

Environmental Degradation and the Compromise of Transportation Networks in the Niger Delta.

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ABSTRACT

The action of man in the process of producing material goods for his subsistence has caused serious alteration in the biodiversity as deleterious or hazardous substances are released into the environment. Man and his products move from one spot to the other by network of mobility which is described as transportation network. There are varied means of mobility, some faster than others and each is powered by oil and oil related products. Crude oil is found in large scale in the Niger Delta region of Nigeria; and the processes of production, transportation and utilisation have been compromised and there are observable avoidable accidents and sufferings; these are accounted for by way of hike in the cost of the powering agents, scarcity, pirates, conflicts and even militancy. With proper and quality education; and conscientising of people on the security of the environment and the means of movement, the officials whose duty it is to maintain standards will perform efficiently and effectively and the people on the other hand will cease to be channels through which the environment will be degraded. This is done by examining the role of the institutions that are charged with regulating transportation in the region; the causes and sources of environmental degradation are investigated. The Niger Delta environment is reviewed briefly so that the readers will understand the link between the environment, production process and the movement of finished goods, services and humans; and why the three elements should be handled carefully.

Keywords- Network, Transportation, Compromise, Environmental Degradation And Niger Delta.

INTRODUCTION

Man is known to move from one place to another from time immemorial; and as society evolves from simple to complex, so also does the transport system(s). Movement of goods, services and even man particularly is by varied means for instance, by foot, beast of burden (donkey and camel) that is animal, bicycle, train, vehicle (car and lorry), canoe and ship, airplane and many more.

Some scholars have made their inputs in different areas of transportation systems, for example Uchegbu (2002), Enger and Smith (2002), World Bank Report (2003); but this particular work is set to investigate how environmental degradation has compromised transportation network in the Niger Delta of Nigeria. The observed compromise this paper argues is as a result of failure of personnel who are charged with monitoring and enforcing regulations based on international best practice in the area of environment and transportation network.

Niger Delta Environment

There are plethora of literature on Niger Delta and related matters, so also are descriptions of the Niger Delta environment. Scholars like (George 1990), posits that “man cannot do without the environment because, it is one basic thing nature bestows on man throughout man’s existence.” Umeuduji in (Atemie, 1999) refers to the environment as the “entire physical setting, experiencing a complex labyrinth of relationships circumscribing life and development.”

According to (World Bank, 1996) report, Niger Delta environment is that area considered to be within Rivers (Bayelsa included) and Delta states; each covering about 1.7 million hectares or in total 3.5 million hectares (approximately the area of Belgium). Therefore, the Delta in its widest sense comprises an area of 2.5 million hectares, which includes the mangroves, fresh water swamps and surrounding areas. In the stance of this contributor, the Niger Delta environment is a delicate and fragile ecological zone with abundant natural resources of importance to the entire world of which its utilisation has impacted the people's way of life.

We can decipher from the above multifaceted definitions that man's surrounding or environment encompasses the atmosphere, hydrosphere and lithosphere and the three together is singly known as the biosphere. In the view of (Nsirim-Worlu, 2005), the atmosphere comprises gases extending outward from the earth's surface, which evolves from elements of the earth gasified during its formation and metamorphosis; the hydrosphere embodies Oceans, lakes, streams, rivers, and shallow ground water bodies that interflow with the surface water; while the lithosphere consists of solid mantle that wraps the core of the earth. In the forthcoming section, the causes of environmental degradation will be discussed.

Causes Of Environmental Degradation

The forces accountable for the degradation of the environment are numerous but this paper views it as arising from the productive activities prevalent in the region. The Niger Delta environment is abundantly endowed by nature with numerous natural resources of which the harnessing of those natural resources using modern techniques have become sources of danger to the people and the environment.

In agreement with the above view, is the submission of Chiefs and Peoples of Rivers State 1992 at Rio de Janeiro in Brazil during a United Nations conference on Environment and Development (UNCED) culled from (Nsirim- Worlu, 2005); which states that the "Niger Delta and the Nigerian coastal zone wetlands constitute one of the most fragile ecosystems in the world". The submission further states that due to her rich natural resources, including over 95% of Nigerian petroleum and gas, the air and seaports; other developmental strides and the intensely hazardous concentration of industrial activities, all have enhanced the danger to which the Niger Delta and the adjacent coastal zone are exposed. Therefore, the combination of this unusual fragility and physical environmental characteristics together with the numerous impacts of hazardous industrialization earned the Niger Delta and its indigenous people an "endangered environmental zone".

