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Impact of Globalization on the Environment: The Niger Delta Region Experience, Nigeria

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Abstract:

The inflow of multinationals especially in the oil sector brought about by globalization has over the years contributed lots to the growth and development of Nigeria as a country, thus, there are no doubts that the activities of these multinationals in the oil sector has benefitted the nation in a great deal however, the amount of the environmental degradation caused by the activities of these firms is enormous in terms of degradation of farmlands, destruction of source of drinkable water, deforestation, as well as the destruction of aquatic lives and its negative effect on the health of the people. This study was designed to critically investigate the impact of globalization on the environment vis-à-vis the organization and the individual. The paper adopted qualitative methods through the application of literature review. We found out that though globalization has benefitted Nigerian state in some areas, its negative effect on the Nigerian environment specifically the Niger Delta region's environment is enormous, we therefore, recommended among others the need to inculcate a higher level of environmental awareness in individuals, organizations as well as the government, thus, public awareness and education should be made utmost priority.

Keywords: Globalization, environment, Niger Delta

1. Introduction

Environmental problems in the past 20 years have turn out to be a real predicament that is currently threatening the survival of human beings worldwide that needs urgent interventions from the nation states, organizations as well as from individuals. The environment in terms of land, water and air that was once unpolluted and very hospitable has become so degraded that the existences of lives have become a threat as a result of the activities of human beings all over the world. Cochrane (2007) expressed that the environmental problems witnessed today such as environmental pollutions (air, land, and water pollutions), deteriorating plant and animal biodiversity, natural resources diminution, ecosystems dilapidation, climate changes and the ozone layer depletion are all caused by the activities of human beings. Human existence has never witnessed the type of environmental crisis we are facing today which is as a result of technological advancement brought about by globalization.

More so, globalization has become a major contributor to this dilemma that has bedeviled our environment of today with lots of consequences and if these consequences are managed effectively may cause other consequences in the long run (Ivana Ilic, 2015). Globalization which has to do with the integration of different economy of the world into one plays an important role in all the aspect of the society and as well impact on all aspects of human operations. Globalization is a phenomenon that touches as well affects all aspect of human endeavour ranging from political, social, economic, and cultural as well as the environment. International trade liberalization, inflow and outflow of capital as well as investment across borders, the flows of information globally and technological transfer internationally has made globalization of today more pronounced than before.

Through the advancement of technology and science brought about by globalization, man has altered and brought lots of destruction to the environment for years. As a result of this devastation, the future existence of the environment is heavily been threatened and if adequate cautions are not taken the situation may go get worse in years to come. More so, the problem of the environment is growing worse each day that even the technology produced by man has not been able to save the world from environmental degradation. Hence, Abdullah (2016) expressed that the degradation of today environment caused by technology has become a problem technologically for which technology has found, is finding, and will continue to find remedies. Billions of dollars are spent every year and even more will definitely be spent in years to come all in a bid to preserve the existence of the environment. Thus, Huesemann (2001) expressed that in spite of all the resources that is been spent in a bid to ensuring the existence of the environment, it is debatable if today's present scientific and technological advancement will proffer solutions to the problem of the environment or worsen it.

From an environmental point of view, globalization causes severe consequences for the environment from two stances vis-à-vis the preposition that globalization creates possibilities for proffering solutions to problems in the environment globally while at the end of the other stance; globalization is a major cause of environmental degradation globally (Ivana Ilic, 2015). Foreign direct investment as well as international trade as part of globalization has over the years increased the production of products across the globe in an exceptional manner, and unprecedentedly increased trade between nations of the world that have led to better standard of living across the globe. Thus, Boers (2010) articulated that the advancement of technology has led to the improvement in food production due to enhanced plant breeding methods which have actually raised the standards of living of man but have left disastrous impacts on the environment. Though it is still complicated to actually evaluate globalization effect on the environment, however, it is to a certain extent apparent in some aspects especially the negative impacts and these negative impacts manifest mainly in the form of pollutions (Abdullah, 2016).

