GLOBALIZATION AND THE ENVIRONMENT: SOME IMPLICATIONS FOR NIGERIA, 1960-2020

Louis A. Edet

Department of History & International Studies University of Calabar, ajomedet459@gmail.com, 08030978552

Abstract

Globalization and the Environment: Some Implications for Nigeria analysed the effects of globalization on the environment. leading to the destruction of lives and property, depletion or complete extinction of some organic species in the environment and, invariably, jeopardize the Health of the ecosystems. The paper utilized both primary and secondary sources derived from oral interviews, published texts and the internet. Investigation revealed that in the quest for higher returns on investments and savings, globalization has proved to be a potent force for catastrophic disasters and diseases that have ravaged Nigeria in no mean measure. Natural and man-made disasters that have caused serious devastation to environment can only be ameliorated or prevented through proper environmental practices, implementable laws and educational awareness by the people, government, civil society organizations and other institutions consciously. Relying on qualitative content analysis and multidisciplinary approaches to historical reconstruction, the paper recommended the adoption of a multifaceted and concerted effort in order to tame the effects of globalization on the Nigerian environment.

Key Words: Globalization, Environment, Implications, Nigeria, Pollution.

Introduction

As a country located in the West African sub-region, Nigeria is widely known for her enormous and bustling population. Greatly endowed with human and material resources, Nigeria stands out amongst the countries in the sub-region as a destination centre. It is the most populous nation in Black Africa. Like other countries within the sub-region, Nigeria started witnessing the effects of globalization around the 15th century, during the European explorations, adventures and "discovery" around the world. At the prevailing level of knowledge, the potential interconnectedness and the liberalization of trade has affected the Nigerian environment caused by early European expansion into Nigeria which this study has chosen to refer to globalization. The dire environmental crisis brought about by advancement in technology through the mobilization international trade has transformed and destroyed the environment badly, and in some instances, beyond redemption. These attacks on the environment have presented profound increases in the consumption of fossil fuel, amongst other carbon producing equipment and gadgets responsible for the rise in pollution level of the atmosphere leading to the depletion of the ozone layer. Coupled with over exploitation of natural resources, low environmental standards and lax environmental laws to reward the countries (in the north) and losses for others (countries in the south) through Pollution Haven Hypothesis (PHH) and Pollution Haven Effects (PHE), the environment could have been anything but healthy.1

Urban centers, more often than not, are laden with problems of overpopulation, unplanned urbanization and pollution which have contributed significantly to the destruction of historical environment, with other public health issues and insecurity of lives and property. Drought and flood are common hazards that have imposed severe hazards on vulnerable populations in both low-cost urban centres as well as remote rural regions of Nigeria. This has more or less limited the hard-won progress in achieving the desired economic development. Billions of naira has been spent to 'cure' the sick environment in Nigeria particularly in the Niger Delta region caused by the activities of Western multinational corporations.

The paper explores the effect of globalization on the Nigerian environment. According to A. A. Mohammad, "to the extent that all parts of the world are affected through the growth of trade, factor flows, information and technology and diffusion, globalization has, no doubt, become a daunting reality for all countries of the world."² Be that as it may, for Nigeria and the rest of the Third World countries, globalization should be taken with a pinch of salt. This is because Third World countries generally lack, minus the Asian Tigers, the tools necessary for to fully immerse themselves in this phenomenon called globalization. Third World countries also lack the capacity and capability to control the levers or drivers of this octopus by name of globalization.

Theoretical Framework

This study adopted the Structural Conflict Theory propounded by scholars such as Karl Marx, V.I Lenin, Ross Scarborough, Walter Rodney and others. These scholars see incompatible interest and competition for scarce resources as being responsible for environmental degradation. These theorists see globalization and its problems like political and economic exclusion, environmental degradation, poverty, diseases, and exploitation of human societies, inequality and the domination of the peripheral states by the core states through Transnational Organizations (TNCs) operating where there are lax environmental laws, cheap labour

and large scale production to satisfy global demand, as sources of polarization, marginalization and exclusionism.³ Whereas this has resulted in the division of the world into two axis - the developed and the underdeveloped or developing countries, the core-periphery syndrome, they justify and legitimize economic, political and cultural imperialism and their ripple effects on the environment.

