North eastern part of Nigeria.. It lies between longitudes 11° 14' and 11/10 East of the Greenwich Meridian and latitude 7° 11' and 7° 30' North of the Equator, It shares boundaries with Taraba State in the south and west, to its north-west by Gombe state and Borno State to the North. Adamawa State shares an international boundary with the Cameroun Republic up along its eastern side. The state covers a total land area of about 39,972 sq. km.

According to Ladan (2012), as at 2006 the population of Adamawa State is estimated to be about 3,178,950. There are over 150 ethnic groups found in Adamawa State. Majority of the people in Adamawa State are farmers. Cattle rearing is also a major occupation, while village communities living on the banks of Rivers Gongola and Benue and their tributaries in the State engage in fishing and farming.

They are 21 local government areas in the state namely: Fufore, Ganye, Gombi, Guyuk, Hong, Jada, Shelleng, Demsa, Madagali, Maiha, Mayo-Belwa, Michika, Mubi, Numan, Song, Yola, Mubi-South, Jimeta, Girei, Toungo and Lamurde.

#### **Sampling Technique and Procedure**

The study population was contacted through a multi-stage sampling procedure. In the first stage, was the stratification of the study area into the three existing senatorial zones in the state, The study will concentrate in the 6 LGAs that hosted IDPs. Two LGAs will be selected from each of the senatorial zones bringing a total of 6 LGAs in all. These LGAs include; Demsa and Numan from the Southern Senatorial Zone; Hong and Girei from the Central senatorial zone while Madagali and Mubi North will also be selected from the Northern senatorial zone. In each of the LGAs, a total of 3 communities will be selected.

# DATA ANALYSIS AND FINDINGS

Environment is the sum totality of living and non-living things which exist in an open and dynamic system, (Nwagbara,2018). Wikipedia Encyclopedia 2012) refers to environment as the surrounding of man classified as built structures, biological (plants and animal) and their chemical interactions, social and their

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economic interactions, non-physical (sunlight, air, and temperature) and physical (soil, water and their interactions)

From the point of view of agricultural underdevelopment, the Boko Haram, has caused the depletion of livestock in the study areas a situation which adversely affects agricultural development. The Boko Haram insurgents camps in the forest of the North-eastern region of Nigeria have caused deforestation and threaten the existence of wildlife and migration of some species of animals. The potential effects of which are the reduction of protein needs of the populace and distortion in animals life cycles. Noise pollution occasioned by arcing bombardment of Boko Haram has serious environmental effects on the populace. According to Harvey (2008) sound greater than 80 decibels is harmful to man.

It has been reported that over fifteen thousand (15000) people flee from Maiduguri to Adamawa State (Sahara report, 2013). Many people have also been reported to relocate out of Maiduguri and its environ. Beside the negative effects of this on the economy of the areas, migration cause underutilization of natural resources, over population which in turn has ripple effects on connection, waste generation, displacement of people to diseases conditions and acceleration of global warming.

According to Nwagbara (2018 )Migration impact on agricultural development because farmers migration reduces agricultural production, food supply and consequently famine which are determinants of food insecurity.

# **Communities Affected By Insurgencies**

The results of the findings shows that 82.3% of the study participants reported that their communities were affected by the insurgency Also, 77.2% of the respondents agreed that their community accommodated a great number of internally displaced persons who fled from various communities and were also hosted by their community as a result of the insurgency.

The findings also indicated that insurgency activities had affected their environment. The study revealed terrorism occasioned by Boko Haram through bombing have impacted on the built environment through vandalization of power plants, telecommunication equipment, educational institutions, military and paramilitary formations buildings and market structures (IOM 2019). The destruction of these built environments affected the environmental plans of the affected areas. The ripple effects of this cause environmental degradation, erosion, flooding, canalization, and climate change. According to IOM 2019 one of the primary weapons used by the terrorist is the improvised explosive device, tear gas, magazines and ammunitions which contain dynamites, carbonated gas, fumes, nitrogen, sulphur and dust. These substances according to Eguebor (2000), have disastrous consequences to man, animals, plants and the soil and aquatic life. According to him, this substance predisposes people to disease conditions as typhoid, diarrhea, Jaundice, haepathetics. e.t.c

## Awareness Level of Community Members on Environmental Degradation Caused by Insurgencies

Also study findings shows that all respondents were aware of the environmental degradation caused by insurgencies in the study area During FGD sessions, participants attested that they were quite impressed with the role of Government and some agencies towards environmental protection against degradation and all attested that they are much aware of the impacts of the activities done to environment as a result of insurgency in their communities. In a FGD session at Malkoni community in Yola South LGA, a participant explained that CSDA has taken its time to create good awareness about the incoming projects by them that will help towards environmental protection. This is in line with Agagu (2008) that government agencies and any project implementers needs to be involved in the project awareness session to their beneficiary groups such as residents in the vicinity, political leaders, public representatives and community leaders; community

