

Effects of pollution on the Nigerian ecosystem

Nigeria is not alone in the types of pollution that it is plagued with, particularly when it comes to developing nations. What is troubling is the manner in which this environmental crisis has been dealt with, even up to recent times. Nigeria has seen its share of political strife, due to being controlled for the most part by military regimes. Even the current president, some would argue, is an army general masking as a democratic president for the sake of international acceptance. The political situation and the corruption that has long plagued the country is the central difficulty that has prevented any gains in the area of environmental protection.

Pollution finds its way into every area of the Nigerian ecosystem through water pollution, urban air pollution, burning of toxic wastes and significant oil spills.

Water pollution is prevalent due to the improper handling of sewage, even in the most populated cities. There are 221 cubic kilometres of renewable water resources in this country. Safe drinking water is reported to be available to 78% of the urban population, and 49% of the rural population. However, Lagos, with a population of more than 12 million, does not have a central sewage system; but rather, all waste is emptied into a lagoon. This same lagoon and the sea around it is the source for most of the fish that the city consumes.

Breathing clean air is also a major issue in this country, particularly in the major city centres. Air pollution is defined as the presence in the indoor or outdoor atmosphere of one or more gaseous or particulate contaminants in quantities, characteristics and of durations such as to be injurious to human, plant or animal life which interferes with enjoyment of life. Clean air has been substantially damaged in this country's environment, especially in the Niger Delta Region due to the population explosion, lack of environmental regulations, the growth of the oil industry and desertification.

In the early 1990's Nigeria was among the 50 nations with the world's highest levels of carbon dioxide emissions. How high is high? CO₂ totalled 96.5 million metric tons or .84 metric tons per capita in the Nigerian air supply. One could say that this is not uncommon in highly industrialized cities throughout the world. We continually hear about the problems with smog and air pollution due to major industries and car emissions, necessitating major financial disincentives to drive in our North American cities. In the larger cities in Nigeria, such disincentives do not exist, and there are no economic rebates for taking public transit. The reasons that such logical policies do not exist is due to the fact that there is no public rail system to move the congestion of people through the cities like Lagos. The population is solely dependent on road transportation. An intra-city rail system was planned by one of the few civilian governments that were in power in 1979-83, but this was abandoned when another military regime took over. To date, such a rail system has not been built. It is estimated that there are more than 2 million vehicles in the city of Lagos alone negotiating there way through the congested roads. Two-thirds of these vehicles are more than ten years old, while up to one-third are more than 15 years old. Most of these vehicles would not pass standard emissions tests in developed nations. There are no standard emissions tests conducted on these vehicles, which means that they are allowed to burn oil and send plumes of toxic emissions into the air.

With such high populations, it also stands to reason that disposal of refuse would be an issue, particularly due to constraints on space. Recycling is not prevalent in this African country, but then neither are garbage dumps. What happens to all the solid waste? Household refuse is collected, and burnt in various incinerators located outside of cities; once again, sending great amounts of poisonous chemicals into the air. In addition to the surprises that exist in this country, is the lack of a dependable power source. Electricity is not always guaranteed, even in large cities. This means that in order for major industries

and businesses to operate, much less households, copious numbers of gas powered standby generators are used when the electricity supply fails. Every skyscraper that exists is serviced by at least four gas-powered generators. Multiply this by the number of businesses in Lagos and Abuja alone, and one can see the breathing nightmare that exists for residents. The result of this is the large number of respiratory ailments that people suffer from. Reports are that these medical difficulties are one of the leading problems that exist in the hospitals in Lagos. These are evidenced by the number of pneumonia or bronchitis cases doctors deal with, in addition to a general inflammation of air passages, which is often caused by chemical pollutants or bacteria being inhaled.