To further show sources of environmental degradation is (World Bank 1995) report, which states that the construction of upstream dams on River Niger for hydropower has had significant impact on the ecology of the area, fluvial sediments and erosion are mechanical impacts with crucial roles for the changes of the ecology of the Niger Delta. It can be deduced from the above that since the Niger Delta hosts most of Nigeria's oil exploration establishments, that its activities then create environmental hazards which directly or indirectly degrade the environment.

It can further be extrapolated that the process of production, distribution and consumption of good (crude), generates a flow of pollutants that eventually accumulates in the air, water and land. To support this view is Brian Anderson, a former Chief Executive/Group Managing Director of Shell in (Nsirim-Worlu, 2005), who states that "the vast assets concentrated in the Niger Delta area inevitably would impact on the environment, that the local communities definitely benefit from the roads and dredged channels that serve the company's operations, but the negative impacts as stated below must be minimized". The impact includes, but not

limited to the following to; oil spill from flow lines, pipe lines, flow stations and export terminals; land taken for seismic operations, drilling and engineering/construction activities; and associated gas flaring.

Separately, such scholars like (Fubara,1997 in Nsirim-Worlu and Ayomike, 1995), contend that the economic activities in the region cause a high magnitude of degradation via oil spillage, marine dumps; clearing of land, swamp waterways, drilling, laying of pipelines, gas flaring and waste emissions, disasters on water-ways, water hyacinth; to mention a few. In the light of the foregoing therefore, the listed sources of degradation clearly indicate that they can on the other hand serve as means of compromising transportation network in the region, because known transportation network systems operate in the air, land and water.

Transportation Network In The Niger Delta

The concept transportation is an act or process of conveying goods, services, man and materials from one location to another by such means as water-way, road, rail and even air.

The more evolved or sophisticated the process of production, the more developed the transportation network of the people (nation). This is evidenced in that, when the Niger Delta region' mode of production was that of hunting and gathering and the political administration was band and the reason for production was purely for subsistence and so, the transportation system was by canoe, animal and human muscles (legs).

As society continued to evolve and with the introduction of steam engine in 1769 (Uchegbu, 2002); this revolutionized the transportation system in the entire world. At this time, the colonialists built railway terminals from the hinter lands or source of moving raw materials to the sea ports for onward conveyance to their home countries. The raw materials were to service the European home industries and to also rebuild and reconstruct their battered economy. In the communities, the indigenes were moving and conveying their personal wares and effects on foot and the environment was minimally despoiled.

Though movement from place to place was more of physical effort, some challenges which existed and were recorded include; the conveyance of little quantity item(s) or goods within short distances. The traders and their goods moved in groups from the community to the farm land or bushes in order to supply the farmers who resided in the bush and produced different agricultural products for subsistence; and the former in exchange for their cash products received the items which they exchanged on the other hand with the European merchants for cash. The people and traders walked through bush paths or track roads which were maintained by community efforts.

With the invention and introduction of lorries in the eighteenth century, the quantity of goods conveyed once increased; that translates to opening of trunk 'A and B' roads. At that period the indigenous traders got to the real sources of raw materials for example, palm oil and kernel (plantation), logs of wood (depot) and which bought the produce off the peasant farmers and then parked the produce in a common place and thereafter invited truck or lorry drivers who haul same to the terminals, which could be seaports or railway for onward transportation to Europe where the goods are processed, packaged and prices fixed for onward exportation to Africa.

During this period, environmental challenges were beginning to become obvious; for instance, the process of conveying goods and services by roads and railways led to the acquisition and

clearing of parcels of land; and heavy earth moving machines employed to build such infrastructures thereby bring about degradation and deterioration of the environment. Some persons also lost their land and so the process of alienation and impoverishment began; and the people also lost control and say in their own affairs.

Modern Transportation Network Andmode Of Production In The Niger Delta

Following the discovery and introduction of different means of transportation by the industrialised nations, the discovery and production of crude oil in large quantity in the Niger Delta in the fifties, these led to revolution in the mode of production (from primary/ primitive to capitalist productive mode), wherein the forces of production and the relations of production began to undergo changes. These observable changes in the mode of production and the transportation networks tremendously account for what this work considers as compromising of the transportation networks arising from degradation of the Niger Delta environment.

The Niger Delta environment is surely agreed by both scholars and indigenes as being degraded. The causes of degradation have been discussed earlier; however, the land, water and air of the region are altered because the current means of movement which are foreign and alien to the people have been compromised, especially as the indigenous people have neither control nor produce such methods of transportation.