Conceptual Clarification

Globalization is a historical process which started when Europeans began their voyages around the world. It started in the 15th century in the Nigerian area. It is characterized by greater interconnectedness and shrinking of borders among nations of the world in economic, cultural, social and political terms through trade and information technology.4 Globalization is defined as the elimination of barriers to trade, communication and cultural exchanges.5A review of the concept of globalization presented by three scholars Najum Arthur, Runnalls Dielli and Halle Marshall - provide a classification of at least five broad sets of definitions of globalization. First, globalization is seen as internationalization, used in describing cross – border relations between countries; it also describes the growth in international exchange and interdependence. Globalization as liberalization which is seen as the removal of government-imposed restrictions on trade and service movements between countries; third, globalization is also seen as universalization6, a process of spreading ideas and experiences to people at all corners of the earth to harmonize the world; fourth globalization Westernization or Modernization which is seen as the social structures of modernity (capitalism, industrialism, etc.) are spread around the world, destroying cultures and firing local determination in the process and fifth; globalization

deterioration which is the process of the reconfiguration of geography, so that the space is no longer wholly mapped in terms of territorial places, territorial distances and territorial borders.⁷ To Immanuel Wallerstein, globalization has marked another stage in the development and triumph of capitalism where the economy is tied together by the logic of capital accumulation.⁸ (282)

Arguably, the most common claim associated with literature on the effects of globalization on individuals, nations and the world at large has resulted in contrasting paradigms - the globalist and anti-globalists or the protagonist and the antagonist. On the one hand, the globalist contend that globalization offers great opportunities because it brings together many more nations and people of the globe who interact with one another at multiple levels as a global village. Supporters of globalization believe that it offers great opportunities for growth and development. But to anti-globalist like Martin Khor, globalization intensifies the integration of people and nations which has impacted on different countries and people in an unbalanced manner, marginalizing some (the South) and rewarding some (the North), with unequal distribution of benefits and losses.¹⁰ He further stated that globalization is a capitalist and imperialist economic revolution. The processes of globalization produce differentiation in the production process - the have and the haves-not.11 It produces polarization, marginalization and creates inequality.

Globalization has bequeathed mixed feelings for the South as it permeates economic, political, social and cultural spheres of the people. In the economic sphere, globalization as a process has accelerated the liberalization of trade, finance and investment through the breaking down of economic barriers, the international spread of trade, financial and production activities and the growing power of Transnational Corporations, and international financial institutions in these processes through policy-making and rising inequality.¹¹ This brought about the adoption (by Nigeria) of the Structural Adjustment Programme (SAP) as a development strategy initiated and promoted by the International Monetary Fund and the World Bank in the 1980s. As a consequence for adopting the SAP, African countries especially Nigeria have to withdraw from their developmental roles but not until it has hampered the recovery process and further led to deterioration in social services.¹²

Politically, globalization has tried to establish neo-liberal democracy across the continent of Africa and elsewhere in the world. The attempt to introduce liberal democracy in countries accustomed to authoritarian, dictatorial and repressive military and civilian rule has led to confrontations which have culminated in conflicts in several African countries such as Nigeria, Rwanda, Eritrea, Liberia and Sierra Leone. These confrontations and violence, according to Gaya Best, had been induced by economic and political liberalization which accompanied the adoption of the SAP. 14

Socio-culturally, globalization has eroded and defaced the imprint of the socio-cultural patterns of the South and implanted or imposed the European cultural standards and values of Western developed countries. The South has become immersed in these values and cultural standards quickly through information technology and other media outlets. But the South has to indulge in globalization with a lot of caution because the south has to be permitted to "develop its own financial systems, domestic markets as well as their industrial capacity". This is because the rules of globalization and its mode of operation are

being driven wholly by the advanced capitalist nations of the north."15

What Constitutes the Environment?

The environment is the totality of what surrounds humanity. It consists of all living and non-living things that live around it. Although the link between globalization and environmental degradation has not been clearly established by scholars of globalization, to understand the effects of globalization on the environment, a proper study of each of the global realms is imperative. These realms are the atmosphere, hydrosphere, lithosphere and biosphere. ¹⁶The atmosphere as the gaseous realm is subdivided into two layers consisting of different temperatures. The lower layer is called troposphere while the upper layer is called stratosphere. According to Professor Andrew F. Uduigwomen, the ozone layer (O3) is very close to the stratosphere. ¹⁷This protects the earth and the stratosphere from direct contact by ultraviolet radiations from the sun.