It would be expected that the air would be contaminated with this large number of contributors. Unfortunately, these are not the last of the causes of air pollution in Nigeria, particularly in the areas that would be expected to be more lush and agricultural based. The Niger Delta is the area that has suffered the most from environmental degradation, not only in the form of air pollution but in all aspects of pollution. What has been the most profitable industry to this nation, has also been its major downfall, and cause of much controversy throughout the world. Since the British discovered oil in the Niger Delta region of Nigeria in the 1950's, life has not been the same for the inhabitants of the predominantly agricultural-based region. Extraction and drilling of petroleum in Nigeria is the largest industry and is the main generator of its Gross Domestic Product (GDP). Over the years the oil industry has been affected by political and economic strife due to the corrupt military regimes and complications of multinational corporations that have sacrificed the lives and well-being of those living in the drilling regions. Royal Dutch Shell, one of the major oil corporations that has taken up residence in the Niger Delta, is the second largest private sector energy corporation in the world. This speaks volumes in terms of who holds the power in this country. The environmental degradation that has taken over the Niger Delta, and resulted in both environmental and human atrocities, is a result

of the greed propagated by these oil companies and the Nigerian government that has protected its interests in ensuring oil continues to flow undisturbed.

What is involved in the destruction of the environment by the oil industry? To begin, oil spillage that has seeped into the water table, without regard for the people in the surrounding area has become food for argument. The oil companies argue that the reasons for the spillages are a result of pirates and rebels sabotaging the oil sites, and not their fault. The people of the area disagree. They feel that the money hungry oil companies care little about the agriculture of the region, and when there is spillage, they care little about the effects it has on their livelihood. Oil spillages due to a lack of technology being implemented has also contributed to the polluting of waters around drilling sites. While in most developed countries basic technology would be implemented to prevent unnecessary spillages, in Nigeria it is not deemed as significant (Orubu et al, 2004). It is reported that the number of oil spillages from 1995-2000 was in excess of 1907 and has continued to increase (Iyoha, 2000).

Perhaps the most senseless side effect of the petroleum industry is the controversial practice of gas flaring. This is the controlled burning of the waste natural gas in oil production. The main source of this is the “solution gas” which is trapped in underground oil supplies that is released when raw oil is brought to the surface. Due to the volume of this gas being less than profitable to recover or collect and sell as natural gas, it is burned off. When there is more drilling, there is more flaring. The effects of continual burning in the Niger Delta have resulted in the people of this land being surrounded by toxic air. The Federal Environmental Protection Agency (F.E.P.A.) have conducted studies on the air in this area, and it has been shown that there are moderate to high concentrations of pollutants, such as carbon monoxide, sulphur dioxide, nitrogen oxides and organic acids, all as a result of this gas flaring. These results have revealed that the concentrations of these pollutants are unacceptable compared to F.E.P.A.’s set limits.

The tribe who occupy this region that have been most effected is the Oguni tribe. For years these people have rallied, arguing that their lives have been destroyed by the oil industry. The soil degradation, contamination of their water supply, polluted air and a loss of livelihood due to the agricultural industry in the area being jeopardized as a result of the pollution. Many Oguni women have stated the pollution has resulted in many miscarriages.

What has been done about this mass destruction by the multinational corporations? Of course there have been some reparations made by Royal Dutch Shell and other oil companies who benefit from the losses incurred by the Oguni people. Unfortunately any financial repayments have not been significant enough to repay what the Oguni's have lost, and most of what has been paid has been absorbed by the Nigerian government. The injustices felt by these people has been lost on the government, who have made it a habit of trying to quiet the voices of those protesting the injustices by jailing those who seem to have made too much of a fuss.

