

Research Article

Environmental Degradation its Impact on Natural Resources Depletion

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Received: 20 January 2021; Accepted: 28 January 2021; Published: 06 February 2021

Citation: Aloni Clinton, Alexander Chinago Budnukaeku. Environmental Degradation its Impact on Natural Resources Depletion. Journal of Environmental Science and Public Health 5 (2021): 50-55.

Abstract

The environment is everything that surrounds us, with pool of resources that helps us to satisfy our needs and fulfill our wants. Within the geographical boundaries of any nation are abundant reservoir of resources and their proper utilization will result to the positive development of such nation. Man realizing the benefits derivable from these resources will extract and process them for the benefits of mankind, and the environmental effects associated with processing and extraction of the resources are air, land, water and noise pollution, as well as the problem of solid waste disposal, and also the susceptibility of the land to erosion, increase in the occurrence of landslides, mudflows and slumps. In an effort to

ameliorate the related environmental problems, the Federal Government of Nigeria embarked on some policies that will bring about the general development of the country to ensure that there is total improvement of the well-being of the people, socially, politically and economically for a better future.

Keywords: Depletion; Environment; Exploitation; Government policies and resources

1. Introduction

The environment is everything that surrounds us, with pool of resources that helps us to satisfy our needs and fulfill our wants, [1]. Thus, the need to reexamine the man-earth relationship and attempt to

understand, manage and control as adequately as possible all our environmental resources in order to minimize related environmental crisis of waste and pollution. It is therefore anticipated that in preventing future pollution difficulties, planning is the key to this our major environmental problems.

2. Integrated National Resources

Within the geographical boundaries of any nation is abundant reservoir of resources and their proper utilization will result to the positive development of such a nation. The resources are in the form of natural and human resources which needed to be catalogued in order to provide information of their locations, quantity, uses and exploitation viabilities [2].

Any resource exploitation should be coupled with an accurate evaluation of future demands and reserve estimations that must be geared towards maximizing that satisfaction of human demands now and in the future. Natural resources such as food, forests and fibers once planted and cultivated, can be regenerated seasonally and these are referred to as Renewable Resources, and on the other hand natural resources like minerals, gas and oil are called Non-renewable resources because the deposits containing them have limited supplies which after long enough exploitation, are totally exhausted, while the next form of resources is the Human resource, which is the different knowledge acquired by man to make his environment a better place for the present and future generations.

A proper understanding of the effects of man's activities on the environment will aid in determining what possible measures to be taken to ameliorate the adverse effects on the environment and thus used in

fulfilling their respective roles in preserving and enhancing the quality of our environment.

3. Problems of Resources Depletion

Man, realizing the benefits derivable from these resources will extract and process them for the benefits of mankind, and the environmental effects associated with processing and extraction of the resources are air, land, water and noise pollution, as well as the problem of solid waste disposal. [3] observed that activities of man unknowingly resulted in environmental pollution through industrialization which has caused the totality of land, water and air pollution. That urbanization is also part cause of environmental pollution, as air pollution for instance tends to be directly related to population density. This increased urbanization process has inevitably resulted in increased atmospheric pollution level in our cities. [4, 5] also observe that pollution generally is a costly venture that the economic consequences of a comparatively do-nothing policy in regard to pollution problems has resulted in untold costs to life and property throughout the urban world as exemplified in health hazard, whereby air pollution is linked with a number of respiratory ailments such as lung cancer, which is due to man's exposure to large amounts of poisonous hydrocarbons found in urban air. Also property damage resulting from pollution, since air pollution is responsible for abrasion, corrosion, tarnish, soil cracks and the weakening of materials, structures and machines, as well as agriculture damage because trees, shrubs, flowers, vegetables, fruits an gains are being damaged mostly by air pollution [6, 7] and Bakpo [8].

Various projects on mineral and energy resources development have some negative implications in the natural environment in Nigeria, tin mining in the Jos Plateau region is mainly by the open cast, hand paddocking method, resulting to man-made lakes, the presence of large dumps that over burden the excavations from the mines. This leads to land shortage for farming in the area and decline in soil fertility due to over cultivation of the available land for farming. The mining activities also resulted to increase in the susceptibility of the land to erosion, increase in the occurrence of landslides, mud-flows and slumps [9-11].

Mining has therefore resulted to direct hazard of the safety of man in cases of death or serious injury. It is also observed that the safety of public health is being endangered through;

- Sudden failure of reservoirs or open pits.
- Major subsidence associate with underground mining.
- Accidents in shafts, inclines adits and open pits due to security lack.
- The release of toxic effluents.
- The use of explosives
- The indirect hazard to the well-being of man through air, water, noise and dust pollution.

