LAWS, POLICIES AND STRATEGIES AGAINST AIR POLLUTION IN NIGERIA*

Abstract

The paper carries out a review of the sources and impacts of air pollution and applicable laws, legal strategies and policies as instruments for combating air pollution in Nigeria and some other nations of the globe. The paper commences with a background, an examination of the sources and impacts of air pollution on the environment, humanity and effects of acid rain, the greenhouse, ozone layer depletion on the future of human life on planet earth, and a further examination of applicable laws, policies and strategies for legal control of air pollution. The paper ends with a conclusion and set of recommendations. In achieving the aims of the paper, it adopts an admixture of the comparative, empirical, the law and development approaches, in relevant areas.

Keywords: *Comparative Review, Sources, Impacts, Laws, Legal, Strategies, Policy, Air pollution, Instruments, Combating.*

1. Introduction

Currently there is global concern against increasing air pollution, the current increasing usage of gases - harmful to the ozone layer, the destruction of forests, and scientifically verified harm being done to human beings and there welfare from the impurities which has led to or the changes in the climate directly linked also to the survival and sustainable development of forests worldwide. It is now common knowledge that 'greenhouse effects' constitutes a major danger to human environments and is also bringing about the continued rise in sea levels. This litter danger has brought about floods around countries of the world and constitutes a clear danger to towns and cities around low-lying coastal areas. Persistent fears have being expressed that rises in sea levels may lead to the wiping out of entire island nations namely the Maldives, Lagos in Nigeria, Twon Brass, Calabar and other places in Niger Delta region of Nigeria, which are seen as living not more than a metre or 2 above sea levels. This calls for urgent global actions with relevant legal framework to save humanity and the environment as a whole.

There is no gainsaying the fact that humanity remains a primary source of air pollution but the poser is where and how laws, legal strategies and policies can deployed as tools to combat air pollution in Nigeria and other nations of the globe. While it is a moot point that, there is no generally accepted definition of law, as a concept and notwithstanding the fact that attempts at defining law, over the ages, have given birth to various schools of jurisprudence[1] one cannot under estimate the fact that the functions in law, in every society include: 'The provision of an accepted structure for society's administration – the preservation of the dignity and inherent rights of mankind – the prescription of the accepted terms of interpersonal relations in society cannot be over emphasized.'[2] Wokocha, for example, also argued that: 'In providing for structure, society through its law provides a Constitution which prescribes the structure of the society, its government as well as the rights and duties of the people and their government. In preserving the dignity of man, law protects human rights through the doctrines of the rule of law and the principles of natural justice. In prescribing the accepted terms of interrelationships,'[3] law can be defined as the body of official rules and regulations, generally found under customary law, in constitutions, legislations, judicial opinions, and the like, which are used to govern a society and to control the behaviour of its members and enforceable by means of sanctions. Furthermore, law is conceived in this paper as an institutional device in the form of rules and regulations employed by persons in authority to promote necessary and required changes to improve the political, socio-economic, environmental justice delivery system and the general quality of life of its members. This is perhaps why the school of sociological jurisprudence (with exponents such as Roscoe Pound), see law as an instrument of sociological engineering which should at all times play the role of controlling society and balancing the several

***Sylvanus ABILA, PhD** (Ekpoma), Senior Lecturer, Faculty of Law, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria and can be reached on drabilasylvanus@gmail.com. Phone No: 08036712455.

[1] R A Wokocha, 'Philanthropy and the Law in Nigeria', *Ahmadu Bello University Journal of Education, Law and Management Studies.* (ABUJELMAS), Vol. 1 No. 2 OF 2001 pp. 139-155 at pp 143-144.

[2] Ibid, p 144.

[3] See generally Ibid, pp. 111-112; P E Igbinovia *et al, Law and Social Policy Legislation and Administration in Nigeria* (Ababa Press Ltd. 2004) pp. 1-3.

conflicting interests in society. It is therefore this view that, law at all times be geared towards the purpose of achieving the corporate goals of society. This school, therefore, recognizes the role of law in social engineering towards the achievements of societal stability and distributive justice.[4] Reference on the potency of law can be made to the provisions of the Kyoto Accord/Kyoto Protocol on global warming, Stockholm Declaration on Human Environment Convention of 1972, the UN Conference on Environment and Development (Rio Summit) the UN Conference on the Human Environment (Stockholm Declaration) 1972 etc. Apart from the above, the place of policies in achieving the reduction of air pollution cannot overemphasize. According to the Black Law Dictionary,[5] 'policy' means 'the general principles by which government is guided in its management of public affairs' while Thompson[6] has defined the term 'policy' as 'a course or principle of action adopted or proposed by government, party, business, or individual etc.' It is submitted that the definition offered by Thompson is broader than that offered by the Black's Law Dictionary and preferable. A policy goes beyond the application of general principles in the management or public affairs but should be viewed to include the actual activities or courses of action adopted by government, persons or businesses in the management of society. This then, means that, while 'policy is a naked slogan or a declaration of intention. Positive law on the other hand, provides not only the starting point of action; it is a tool, a mechanism for effective management or control of misconduct.' 'There ought to be law' is usually the request of a society endangered by loathsome human activity.[7] In any way one looks at it, it can be taken for granted that there are no problems created by man that cannot be tackled through the instrumentality of laws, policies and strategies directed principally at solving those problems.[8] Laws, policies and strategies can therefore be used as veritable instrument in changing human behaviour in any particular manner determined by society. That is why it has being correctly argued, in our opinion that since 'air pollution is generated by human activity…… Without legal control the face of the earth and everything on it will be ruined, with unbridled exploitation and the pollution that accompanies it.[9]