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organizations such as Community-Based Organizations (CBOs), Non Government Organizations (NGOs) (NEMA ,2015), social and cultural groups. This is because understanding the key messages towards awareness have a significant impact on community participation and overall benefits of the project; success will be determine by the effectiveness of the awareness created. For the benefiting community respondents whether they view the agency's projects as environmental protection strategy. Majority (82%) affirmed that most Government and NGO's strategies are geared towards environmental protection and only 18% disagreed. Thus, it is apparent that most of the respondents agreed that Government Agency and NGO's do have environmental protection strategy projects, even though most of the participants in this study viewed the environmental protection projects were not adequate (77%) and they need more of the projects to be implemented in their communities (96%). This is an indication of the need for more support in the communities. More projects will have much effect on their environment, social and economic development of the benefiting communities.

# **Types and Status of Environmental Degradation**

Findings shown that 96% of the study population agreed that land degradation is one of the worst environmental problems facing many people in the study area. The intensification of the insurgency in the study areas has led to progressive degradation and continued desertification of marginal agricultural lands even in periods of normal rainfall. It is feared that the damage caused as a result of population pressure on the host communities have resulted in the genetic loss of a vast array of valuable plant species. Pressure on the dwindling resources arid prone areas has caused in a number of devastating socio-political and sectarian conflicts in the study areas. Some of the causes of land degradation as noted by Ukpong (2014) include

In our findings 87% have agreed that the status of environmental degradation in the study area is very high. According to our respondent findings shown that there is a relationship between poverty and environmental degradation according to Anijah-Obi (2001) the poor are both victims and agents of environmental damage. Poverty may be created by negative and unjust social conditions such as structural inequalityThose who are poor and hungry will often destroy their immediate environments in order to survive. Insurgency can be identified as one of the causes of poverty across globe.

# **Environmental Degradation and Insurgency**

Findings shows that most 98% of the study population have opined to the assertion that insurgency is one major factor that led to their environmental degradation, which according to some respondents in a FGD "we never experienced low level of land productivity until when we were attacked by insurgency in our area, our land has been depreciated as a result of different pollution, in conclusion to their responses to them the insurgency attack had rendered their land useless and have introduced more poverty to them Ukpong (2014) also identified other indirect causes of land degradation to include population growth and population influx, this can be connected with displacement of people to host communities.

# The Underlying Causes of Environmental Degradation Induced by Insurgency

## **Social Factors**

**Population :**Population is an important source of development, yet it is a major source of environmental degradation when it exceeds the threshold limits of the support systems. Unless the relationship between the multiplying population and the life support system can be stabilized, development programmes, howsoever, innovative are not likely to yield desired results. During the cause of the study responses indicated that 87% of the internally displaced persons IDP's that move from the hometown to settled in a different place from safety have increased and affected the population of the host communities thereby sharing the available resources of the host communities. According to Agagu (2008), increase in human population can also

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increase the rate of crime and other social vices because of different of socio-cultural background of the people. Population impacts on the environment primarily through the use of natural resources and production of wastes and is associated with environmental stresses like loss of biodiversity, air and water pollution and increased pressure on arable land.

**Poverty:** Poverty is said to be both cause and effect of environmental degradation. The circular link between poverty and environment is an extremely complex phenomenon. Inequality may foster unsustainability because the poor, who rely on natural resources more than the rich, deplete natural resources faster as they have no real prospects of gaining access to other types of resources. Moreover, degraded environment can accelerate the process of impoverishment, again because the poor depend directly on natural assets. There has been a significant increase in the poverty ratio in the country from 75 percent in 2020 to 86 percent in 2022.

**Urbanisation:** Also study findings shows that majority of the respondents 95% agree to Lack of opportunities for gainful employment in villages and the ecological stresses is leading to an ever increasing movement of poor families to towns. Mega cities are emerging and urban slums are expanding. There has been an eightfold increase in urban population over 1991-2022. During the past two decades, Nigeria's urban population has doubled from 160 million to 210 million and is estimated to reach 300 million by 2025. Such rapid and unplanned expansion of cities has resulted in degradation of urban environment (NEMA ,2015). 80% of the respondents strongly agreed that insurgency has been the major cause of the urban population which widened the gap between demand and supply of infrastructural services such as energy, housing, transport, communication, education, water supply and sewerage and recreational amenities, thus depleting the precious environmental resource base of the cities. The result is the growing trend in deterioration of air and water quality, generation of wastes, the proliferation of slums and undesirable land use changes, all of which contribute to urban poverty.