Today's Nigerian environment is characterized with pollutions ranging from air pollution to water as well as land pollutions which is mostly due to the activities of industries and increased need of energy for the nation's uncontrollable growing population. Specifically, today's environmental degradation in the Niger Delta part of Nigeria is as a result of the operations of the oil and gas exploration firms such as Shell, Agip, Elf and the rest. The operations of this multinational enterprise have made most part of the Niger Delta to become inhabitable and those firms have mostly destroyed the peoples' livelihood. Their waters have become undrinkable, their farm lands have become infertile due to oil spillage as well as aquatic lives are been affected on a daily basis as a result of these firms' operations. Furthermore, the increase of multinational firms in the area of oil exploration and exploitation in the Niger Delta part of Nigeria has had and is having devastating effects on the regions environment as well as the people residing in it. The Niger Delta region has a good environment before now but because of pollutions from oil spillage, the environment of the region is now characterized with loss of biodiversity, full of infected waters, demolition of its forest and the region have now become environmental wasteland which has really affected individuals depending on the flora and fauna in the region to making a living.

Over five decades of oil exploration in the Niger Delta, the operations of the oil multinationals as a major part of globalization have caused lots of environmental wreckages to the region which has affected individuals in the region as they no longer effectively carry out their farming, hunting and fishing operations been major sources of their livelihood (Onuoha, Ebong & Ufomba, 2018). The environment of the region has over the years suffered lots of environmental devastation such as habitat wreckages, forest devastation, soil desolation as well as the alteration of the environment by the activities of these multinationals. Though the oil multinationals in the region have enormously made lots of contributions to the general development of the nation, however, their flawed operations have made the Niger Delta region to be one of the five most brutally oil devastated environment globally (Kadafa, 2012). Thus, the purpose of this paper is to critically analyze the impact of globalization on the environment, specifically on the Nigerian environment focusing on the Niger Delta part of Nigeria as well examine its influence on the organization as well on the individual.

2. Literature Review

2.1. Concept of Globalization

The root word of Globalization is global which means the entire world or the entire universe. It has to do with the integration of the world into a whole. Globalization relates to changes in the social order of people as well as the economy of the world due to significant increase of trades, investment as well as exchange of culture across national frontiers. Globalization according to Giddens (1990) is the amplification of global social relations that connects far localities together so that what happens in one locality affects the other locality and vice versa; the corona virus pandemic that emanated China can have devastating effect on all countries of the world.

Globalization has to do with the eradication of trade barriers, exchanges of culture and the elimination of barriers to communication (Abdullah, 2016). Today's world has changed immensely when compared to the world of the past say 5 decades ago due to globalization in the form of technological and communication advancements, thus today's world has become so integrated as well have become more unified (Abdulsattar, 2013). Due to its effect on all aspect of the society vis-à-vis politically, socially, culturally, environmentally and economically, globalization has become a household name used by individuals as well as organization and governments across all nations. Globalization which has been developing in some centuries ago has increased immensely in the last 20 years due to increase in international trade as well as investment across national borders. More so, McMichael (2000) expressed that the increase of human movement across national frontiers as well as the improvement in electronic communication technologies have made lots of contribution to the process of globalization.

Furthermore, Najam, Runnalls and Halle (2007) categorized globalization as internationalization, liberalization, universalization, westernization and as deterritorialization. As internationalization, globalization has to do with the cross-border connections between nations state. It focused on the interdependency of one nation on the other which enhances international trade among them. As liberalization, globalization eliminates governmental restrictions on movement of goods and services across borders of nations. More so, as universalization, globalization has to do with the transfer of ideas as well as experiences between individuals globally which bring about the harmonization of ambitions as well as experiences globally. As westernization, globalization is seen as the spread of social structures of modernism that is industrialization globally which its process tends to tear down cultures and local self-determination while as deterritorialization, globalization has to do with the reconfiguration of geography, so that social space is no longer wholly mapped in terms of territorial places, distances as well as borders.