Such was the case of internationally known Ken Saro-Wiwa, activist, playwright, author and environmentalist who lost his life because of his beliefs. Saro-Wiwa was a member of the Oguni tribe and president of the "Movement for the Survival of the Oguni People" (MOSOP) in the early 1990's. This group ran a non-violent campaign against the environmental damage associated with the operations of the oil companies, especially Royal Dutch Shell. They demanded a fair share of the proceeds and remediation of environmental damage to the Oguni lands. Saro-Wiwa was a major voice speaking against the oil companies and the Nigerian governments' total disregard for the needs of his people for over forty years. He made it no secret how he felt, and penned plays depicting the injustice done to his people and the pollution that has destroyed his homeland, leaving them in poverty. Saro-Wiwa made it clear that his government was too slow to implement reforms in remediating the environmental degradation resulting from the mass

petroleum extraction. This great activist made his own sacrifices in standing up for his people. He was unlawfully imprisoned on several occasions for speaking his mind. His final imprisonment in November of 1995 without a legitimate trial by the Nigerian military government, led to the eventual execution of this Oguni leader on November 10, 1995. His death brought about international outrage, as it raised attention to the fact that Nigeria was a major concern with respect to human rights and environmental degradation . The “monkey trial” of the activist and several others that supported the fight and their subsequent execution speaks to the attitude held by the powerful in this country towards the pollution of these lands. Saro-Wiwa’s murder caused an immediate suspension of Nigeria from the Commonwealth of Nations.

The environmental situation of Nigeria is a global nightmare. What has been done to rectify and monitor the devastation to Nigeria’s ecosystem and its people? One would ask is there an absence of environmental agencies to oversee what has happened. On the contrary, there are more than enough agencies that should be able to place restrictions and rules on what goes into the air, soil and water of the Nigerian people. There is the Environmental Planning and Protection Division of the Federal Ministry of Works and Housing, as well as the Analogous division within the Federal Ministry of Industry. Though these government bodies sound quite official, they have done little than to provide high profile governmental positions for individuals .

In 2007, Hajia Halima Alao, the Minister for the Environment, Housing and Urban Development made headlines in Nigeria when inspections were completed on some industries and findings were that the level of pollutants into the environment was unacceptable. She stated that the federal government would sanction industries that fail to comply with environmental standards. She acknowledged that most of the countries’ industries did not have effluent treatment plants and air pollution abatement facilities. Perhaps this is an indication that times may change. She

further advised that the “government cannot continue to watch the gradual destruction of lives, properties and environments through unwholesome industrial practices” . Furthermore, the National Environmental Standards and Regulations Enforcement Agency (NESREA) was established to enforce environmental standards, and it was made clear that those who did not comply would be closed down.

The dedication denoted by these statements seems somewhat contrary to the behaviour of the Nigerian governmental agencies over time. Perhaps this is the new belief system being adopted by the same government that has ruled for several years. On the other hand, perhaps this is just lip service being paid to the international business community and environmental agencies, to take the spotlight off of this African country.

Where does a nation as populated and powerful go from here? The contributing factors of mass pollution in this land are not about to go away. There is no end in sight with regards to the population explosion. There are no plans for a mass transit system to assist in the elimination of air pollution. The Nigerian government has not made any headway in terms of improving the availability of clean electricity, which necessitates the continuation of diesel-powered generators throughout the country. Sewage treatment plants do not seem to top the priority list of environmental infrastructure projects. These issues, for developed nations seem to be non-negotiable. For a country as rich in resources not to prioritize clean air and drinking water for its people is not only illogical, it is inexcusable.

As long as the oil industry is present in the Niger Delta region, and providing its share of profits to the Nigerian government, it is obvious that little will be done in reality. Though provisions will appear to be made to improve the state of the environment, which will likely only be for the benefit of the international media. Environmental groups and human rights activists know the truth behind the façade designed by those who have a great deal to lose by making the oil executives pay what is

truly owed to the people. Despite whatever changes are made, nothing will change the damage that has been done, not only to the Oguni people, but to all Nigerians. In a time when the highest levels of technology exist to do anything possible, there are people living in poverty and filth in one of the richest countries in Africa. People are bathing in raw sewage, breathing air that could be compared to noxious fumes from the tailpipe of a car, and unable to make a living from agriculture, the most basic of livelihoods. We need to ask the international community what they are doing to change this situation. Does cleaning the environment stop at demanding recycling facilities in the western world? We all need to take responsibility for the atrocities happening in Africa, and specifically Nigeria.