The hydrosphere, on the other hand, is the water realm. According to geographers, 70 per cent of the earth surface is made up of water. This constitutes the hydrosphere where water is stored in three states, Ice water, liquid water like oceans, seas, streams, etc. and gas which is vapor. Water is very essential to life and it is believed that the first sign of life is found in water. Lithosphere is the component of the earth which is made up of crustal rocks, mantle and core. The uppermost part of the solid earth consists of weathered rocks, minerals and organic matters as soil. Land is very important for use in agriculture, industrialization, transportation, etc.

The biosphere is the realm of living organisms. Biosphere reaches well into the other three spheres of (atmosphere, hydrosphere and lithosphere), although there are no permanent inhabitants in the atmosphere. There exist interactions among the organisms in the biosphere. Ajake, Eja and Koffka in 1935 divided the environment into geographical environment where space and all the things surrounding man are domiciled; the operational environment which is the subject of the wider system and is the actual area of man's operation in the day-to-day activities which affects man either consciously or unconsciously and perpetual environment which dictates the behavior of man through response to stimuli.¹⁹

Effect of Globalization on the Environment

Globalization has presented mixed blessings for the Nigerian environment. The fringe benefits are the liberalized trade which is supposed to generate economic growth, induce spectacular increase in food production flowing from improved plant breeding techniques, which have raised the living standard of the people, bring about internet revolution; global integration in which the sources of social conflict will vanish, creation of new opportunities for cooperation, faster access to technology, improved communication and innovation. Despite the global environmental summits of 1972, 1992, 2002 and 2012, convened to combat environmental crisis, globalization has created some areas of concern on the environment which have threatened Nigeria's present and future wellbeing. Consequently, this has resulted in damage to the physical environment.

Global warming is seen as an overall increase in temperature in earth's atmosphere and Oceans. According to a UN-sponsored Intergovernmental Panel on Climate Change (IPCC), global warming is "unequivocal" and very likely, mankind is largely to blame and little likely, cities may be heating up because they are growing in size. Gases that contribute to the greenhouse effect

include carbon dioxide (CO2) through industrial and commercial processes, nitrous oxide and methane as well as water vapor. These gases have increased over the past 267 years, since the industrial revolution. The increased use of fossil fuel like coal, oil and gas and the rising population of farm animals, whose digestive processes produce methane and nitrous oxide, all assist in the global warming processes.²⁰ Additionally, sunspots and solar flares, the influence of volcanic dust and changes in oceanic currents and global warming substantially contribute to climate change and dramatic rise in sea levels leading to serious consequences for food production, housing, flood, communication, etc.²¹

Urbanization has been regarded as an index of industrialization, improved income and jollity for the urban residents. Street beggars constitute a nuisance because they pose a serious pollution activity to the environment. Beggars defecate everywhere and pollute the environment with their feaces, wrapped in newspapers and render the streets foul, stinking and therefore very ugly to look at and unclean.²² Beggars use the uncovered gutters for excretion of feaces and urination even in the daytime. This phenomenon renders the environment seriously polluted with odour especially along Bogobiri, the Hausa people's quarter in Calabar, Nigeria and beside the Cultural Centre, along Mary Slessor Avenue, Calabar. These said areas could be fertile grounds for diseases like malaria, cholera and other related dirty environment-based diseases.²³

Noise is a distortion of communication after transmission and before reception, and anything that reduces communication effectiveness or fidelity is noise. The various forms of noise include environmental noise like atmospheric noise (e.g. thunder), animal, human or mechanical noise can interfere with verbal (minos) or aural instruction.²⁴ Light that is very poor, irregular, etc. can seriously interrupt dazzling. communication; physical noise like ill-health and hunger. Overfeeding can be a constraint to idyllic environment: psychological noise, cultural noise and semantic and syntactic noise.25 Friday James, an airport worker at the cargo section of the Margaret Ekpo International Airport, Calabar, Nigeria claimed that noise pressure level of 130 decibels, (a decibel is a logarithm measure of sound) with steady exposure could cause permanent hearing loss or deafness. According to him, "the rapid growth of aviation since 30 years ago has created a major noise problem in the airports".26 A resident at Edim Otop, also in Calabar, Ekanem Asuguo, complained of the vibration of her house during the take-off and landing of aircrafts at Margaret Ekpo International, airport, Calabar resulting in disturbance, annovance and deafness emitted from the airport.27This could unmask auditory lopes and general fatigue.