2.2. Concept of the Environment

The environment is the sum total of conditions in which an organism has to survive or maintain its life processes which affects the growth and development of the organism (Adelagan, 2006). It is the sum total of factors surrounding us at a given point of time and space. In other words, our environment is the sum of all factors that affects our lives, developments as well as existence survival. It is made up of the atmosphere, hydrosphere, lithosphere and biosphere. Everything, which surrounds us whether, living or a non-living is a component of our environment. It includes the air we breathe, the water we use for our needs, the soil we cultivate, the flora and the fauna we enjoy.

Environment as a concept has to do with our surrounding which includes physical, biological and socio-cultural aspects which often interact with one another. The physical aspect of the environment has to do with nonliving element such as soil, minerals, rain, air, light, temperature, water, wind, climate while the biological aspects of the environment comprise of all types of flora, fauna and the micro-organisms. More so, the socio-cultural environment are man-made aspects of the environment which includes population density, market facilities, customs, religion, habit, railways, means of transportation that affect the living conditions of humans.

The environment is very important to the survival of human beings because it regulates the life of human beings living in it. However, because of man activities of today, the environment is losing its value and the existence of man is been threatened. Population pressure as well as increased in globalization are generating unparalleled social and environmental problems at national as well as global levels; thus, the need for better management of the environment. Precise knowledge of various facets of sound environmental management is the sine qua non for sustainable development of the environment which meets not only the requirements of the present generation but also of the future generation. The environment plays an important role in determining the existence of man as well as the organization as such individuals as well as managers must make all effort in preserving the natural environment for now and for the future purposes.

2.3. The General Impact of Globalization on the Environment

Globalization has positively as well as negatively affected the environment. Globalization can increase or worsen environmental problems as well as provide new means for addressing them; however, its negative impact on the environment is more than its positive impacts (Shidawa, 2015). Industrialization brought about by globalization has significantly and undoubtedly affected lives globally positively especially those of the undeveloped countries through increased production, accessed to ideas and information globally as well as access to technology however it has brought lots of environmental dangers through the release or discharge of unsafe gases into the environment such as plants desolation, animals' extinction as well as human health deterioration. One area globalization has positively affected the environment relates to the progress in the use of resources, better awareness of the environment as well as the development of environmental technology, however, its negative effects is overwhelming. The positive effect of globalization is mainly in the increased awareness of environmental challenges as well as providing encouragement for multinationals to ensure the environment is protected.

Globalization has over the years affected our lives in all aspect as a result of faster access to technologies, advancement in innovation as well as enhanced communication networks; however, their usage immensely adds to the warming of the globe and the subsequent release of dangerous gases into the atmosphere (Ivana Ilic, 2015). This because according to Smrecnik (2002) globalization is a major causes of environmental degradation as it is characterized by the absolute dominance of the social, cultural, political and economic representation of the developed countries of Europe and that of United States, as a result creates a global social order with obvious inequality. Global warming is as a result of greenhouse effect brought about by growing industrialization as well as heavily dependent on fossil fuels usage which impacts immensely on the biodiversity and weather system globally.

Specifically, globalization has led to different pollution of the environment vis-à-vis air, water, land and noise pollutions. Pollution has to do with the contagion of the environment by physical, chemical or biological elements detrimental to man existence as well as animal and plant existence that occur through man operations or natural occurrences (Otukong, 2002). Environmental pollution is majorly caused by the increase of industrialization, emission of harmful carbon during the functioning of the industries' machines as well during the transportation of raw materials and finished products to different locations where it is needed.

The process of globalization has also led to increase in traffic congestions especially in the urban regions that has brought lots of damages to the environment (Siriner&Nenicka, 2011). Due to globalization in terms of movement of people from one country to another has led to increase means of transportation such as vehicular movement and other means of transportation which has amounted to all kind of pollutions vis-à-vis noise pollutions as well as air pollutions. The release of detrimental and unsafe gases into the air are major causes of climate change which are mostly widespread in areas with road traffic which is majorly depended on fuel and according to Jovanovic, Ignjatovic, Vlajkovic&Darmati (2012) out of the total emission of dangerous gases into the air, fuel contributes 14% which is very detrimental to health.