At this juncture, may I list and describe some transport networks as operational in the zone; for instance, the air plane (the fastest means of transport), train, ship, vehicles of all types, automobiles and even bicycles. These multifarious means of transportation are replete in the Niger Delta and each contributes to degradation of the environment in its right. These transportation networks have contributed to increase in movement of people, goods and services within and outside the region; and the region is connected to the world directly twenty four hours a day simply because, there are sea and airports that can connect any parts of the world.

The maxim by Rosa Luxemburg in (Nsirim-Worlu 2005) that "Capitalism whose main purpose is maximisation of profit without necessarily taking precautionary measures to protect the environment where the resources are extracted" is true in this region. The Multinational Corporations (MNCs) whose operations are noticeable in the Niger Delta contribute to more than 95% of Nigeria's Gross Net production (GNP) and Gross Domestic Product (GDP).

It is discovered that in the attempt to produce, distribute, consume and transport this product, that the environment becomes degraded and this directly and indirectly leads to the compromise of the transport network as well. The different means of transportation which are becoming complex as do the mode of production upsets the entire system, as this paper observes that there is no proper planning before the introduction of the current transportation networks. Though, these new methods of transportation network have made movement, communication and even production easier, but the challenges generated by them are of very high magnitude.

To give credence to the above view therefore, this paper thus states that as mode of production is modified, so too are the means of transportation; and also the observable changes in the transportation network directly create some problems, some anticipated and others not. In support therefore, (Enger and Smith 2002) posit that "the establishment of new transportation corridors stimulates increased growth in the areas served and transportation corridors soon become inadequate".

The above is true since the new methods of transportation help in movement of personnel (national and international), equipment, partners and more to reach different places in no distant time and to also do business(es), attend conferences and even exchange staff. In the Niger Delta region of Nigeria, conveyance of goods, services and man is a very important sector that the present and past governments may not have considered the possible consequences the current means of transportation would have on the people and their environment before the nation was integrated into the world's varied modern transportation network.

Challenges Of Transportation Network In The Niger Delta

This section is set to discuss perceived compromise as it affects the transportation networks in the Delta region of Nigeria; that is to say that following the ongoing productive activities of the Multinationals in the zone, the observable degradation of the environment and then the real influence of those on the movement system.

The bid to provide advanced transportation network as to be at par with existing productive mechanism has generated a lot of challenges; since it is observed that from the colonial time till date, the managers of most of the transportation systems ever operated did not consider their possible consequences on the people and environment before they became operational. For instance, in the thirties and forties, the railways and roads were built to meet the economic needs of the colonizers as to convey the raw materials from the hinter lands to the seaports and hitherto to the latter's country home in order to serve their industries.

The introduction of air planes took the same pattern and style as the roads and railways. Importantly however, is the fact that the building of new means of movement brings about movement of people from rural to urban areas where movement channels are existing. In other words, existence of different transportation networks bring about urban –rural pull, as more people migrate to such areas for job and subsistence; (Cunningham and Siago, 1999).

The Niger Delta region is the oil hub of the nation and with varied transportation networks a lot of people are attracted to that zone; some work with the haulage industry, forwarding and back-warding (freight), airlines, etc. This type of economic activity has affected the population of the area; and some communities are displaced in order to create room for expansion of the roads or to improve other transportation networks.

Again, because adequate planning was not done by the government and operators of transportation services ab initio, such challenges as road traffic accidents (RTAs) water and air crashes; water, land and air pollution; noise and traffic jam are common sight and news in the area. This paper will attempt to discuss some of the observed challenges in the upcoming section briefly.

Air Pollution

The automobile, train, ship, speed boat and even air plane are powered by products of crude oil; different crude oil products whether fuel or gas is utilized by different systems of transportation network for aid mobility generate waste products which when emitted into the air upsets the atmosphere and the people and the environment are denied pure and quality air. Waste products in the form of carbon monoxide, carbon dioxide, sulphuric acid (tetraoxosulphate (vi) acid) when released by a combination of poorly maintained machines and cluster of numerous machines hitherto upset the air in the zone.

Traffic Jam

Heavy traffic jams are prevalent in most cities in the region and there are multi-varied reasons; some among them are that there are more vehicles than available roads, break down of road and rail networks; attitude of operators, presence of cows and herdsmen, sea pirates, and sometimes actions of officials who are licensed to regulate the activities of the transportation systems.