Soils and vegetation are closely related and the impact of man's activities on either of the two elements has often had repercussions on the other. The delicate balance between them necessarily places limitations on the use of either of them. Failure of the people to realize this impact has often le to serious environmental problems such as;

- Soil deterioration
- Soil desiccation
- Accelerated soil erosion

Soil deterioration is a general lowering of the natural fertility and consequently the productivity of the soil, while soil desiccation is the progressive drying up and hardening of the soil, and Accelerated soil Erosion is the rapid removal of soil and the destruction of valuable land by such agents as torrential rainfall, surface run-off and strong winds. These problems are all precipitated by the removal of the soil vegetal cover by man, forest clearance, repeated crop cultivation, over-grazing and bush burning. Crude oil exploration and exploitation in Nigeria has resulted to oil spills, which destroy or pollute hectares of farmlands and swamps including fish ponds [7].

Akaninyene and Augustine [12] stated that the case of the Niger Delta region of Nigeria is a good example of the consequences of unsustainable use of natural resources. That prior to the discovery of oil in this region, the land was fertile, the water and air were less polluted, thus the environment was generally clean and free from pollution. Unfortunately today in the Niger Delta Region, there is so much pollution in the environment (water, air and soil). This is due mainly to the oil exploration and exploitation in the area. As a result of these associated problems, there have been suggestions of the urgent need to develop efficient environmental conservation measures to guide the exploiters of the community's mineral resources and the need to develop and employ the necessary human resources [13].

4. Enhanced Developmental Policies

The Federal Government of Nigeria embarked on some policies that will bring about the general development of the country to ensure that there is total improvement of the well-being of the people socially, politically and economically for a better future. Considering the negative impacts associate with natural resources exploitation, the government initiates policies that will preserve the environment and make it as much habitable as possible for the people that live in such environments.

Some of the policies initiated for developmental purposes include;

- 1. Housing policy, which is a Federal Government's attempt to make housing available to its citizens through the building of low-cost houses and allocating them to the general populace, making land available for building and also ensuring that people easily obtain financial loans from the financial institutions in order to build their personal houses.
- The land-use decree of 1978 which prescribes which land is good for whatever purpose intended to maximize the available land spaces for the benefit of the citizenry.
- The preservation of wild-life for recreational purposes and tourist attraction. This is intended to return the environment to its natural state in order to maintain a natural ecosystem.
- 4. There are policies against the burning of bushes and that supporting the planting of trees. These are specifically for safeguarding our vegetal resources in order to avoid the negative impacts associate with their removal.
- 5. Brain drain is the loss of competent human resources to other wealthier countries whose contributions would have resulted to one form of development or another in the country. A government policy discouraging

- the exodus of these resources and establishing policies of encouragement to make them stay behind in order for them to provide their needed services that will serve as a positive step towards a developmental purpose.
- 6. The rural electrification programmes, rural water projects and the Better Life for Rural Women Project are specific policies geared towards development of the rural areas in the country. There is also the Federal Environmental Protection Agency (FEPA) being mandated to oversee the environment and enforce the laid down laws and policies in-order to make the society a better place for all.

Douglas and Akpan [14] observed that the concept of gazette o resources implies that all government legislations concerning the judicious use of resources should be entered into the gazette, so that there could be public awareness of the existence and vulnerability of these resources and regulated use of the resources. In explaining further, they noted that the purpose to gazette resources is to;

- Create awareness to the general public about the existence of resource reserves and their susceptibility of depletion.
- 2. Provide government legislation on the judicious use of resources.
- Provide a legal document which can be referenced to in case of activities such as resource exploitation or illegal occupancy of resource reserves.
- 4. Assess development trends and activities in resource reserves.

5. Recommendation

- Environmental laws offenders should be punished and in case of companies, heavily fine should be levied.
- Regular offenders should not be given contract and their account should be frozen.
- Sustainable agriculture and development should be practice. Since otherwise will be inimical to the development of the country.
- Professional environmentalist should be engage to manage and harness the environment.
- Orientation on the impact of resources depletion and environmental degradation should be made known to the people.
- On no account should pipeline be vandalized or solid minerals, be mined illegaly.

6. Conclusion

There is therefore the need to enforce fundamental steps in order to solve the environmental crisis in which we find ourselves by minimizing both waste and pollution in a nation with abundant reservoir of resources, whose proper utilization will result to the positive development of such a nation.

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