Water pollution is one of the greatest environmental problems. Water pollution is the contamination of water used for drinking and other purposes. When chemical pollutants are released into water, they constitute health hazards to human and aquatic life. Water infested with pathogenic organisms such as bacteria, viruses, worms, protozoa and fungi is not safe for human use. Water pollution is responsible for water-related diseases such as guinea worm, dysentery, typhoid and cholera bilharzias and infectious hepatitis. Water-borne diseases still constitute major killers in the developing world Nigeria inclusive.²⁸

Air pollution occurs when air is mixed with poisonous gases and particles of liquid and of solid nature when the atmospheric quality determines the degree to which such substances being released into the air can be considered harmful to public welfare.²⁹ In a highly publicized World Bank memo endorsed by Lawrence Summers, a Chief Economist in 1999, urged the World Bank economists to encourage pollution intensive industries to migrate to developing countries. The direct effects were seen in the scale which encourages the shift in global production possibilities frontier, raising the size of the industrial pollution base, resulting in greater global emissions; composition effect which encourages trade liberalization that worsens environment by shifting pollution intensive production to lowregulation and often low-income countries. The proposition that globalization facilitates the relocation of dirty industries into poor countries is known as the Pollution Haven Hypothesis (PHH) where pollutants will expand into poor countries and the technical effect which has to do with environmental policy associated with income gained from trade.³⁰ These pollutants cement factories, refineries, breweries, such industries, iron manufacturing glass and steel mills. manufacturing industries, aluminum processing or exhaust fumes from heavy generating sets, old motor vehicles, fumes from generating sets, dusts and gases have been responsible for serious respiratory problems like bronchitis, asthma, and lungs cancer and other respiratory diseases including cold, pneumonia, could cause eye irritation and other-toxic effects.³¹ Acid rain caused by combustion of fossil fuels, erupting volcanoes or rotting vegetation which releases sulfur dioxide and nitrogen oxides into the atmosphere affect human health, wildlife and aquatic species.

According to the United States Department of Energy, it is estimated that over 4,000 crude oil vessels discharging more than two million barrels of crude oil into the Niger Delta since 1960 will gulp up \$1billion for it to be cleaned up. Oil slicks cover the region. Blow-outs and leaks affect creeks, streams, and

related traditional sources of livelihood, poisoning the water supply, destroying the mangrove forests, eroding soil plots and killing aquatic life. Hundreds of well-sites have flared, which come from the burning of associated gases. The flares heat up everything nearby and turn day to night, releasing 25 million tons of CO2 and 12 million tons of methane annually. The resulting sulphuric acid mists damage plants and forests. Flares pollute rain water, cause acid rain and immensely contribute to climate change.³²

Deforestation is the cutting down or burning of trees in an area. Economic trees when cut are sent to the industries driven by globalization and for making furniture and sometimes to supply fuel. Deforestation normally results in destabilization of the ecosystem in the environment, like the proposed 262km Super Highway proposed by the government of Cross River State which cuts across the Cross River National Park, a world heritage centre and the largest rainforest in West Africa. Other implications of deforestation include increase in soil erosion, decrease in water percolation rate, deforestation results in loss of soil nutrients; it decreases the humus content of soil, it decreases the amount of rainfall in the said area, it reduces wild life population in the concerned area and may lead to desertification which ultimately may lead to the denial of animals and other organisms their natural habitat.³³

The earth tremor that occurred on 11 September 2016 at Kaduna, Nigeria was said to have been caused by the activities of man. According to Felix Ali, a spokesperson for the National Space Research and Development Agency (NASRDA), the tremor occurred because of illegal mining and unregulated drilling of boreholes and quarrying. The earth tremor occurred at 10:32 am on Sunday September 11, 2016 in Kwoi, Sabbah and Chori

villages in Jaba Local Government Area of Kaduna State³⁴. Although environmental experts may have warned that six states in Nigeria could witness earthquake in the future - Lagos, Oyo, Ondo, Bayelsa, Cross River and Delta States before 2020 - if no active environmental policies and practices are put in place.³⁵ Due to loading of the earth crust, disposal of waste into deep wells and setting of underground explosions especially by quarries in Cross River and Ondo states in particular may result in unanticipated earth movements as occurred in Kaduna. All this is anchored on the capitalist drive for investment and turn-over to which globalization has ultimately induced.