Traffic delays are at times reported in the air and some of the adduced facts are the incidence of tornado, turbulence, presence of government functionaries and even perceived presence of imagined or real terrorists in the air space; more importantly is technical issues whereby there may not be synchrony between the officers in the control tower and the cabin crew. Traffic jams whenever they occur however, consume lots of man-hours, and the psychological trauma experienced by commuters is more imagined than experienced; this idea is collaborated by (Cunningham and Siago, 1999).

Accidents

Accidents are said to be caused, contrary to speculations that they are manipulations; there are plethora of crashes, some recorded, while others are not. Due to poor quality of roads in the region, there is quantum of road traffic accidents (RTAs). Road traffic accidents are hydra-headed monsters which leave many people maimed, and others dead.

Most of the existing roads are broken down without timely maintenance, unconstructed rural and urban ones, and most importantly are the fluidic roads built by development agents like Niger Delta Development Commission (NDDC), which will not last for more than six months before they break down irretrievably and the roads hitherto get to the stage of being described as non-use and irreparable.

Along the waterways too accidents do occur, and they could be due to collision of two speed boats, effect of waves generated by MNCs boats on local boats or canoes; action of pirates or militants on the creeks; and sometimes sinking of ships due to act of sabotage or over-loading. When the railway system was functional in Nigeria, there are evidences of derailment; but what we see today are the old and dilapidated buildings of Nigeria Railway Corporation (NRC). Currently in Rivers State there is ongoing construction of a modern railway system known as mono-rail by the government under the leadership of Rt. Honourable, Chibuike Rotimi Amaechi. This project is considered as one of the 'white elephant projects' undertaken by Nigerian governments; and therefore serves as channel for diverting public funds and depriving the masses necessary and needful social amenities, such as portable water, electricity and good road network.

Furthermore, there are evidences of plane crashes; for instance, ADC- 1996, Sosoliso-2005, Bellview- 2005 and Dana -2012 (passenger planes) and military jet (Dornier 228-2006, in all the incidences those on board the airlines were killed (crew and passengers). This reminds each and every one of us how the nation's transportation networks are compromised, the ineptitudeness in the system and the state of unpatriotism on the part of the citizenry.

Noise Pollution

This nuance is one of the ways to measure how compromised the transportation network has become; any unpleasant sound is considered as noise. On daily basis the people are inundated by unhealthy sounds from the automobiles, aero-planes and even speed boats, these sounds collectively impact the hearing and health of the people and their environment. The normal decibel for humans is 60-65db, hence, any measure above that range is capable of exposing the

people to hearing problems; this view is supported by (Cunningham and Siago, 1999) and it is the situation in the Niger Delta.

loss of valuables

In the process of building roads, airports, railways and seaports; some people lose their ancestral homes, farm lands and wetlands, and these observable losses cause the indigenous people to be alienated to their means of livelihood, as they are not easily employed by the constructing companies. On the other hand, the people can sometimes constitute themselves as saboteurs in order to disrupt ongoing projects from being completed.

One incidence worthy of mention is the bulldozing of many houses in Rivers State by Rt. Honourable Chibuike Amaechi' administration; whereby his administration used all that is within its power to restore Port Harcourt to its near garden city status and to also ease traffic flow in the environ. Though this action did not go down well with majority of the people, who for economic reasons violated and defaced the original plan of the city; most of them even extended their buildings beyond drainage lines, an action which contributed to safety, security and transportation challenges; (Cunningham and Siago 1997; Enger and Smith 2002).

Fare Hike

At the introduction of the varied transportation networks, the cost of movement from one place to another was relatively low; what does that mean? It simply explains that though the fare would be said to be low then, but, not everyone could afford their use or have need for them. However, the increases in transport fare is industry driven; that is, whenever the cost of petroleum and its related varied products increase either as a result of international economic demand or internal forces, so too do the cost affect this all important sector.

The most recent and also most devastating increase in fare is that of January 2013; when the pump price of fuel was increased from sixty five naira to one hundred and twenty naira. This increment led to series of protests by the citizens and civil right organisations; the protest had both political and ethnic undertones. While the protests lasted, several man-hours were lost as both private and public servants participated; traders inclusive and the nation lost fortunes economically. The Federal government on her part introduced programmes aimed at cushioning the effect of the pump price increment on the masses, which is tagged 'fuel subsidy', and this has metamorphosed to be known as Sure P. This organ is empowered to manage the excess funds realized from the increment from the pump price of fuel.