Due to the interdependency of one nation on the other brought about by globalization, international trade among nations have increased which has brought along with-it increased pollution in terms of transportation especially in urban areas. These pollutions in term of air pollutions, noise pollutions and water pollutions occur as result a result of increased number of vehicular movements which are unfavorable to human health as well major causes of changes in the climate globally (Keles, 2012). Environmental pressure resulting from globalization is a major threat to the existence of living beings throughout the globe (Abdullah, 2016). Aspects of globalization such as industrialization, increased of shopping malls, as well as tourism activities globally are also causing inevitable environmental harms. Due to globalization, toxic and chemical wastes from factories and industries have resulted to pollutions of the environment that acutely stand as a threat

to existence of humanity. Thus, humans need to be aware of environmental changes due to the fact that issues emanating from the environment are heading to a state that is not controllable due to human activities against the environment.

Furthermore, globalization has also affected the environment negatively in the form of too much use of natural resources as a result of demand increased globally as well as deforestation as a result of growth in population due to trade liberalization. Ivana Ilic (2015) expressed that due to civilization and globalization, about one-half of the forests that once covered the Earth have vanished and deforestation causes loss of biodiversity which is very detrimental to the environment. Globalization has affected the environment negatively through deforestation. Far-reaching deforestation has taken place and will still occur more globally due to industrial needs of disposable products. Therefore, increase deforestation has resulted in the loss of environmental biodiversity in the globe. Forest globally is diminishing as a result of trade internationally; thus, Kalbessa (2007) expressed that with today's international law that covers the liberation of trade, multinationals are at liberty to set up their corporation in any part of the globe. Hence these multinationals have consistently over the years established various industries in different part of the world through the destruction of the natural forest as well as destroying the source of the livelihood of farmers. Also, lots of animals and plants have extinct and lots are at the verge of extinction due to deforestation. More so, deforestation reduces the content of water in the soil and groundwater as well as atmospheric moisture, reduces soil cohesion, thereby causing environmental erosion, flooding as well as landslide (Shidawa, 2015).

2.4. Impact of Globalization on Nigeria Environment: Niger Delta Experience

The inflow of multinationals especially in the oil sector brought about by globalization has over the years contributed lots to the growth and development of the country generally in terms of increasing the GDP of the country and the provision of employment to individuals across the country. There are no doubts that the activities of these multinationals in the oil sector have benefitted the nation in a great deal however, the amount of the environmental degradation caused by the activities of these firms is enormous in terms of degradation of farmlands, destruction of source of drinkable water, deforestation, as well the destruction of aquatic lives (Kadafa, 2012). Since the discovery of crude oil in commercial quantities in 1956 as well as the commercial productions in 1958 at Oloibiri in Bayelsa State in the Niger Delta region by Royal Dutch Shell, the environment of the region have never been the same. Lots of damages have been done to the ecosystem of the region.

The operations of multinationals in the oil sector in the Niger Delta area of Nigeria has become a major concern in terms of the amount of damages those corporations have done to the environment of the region. Oil firms' operations such as exploration/extraction of the oil, the production of the oil, its refining as well as its transportation have resulted to pervasive environmental damages of the region. The damages consist of gas flaring that emit harmful gases into the atmosphere, pipeline leaks pollutions, disorder and the destruction of natural landscape through deforestation for the construction of oil related industrial infrastructure as well as installations, blowouts, drilling floods and explosions from seismic surveys (Shidawa, 2015). The most affected States in the Niger Delta region include Delta, Bayelsa, Rivers, Akwalbom and Cross Rivers State. The impacts of the extractive operations of this multinational vis-à-vis Total, Texaco, Chevron, Agip, Mobil, Shell etcetera have over the years affected the environmental conditions as well the social and economic lifestyle of the people of the region.