**Economic Factors:** According to Animashav (2012) to a large extent, environmental degradation is the result of market failure, that is, the non-existent or poorly functioning markets for environmental goods and services. In this context, environmental degradation is a particular case of consumption or production externalities reflected by divergence between private and social costs (or benefits).

resource depletion (fossil fuel, minerals, timber), water, air and land contamination, health hazards and degradation of natural eco-systems. With high proportion fossil fuel as the main source of industrial energy and major air polluting industries such as iron and steel, fertilizers and cement growing, industrial sources have contributed to a relatively high share in air pollution. Direct impacts of agricultural development on the environment arise from farming activities which contribute to soil erosion, land siltation and loss of nutrients. The spread of green revolution has been accompanied by over exploitation of land and water resources, and use of fertilizers and pesticides have increased many fold. Shifting cultivation has also been an important cause of land degradation as mentioned by some respondents.

#### **Institutional Factors**

The Ministry of Environment & Forests (MOEF) in the Government is responsible for protection, conservation and development of environment. The Ministry works in close collaboration with other Ministries, State Governments, Pollution Control Boards and a number of scientific and technical institutions, universities, non-Governmental organizations etc.

Environment (Protection) Act, 1986 is the key legislation governing environment management. Other important legislations in the area include the Forest (Conservation) Act, 1980 and the Wildlife (Protection) Act, 1972. The weakness of the existing system lies in the enforcement capabilities of environmental institutions, both at the centre and the state.

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There is no effective coordination amongst various Ministries/Institutions regarding integration of environmental concerns at the inception/planning stage of the project. Current policies are also fragmented across several Government agencies with differing policy mandates. Lack of trained personnel and comprehensive database delay many projects. Most of the State Government institutions are relatively small suffering from inadequacy of technical staff and resources. Although overall quality of Environmental Impact Assessment (EIA) studies and the effective implementation of the EIA process have improved over the years, institutional strengthening measures such as training of key professionals and staffing with proper technical persons are needed to make the EIA procedure a more effective instrument for environment protection and sustainable development.

# **CHALLENGES AND DIFFICULTIES**

Study observed that awareness level of community members on environmental degradation caused by insurgency was not adequate as supposed given the fact that majority of the respondents in the study area were not informed on the effects of land pollution against land productivity and fertility. This can be associated with the movement of IDP's to urban Centre's by most rural people who many of them are illiterates.

In the course of the findings most respondent were not free to give out information needed that will help the research to bring out result, instead many IDPs including some host communities they were demanding for a relief material before they cooperate in responding, this attitudes have affected the outcome of the research and has affected the timeframe for the research.

Findings also indicated that there are challenges in the implementation of environmental projects in the study area. Respondents representing the study areas claimed that corruption is one of the problems encountered during any environmental project implementation. Insecurity accounted for 35.5% and poor cooperation was reported by 14.2% of the respondents. Non nonchalant attitude accounted for 20.2% while 0.6 did not commit time for the projects. Also 11.1% identified ignorance, 0.8% identified communication problems, 15% opined that it is poverty, whereas 6% are of the view that it is cultural influence.

# CONCLUSION AND RECOMMENDATIONS

Ensuring sustainable utilization of environmental resources calls for a holistic approach in tackling the problem of insurgencies.

In a world where more than half of the population lives below poverty line, and where the consumption propensity of the wealthy few is on the increase, the problem of environmental degradation will continue to be on the increase. Appropriate legislations and political will to implement them will salvage the world from human side of environmental problems and guarantee sustainability. Since development is about people – present and future generations – the concern about sustainable development should take into cognizance critical factors that influence its attainment.

Twin factors of insurgency and environmental degradation are paramount in that regard. Government and nongovernmental organizations across the world should hire the services of experts to construct appropriate index for measuring the part played by the rich and the poor on environmental degradation.

In order to survive our environmental crisis degradation and maintain the earth as a place for human habitation, we must engage into a massive awareness campaign on environmental degradation and its effects on humanity.

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There is also need to reduce the massive pollution of the biosphere. The reduction of the massive pollution of the biosphere and the control of air pollution emission can be achieved by the following methods:

Surface sink / tree planting

Precipitation

Smokeless fuels

Air pollution reduction by exhaust

International / National Legislations.

Empowerment/Employment

It should be noted that Nigeria stands to lose both financially and in manpower resources if it maintains an unhealthy working environment. Therefore all hands will be on deck to see that the efforts being made to revitalize the environment are not wasted. However, the Federal Government should enforce the establishment of environmental protection agency boards at both the state and local government levels in the region that will creating awareness on environmental degradation awareness.

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