To the dismay of all, every alleviation measures by the Federal government is not felt or experienced by the general public. The government promised to provide mass transit vehicles which would convey people from place to place, especially the workers at low prices. This promise never saw the light of day and the people still suffer for the fall out of the increment in fuel pump price till date.

The brunt of increase in the pump price of fuel includes; fare hike, increase in the cost of goods and services, destruction of lives and properties. It also shows the level of impunity on the part of the political class. This singular action shows how the transportation networks are compromised in the Niger Delta. Compromise in this context can mean an action or step taken by an individual, group or government and its representatives which therefore, brings a system to danger or suspicion, and thus exposing it to loss of reputation.

Misuse Of The Environment

Another very important issue in the area of compromise of the transportation network in the region is the misuse of the environment. Niger Delta is a region where the inland waterways, road and drainages have been converted to dump sites for wastes of all kinds (solid and liquid, degradable and non-degradable). Dumping of wastes in undesignated places have caused delayed movements, accidents and sometimes fire incidences; and it accounts also for why water hyacinths are common on the waters, objects float freely, while some roads have been taken over by sprouting illegal dump sites by the populace. This view is supported by (Enger and Smith 2002); where they discussed the misuse of wetlands in Louisiana.

Agents Of Transportation

Every structure in a nation has regulating bodies; and this is applicable to transportation system in Nigeria. The different networks that function collectively to bring about the movement of people and materials to different designations have different regulating organs. The role of these varied regulating organs will be examined in this section and they are first, Federal Road Safety Corps (FRSC) and Vehicle Inspection Organisation (VIO). These two organs are discussed together because their functions and services are directed toward the regulation of means of movement on land.

The Federal Government of Nigeria in February 1988 through a decree No. 45 amended by Decree 35 of 1992; established the FRSC and in 2007, the National Assembly passed the FRSC Act cap 141 laws of the Federation of Nigeria. By this act or legislation, the FRSC is empowered to perform very vital functions that would impact on the safety of every road users within the territory of Nigeria.

Among the numerous duties assigned to the FRSC, this paper is set to critically examine three of them.

- Making the high way safe for motorists and other road users.
- Recommending works and devices designed to eliminate or minimize accidents on the highways and advising the Federal and State Governments including the Federal Capital Territory Administration (FCTA) and relevant governmental agencies on the localities where such works and devices are required; and
- Educating motorists and members of the public on the importance of discipline on the highway.

The above listed functions are all embracing and if the rules are carried out to the latter, Nigerian roads will be safe haven for all; but on the contrary, the reality and actuality are not on the same pedestal. The actuality is what the law stipulates, while the reality is what we all observe on daily basis where some personnel of the corps aid, abate, and even exhort money from road users. The argument may be that other structures of the Nigerian nation are indulging in sharp practices which make functionality of the system very unsatisfactory.

On the other hand, the VIO functions are closely related to those of the FRSC; and they read in part;

- Inspection and issuance of road worthiness certificate (RWC) to all types of vehicles.
- Maintaining sanity on our various roads and highways by ensuring that all vehicles plying such roads are road worthy at all time.
- Training and testing of drivers for driver's license and organising seminars and public lectures.

Good and noble as these duties appear on paper, but it is very disheartening to observe rickety vehicles on Nigerian roads and most of such vehicles sometimes are causes of fatal road traffic

accidents; and this leaves one to wonder whether there are traffic regulatory agents in the country.

Next, to be examined is the National Inland Water Ways (NIWA); this agency has three objectives, which are;

- Improve and develop the inland waterways for safe navigation
- Provide alternative mode of transportation for the evacuation of economic goods and persons.
- Execute the objectives of national transport policy as they concern inland waterways.

The above functions can be organized as regulatory, transport, engineering, marine survey, environment and general services. All the services are directed towards ensuring the safety and security of both man and materials in the Niger Delta, but let me draw your attention to the environmental services aspect of this agency, which reads in part “we pursue an ecologically sound inland water transportation policy. Due consideration is given to the well being of aquatic life as well as the cleaning of water hyacinths and other harmful aquatic weeds. We are also authorized to “carry out environmental impact assessment of navigation and other dredging activities within the inland water and its rights of ways.....” These also are cosmetic statements, as they are far from being true in practice.

Another agency is the Nigerian Railway Corporation (NRC), whose history may be as old the Nigerian nation, but currently the NRC is better described as moribund. However, in this present dispensation a little is heard or seen of this corporation except in Lagos State, where there is skeletal services; and in Rivers State where mono-rail is under construction of which only the gods know when it shall become operational and whom it would serve; the billions of naira sunk into the project notwithstanding.