The environment of the Niger Delta region has been suffering from degradation since the beginning of exploration of oil in the region as a result of oil spillage in the communities hosting the multinational enterprises (Onuoha *et al.*, 2018). Amadi and Tamuno (2001) expressed that the exploration of crude oil resources by the oil multinationals has caused lots of ecological dilapidation as well as the pollutions of the environment which over the years have impacted the living standard of the people in that region. More so, CAB (2009) expressed that some past spills caused by the operation of these firms have over the years resulted to relocation of some homes as well as communities in the area, deforestation, fresh water pollution, as well as the destruction fishing ports and the diminution of fish population which is the main stay of the indigenes in the region. In the same vein Chinda and Braid (2000) also expressed that the operations and activities of the oil multinationals has led to deformation and displacement of some of the indigenes of the region.

Furthermore, one significant aspect the operation of these multinationals that has tremendously affected the environment of the Nation in general and the Niger Delta specifically is in the area of gas flaring. Gas flaring in the region is one of the highest in the world thus, Shidawa (2015) expressed that by 2002 gas flaring in Nigeria has added more greenhouse gases to the atmosphere than all other sources in sub-Saharan Africa combined due to the amount of gas flaring in the region. The operations of the oil firms in the area have enormously brought lots of damages to the environment of the region and despite government actions to put to hurt the everyday flaring through the setting of monitoring agencies as well as regulations and standards, gas flaring in the region has continued to be on the increase.

It is estimated that the region has about 123 gas flaring sites and about 45.8 billion kilo watts of heat is been emitted everyday in the atmosphere from 1.8 billion cubic feet of gas which makes most of the region inhabitable and out of the total gas produced in the country 84.60% is been flared on a daily basis while 14.86% is locally used (Agbola & Olurin, 2003; Ukoli, 2005). Over how many decades now we have been witnessing lots of fire incidences across the country from pipeline explosions that have brought about loss of large number of humans as well as properties and the destruction of the environment.

Another aspect of the environmental degradation caused by the gas flaring and other operations of the oil firms is in the area of acid rain and black soot. Gas flaring in the region has resulted to loss in biodiversity due to deforestation and the destructions of economic crops. Opukiri and Ibaba (2008) expressed that the invasion of grasses and shrubs in the Niger Delta area indicates that deforestation has taken place in the region as a result of acid rain and other operations of the multinationals. Thus, Uyigue and Agho (2007) articulated that the amount of acid in rain water is more in the region

when compare to other regions. More so, the induced heat from flaring is very detrimental to plant life especially the plants that are closed to the area, stimulate soil dilapidation and reduces productivity of agricultural products (Mba,2000). More so, another major impact of this oil spillage is the pollution of water in the region. Thus, Etuk (2004) expressed that the discharges from oil multinationals industries have increased the contents of sulfates and nitrates in water bodies and have tainted properties such as color and odor of those water which has caused lot of damages to aquatic lives as well as human lives. This is because a quite number of persons in the communities hosting the multinational corporation obtain most of their household as well as drinkable water from the rivers' waters that have been affected by the oil spillage. This has become a major health concern that places the health of the people at risk of diseases like typhoid, diarrhea, cholera, as well as dysentery (Ekpo, 2004).

3. Impact of Globalization on the Organization

Changes brought by globalization economically, socially, technologically, environmentally, culturally, politically, as well as in transportation and communication require today organizations to adapt to new strategies in tackling these changes. Globalization has a two way effect on the organization; thus it can provide better business opportunities for organizations and can however leads to disastrous challenges for the environment that may affect the performance of the organization (Abdullah, 2016). Globalization is a global trend by which various economies in the globe lose their boundaries and hook up to one another, thus organizations are no more limited within their home countries but can carry out their operations all over the world, hence better access to larger market. The provision of business opportunities for organization comes in the form of global access to larger market which increases the performance of the organization. Today, due to globalization, financial flow that transverse national borders are freer and organization are getting better financial aids which help them to invest more globally.