Other negative effects of globalization on the environment include the dumping of toxic wastes in Nigeria as occurred in 1988. The industrial waste of 9,000 chemical drums and its leakage stewed the environment with Polychlorinated Biphyenyls (PCBs), a highly cryogenic and poisonous acid and inflammable liquids. For example, in the Koko incident in the former Bendel State, 1,000 people were affected by toxic waste brought in from Italy by Gianfranco Raffaelli. Out of the 150 workers involved in the off-loading of the drums, 40 persons were claimed to have died, six in critical conditions and others suffered from different ailments ranging from burns, vomiting blood and one man was said to have been temporarily paralyzed.³⁶ In that vein, mercurial poisoning cause neurological problems resulting in heavy brain damage and disturbed coordination, temporal deafness, failure of peripheral vision, urinary complications and death in severe cases.

Natural disasters have no defined limits both in area and intensity but could be managed when they occur. Flood is usually a large amount of water covering an area that is usually dry. It is generally caused by heavy rains and tidal wave movements and

inadequate urban planning. Other causes include urban sprawl, overpopulation, poor drainage system, refuse dumping or disposal in drainage, rivers, streams, etc.³⁷ Nigeria is noted for producing excessive amounts of waste or garbage. The waste in nuclear, plastic, fast food packaging and cheap electronics threaten the wellbeing of Nigerians and the environment. The erection of buildings on water courses, roads and culvert sites and break down of dams and embankments could also cause flood because of the above mentioned factors. As reported by Sani Sidi, Director General, National Emergency Management Agency (NEMA), flood claimed 52 lives and property worth NGN2.1billon were destroyed. In August 2017 in Makurdi, Benue State, flood sacked the residents of Wurukum and Gboko roads due to heavy rains, indiscriminate refuse dumps and poor drainage system of the areas.³⁸

Receding flood provides an ideal breeding ground for mosquitoes as well as creates an increased risk of such diseases as malaria, dengue and rift valley fever. Floodwater, open sewage and reduced opportunities for good personal hygiene, has led to cholera outbreaks, diarrhea and gastro intestinal virus and displaced rodent populations. This has also led to the outbreak of leptospirosis and anti-virus infections and the destruction of farmlands. Besides, this has led to the intensification of poverty in Nigeria³⁹

In a study conducted by Jibo *et al* on *Ethnic Groups and Conflicts in Nigeria*, a careful analysis of the 40 conflicts studied revealed that 32 of them were over land ownership, hence a direct link to rights claims of ownership between indigenes and settlers. Both the conflicts in Plateau and Delta states in Nigeria are about claim of ownership of lands with resources found in them. These conflicts are in essence over the right to use the

environment in pursuit of socio-economic interest of the people for higher monetary returns. Of course the chieftaincy claims three (3) and resource control claims two (2) are also linked to the usage of the environment.⁴⁰

Conclusion

The study examined the effects of globalization on the environment as a complex phenomenon induced by the activities of man on earth. Environmental changes arising from globalization have made the earth uncomfortable for man in his quest to satisfy his needs. The transport sector is responsible for the release of anthropogenic greenhouse emissions by shipping (ocean transport), aviation and road transport occasioned by the liberalization of trade which has increased the openness in trade volume leading to an intensified release of toxic wastes and global warming.

The damages to ecosystem from oil spills and gas flaring has caused a lot of harm to aquatic animals and plants in the interference of their genetic makeup and has further put pressure on available land resources. The other great areas of concern like noise pollution and landscape intrusion are not equally left out in the menace.

Studies have shown that in Nigeria vast virgin forests and mountains have been trespassed to erect buildings or industries, construct roads, railways, airports or other infrastructure. Besides over-exploitation of resources, deforestation, overgrazing and overfishing have been exacerbated by globalization. It is imperative to note that the evolution of agriculture in the 'fertile crescent' changed the land many years ago. The industrial revolution has affected the atmosphere, biosphere, lithosphere and hydrosphere putting every living creature under severe health hazards. These have reached an uncontrollable dimension

as a result of man's activities on earth via globalization for a higher return through Foreign Direct Investment (FDI) and its destructive spiral of environmental degradation and apocalypse all on humanity, animals and plants.

Recommendations

- The various types of natural and man-made disasters which have caused devastation can only be reduced and curbed if:
- Proper environmental practices are observed
- Legal measures should be put in place to prevent further deterioration of the environment.
- Effective mitigation and preparedness provisions by the individuals, Federal Government, Sate Government, civil society agencies, NGOs, Rotary Clubs should be secured by multi-disciplinary emergency management practices.
- Environmental education should be encouraged to create awareness, skills, knowledge, attitudes and participation in saving the earth from 'dying".
- Environmental and disaster management proposals should be professionally developed to address global warming, pollution, deforestation and land encroachment with six basic questions: what, where, when, why, who and how.

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