The mandate of NRC is scanty and shows how non functional this transportation system is, and the mandate reads;

- Carriage of passengers and goods in a manner that will offer value for money.
- Improve market share and quality of service amongst other modes of transportation
- Ensure safety of operations and maximum efficiency

Finally, National Airspace Management Agency (NAMA); this agency is in charge of Nigeria's airspace and it therefore, serves both the civilian and military planes. So, its functions will include but not limited to:-

- Provide air traffic services in Nigeria, including air traffic control, visual and non visual aids, aeronautical telecommunication services and electricity supplies...
- Provide aerodromes at all the major Nigerian airports, the navigation services necessary for the operation of aircraft taking off and landing and integrate them into the overall of air traffic within the Nigerian airspace.
- Minimize or prevent interference with the use or effectiveness of all apparatus used in connection with navigation and for prohibiting or regulating the use of all such apparatus and display of signs and lights liable to endanger aircraft and the use of Nigerian airspace

In the course of this investigation, some persons and groups were interviewed who helped to provide information that cushioned the hunches of this writer. Communities were purposively selected from Bayelsa and Rivers states in the Niger Delta region of Nigeria. The people of Emeyal and Ogbia in the Bayelsa affirmed that in the eighties and nineties that most of the boat mishaps that occurred in the region were due to the action of Edok company that operated in the area who had and used speed boats as means of transportation while the people's only

means of movement was mainly by canoes and on foot. They further agreed that the boats polluted their water ways with petroleum oil, they saw oil float on the rivers and creeks after the boats had driven pass.

At the Abonnema wharf and Nembe waterside in Port Harcourt, those who live and do business there relived their experiences; and they are in the form of fire disasters, boat mishaps, petroleum products flowing freely on the water surface, abandonment of wretched boat and canoe parts, long periods of waiting and more. These they say contribute to the degradation of the environment which directly compromises the transportation network in the area; and Cunningham and Cunningham (2007), posit that most of the natural water sources in U.S. are degraded due to the economic activities in the country.

At the Odual end of Port Harcourt city, this was the hub of activities of the Nigerian Railway Corporation in the sixties and seventies; we saw broken down and dilapidated offices, coaches, railway. No transportation activities were going on there; rather most of the areas have become trading spots, home for miscreants and mentally deranged, imposing and awful sights of refuse dumps. These in their rights degraded the environment also and further compromised the transportation system in the region.

Through the length and breadth of region, there were more dysfunctional road networks than functional ones and those interviewed contend that the number of man-hour people spend in the traffic is more than the time used to perform useful duties in either their homes or offices. For instance, during what is tagged as "rush hours" (between 06:30am and 08:00am in the morning and 3:00pm and 6:00pm in the evening). An individual or commuters can spend more than an hour at a spot, this long and tiring queues arouse in the commercial drivers sense of impatience and so most of them drive against traffic, pedestrians' path, make dangerous and wrong turns. These actions collectively worsen the traffic situation and some people eat and drink in that circumstance and whatever that is left over is dropped on the road and they too lead to compromise of the transportation network.

Around the airport, especially Omagwa and Rumuomasi, those interviewed submitted that the amount of noise they experience around their environment is of high magnitude; however, the long term effect of the noise on their hearing was not well articulated by many. But many believe that if the planes are in good condition, that the noise will be minimal; some account for how horrifying it is to be around crash site and people watch helplessly as others perish in public glare.

This work therefore, discovers that in spite of the multi-varied agencies of transportation networks in the nation, that the Niger Delta transportation network is badly compromised; some of the facts being the political structure of the nation, inability of regulating agents to perform their legitimate functions without fear or favour; no conducive environment as the personnel want their share of the national cake (corruption), indifference on the part of the personnel as to the challenges the Niger Delta environment is passing through due to the activities of the MNCs. Furthermore, due to nepotism and godfatherism, some personnel are ill qualified to occupy certain positions and so inefficiency and loyalty to officers' region of origin account greatly for the compromise.

At this juncture, this work recommends that the rule of engagement of officers to different cadres of the agencies be reviewed, that the serving officers should undergo training and re-training, which is continuing education as to how to use modern operational equipment; in order to meet international best practice requirement or standard. Finally, the Federal

Government and MNCs should religiously meet their corporate social responsibilities to the people thereby, forestalling sabotage by the people at times.

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