Another area globalization has affected organization positively is in the area of cost reduction. Liberalization of trade across borders, global consumer habits, pressure from foreign competitors in the home market as well as the development of information and communication technologies, are major drivers of globalization which has helped organization to achieve economies of scale, reduce costs as well as access to cheaper raw materials for their production (Ristovska&Ristovska,2014). This is the reason organizations mostly site their production facilities in countries where the cost of production is low. However, due to globalization, organizations face tougher competitions this is because of the ability of foreign organizations to carry out their business operations across national borders. This often affects the performance of the organizations in the host countries since those foreign enterprises have a strong capital base. Also, trade liberalization among countries can leads to economic development, which can also lead to increase in pollutions for the host country as a result impact on the environment tremendously (Esty&Ivanova, 2003) which can affect the performance of the organization.

4. Impact of Globalization on the Individual

The change in the environment especially in the Niger Delta region brought about by the activities of the oil multinational which is as a result of globalization has impact on the individuals too. Due to environmental degradation by the operations of the oil multinationals, lots of forests have been ruined, lots of farmlands have been made un-cultivable, lots of fish ports have been destroyed which are all major means of livelihood of the people living in the area. The environmental degradation of the region due to oil exploration and production has decreased most farmlands in the region and subsequently turned it into wastelands; thus, farmers have no other choice than look for alternative means of survivals (Duru, 2010).

Shidawa (2015) noted that out of the 192 billion standard cubic feet of gas generated in the country in the year 2010, over 145 billion standard cubic feet of gas was flared which is very harmful to humans as well as the environment adding a lot to the changes in climate. Thus, it has resulted in increase of cancerous diseases, damages of the weather conditions as well affecting food security across the globe specifically in the Niger Delta region of Nigeria. As a result, most farmlands have become un-cultivable due to gas flaring and oil spillage from the activities of Multinational Corporations. Persons residing in the area where gas is being flared are mostly affected; this is because the flared gases contain contaminant like benzene which result in air pollution that affect humans' respiratory system. Also, the pollution of the environment as a result of the activities of these multinationals exposes the inhabitants of the region to different kind of diseases. Thus, Ndubisi and Asia (2007) noted that the environmental degradation causes respiratory illness, leading to kidney disease, neurological disease as well as possible death of persons.

Furthermore, Eregha and Irughe (2009) expressed that gas flaring have over the years distorted the flora of the region replacing natural vegetation with stubborn grasses and the presence of these grasses indicates that the land is no longer fertile for farming because of the extreme heat that goes along with gas flaring. This has affected individuals in the area in terms of food shortages because individuals in the area can no longer make good use of their farmland and water for farming and fishing respectively.

More so, when there is oil spillage, it spread over far distances which affect terrestrial and marine resources which many a time have led to the devastation of fishing ports, deforestation, loss of farmlands, fresh water pollution, complete relocation of some communities and loss of ancestral homes (Kadafa, 2012). Also, due to the frequent pollution of the area, inhabitants of the region do not have access to clean and quality water which has resulted in most death in the region. Thus, Onuoha et al.(2018) expressed that lack of water quality is responsible for more than two million deaths and billions of illnesses annually throughout the world.

5. Conclusion and Recommendations

Today's world has become a globalized village due to advancement in technological and information and communication transfer, quick access to information, idea and experience across the globe, and trade liberation. This has led to development and growth of various countries of the world especially those of the developing countries. Today, the benefit associated with globalization cannot be denied but the negative effect it has brought along is enormous especially on the environment. All humans and organizational operations either deliberately or un-deliberately impact significantly on the environment. Some of these activities are harmful to the sustainability of the environment. The environment has been degraded as a result of increased pressure on the ecological system by human activities especially those of the multinational enterprise in the oil sector.

The operations of the oil multinationals cause lot of damages to the environment especially the Niger Delta region, however, the effects can be minimized through effective monitoring of the oil firms' facilities on a regular basis to ensure those facilities that are obsolete are replaced with new ones to avoid oil spillage and linkages. Also, the negative effect of globalization on the environment can be eliminated through efficient and effective state policy, thus the government should enact and fully execute policies that will protect the environment. More so, to ensure the environment is sustained there is need to inculcate a higher level of environmental awareness in individuals, organizations as well as the government, thus, public awareness and education should be made utmost priority.

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