2. Air Pollution and the Future of Human Life on Planet Earth

Air pollution is known to occur at the moment the stratosphere is over-loaded by reason of the massive presence of chemical and gases leading to the inability of the stratosphere to function in its ultimate capacity. The effects of this phenomenon can be better appreciated in the light of the fact that, the stratospheric ozone layer of the earth measures between an altitude ranging from 15 to 50 kilometres and operates to shields lives on earth from the destructive impacts of Ultraviolet-B radiation. This then means that the depletion of the stratospheric ozone layer accounts, through scientific findings, to cause the increase of the incidences of eye cataracts, skin cancers among human beings. Furthermore, signal exist also that this phenomenon is a potent threat to the immune systems of human beings, aquatic life, plants and others deformities on the difference species of lives mentioned above.[10]

In tracing the sources of air pollution around the nations of the world, existing literature has found out that the following are veritable sources of air pollution. They are: Fires of forest, volcanic eruptions, the burning of fuel and bush etc. Other toxins include polychlorinated biphenyls (PCB_S), chlorofluorocarbons (CFC_S) connected with the manufacture of aerosol vessels, spray packaging and refrigerators. It has also been discovered that, 'the huge increase in cattle rearing over 1,000 million world-wide and to a minor magnitude, other livestock contribute to air pollution.

[4]S. Abila, 'The Law and Policy of Oil Mineral Resources Ownership and Current Development in the Niger Delta region of Nigeria' being a thesis submitted to the school of post graduate studies, Ambrose Alli University Edo State. P. 17

[5] B A Garner (ed), *Black's Law Dictionary*, p 1178.

[6] D Thompson (ed), *The Concise Oxford Dictionary* (New York: Oxford Clarendon Press, 1995) p 1057; I L Worika, *Environmental Law and Policy of Petroleum Development – Strategies and Mechanisms for Sustainable Management in Africa* (Anpez Centre for Environment and Development 2002) p. 24.

[7] M R Sive (ed), *Environmental Legislation A Source Book*, p. xxv.

[8] J Dukeminier, Jr., 'The Coming Search for Quality' (1964-65) 12 *U.C.L.A. Rev*. 707.

[9] See Environmental laws in Nigeria including compensation edited by J. A. Omotola P. 197 published by Faculty of Law, University of Lagos.

[10] Bretherton, Charlotte and Geoffrey Ponton (eds), *Global Politics: An Introduction* (Blackwell, Oxford), 1996, p 195. See also Dokun Oyeshola, O.P. Politics of International Environmental Regulations P. 31.

The peptic structure in animals which turns green fodder into food inside them produces methane gas.'[11] This has been found, is 'debarred into the air and globally, is a most significant input to the huge increase of methane (CH_4) in the atmosphere. [Incredibly but true] paddy fields for growing rice (also) provide a major source of methane (just as) termites, through their digestive system similar to those in cattle, excrete methane (every termite mound exudes 5 litres of the gas every minute). It has been estimated that with about half-tone of termites for termites for every person on earth, termites make a considerable contribution to the release of methane into the atmosphere.'[12]

Other pollutants are also been discovered to be created through the interchange of regular occurrences provides different measures of neutralizing pollution occasioned via the activities of man on planet earth. These activities rang from oil/gas exploration activities, destruction of forests through timber lumbering activities which to a great extent operate to destruct remedial actions of natural processes. It is a well-known fact that natural process of photosynthesis which operates to bring about the exchange of oxygen and carbon-dioxide between plants and human beings constitute an important dynamic relationship between man and his environment. Since man is known to breathe in oxygen and give out carbon-dioxide which plants and vegetation take in for their survival meaning that whenever air pollution occurs, man inhales contaminated oxygen leading to incidences of headaches, sore-throats, cancer, diseases of lungs and lack of red blood corpuscles amongst children. A report released by the World watch Institute in the year 1990 confirmed that as much as 5 percent of the population of the globe breathes in contaminated air few above world safety limits. Savitt and Bottorf have given support to the above assertion and adumbrated further by stating that:

> ….the deterioration of Europe's forests from air pollution causes losses of $35 billion a year – but air pollution is especially acute in Southern regions. Mexico City produces 5.000 tons of air pollution a year. In Bangkok, more than 40 percent of the city's traffic polices reportedly suffer from respiratory problems. Pollution cause numerous diseases, including cancer, neuropsychiatric disease, chronic respiratory problems, and musculoskeletal problems. These consequences tax the already over-burdened health care systems of Southern nations and absorb vital productive, human and monetary energies.[13]

Collated evidence in Czech Republic and more especially in the city of Temlice, children are made to go to schools with wear filter covers so as to help them safeguard their developing lungs from the Sulphur and soots coming out of industries and especially coal plants in the neighborhood of schools.[14] Another problem linked with air pollution is the phenomenon of acid rain. A more preferred term, however is what is referred to as 'acid deposition' which conception embraces the incidences of dry acidic particles deposition, snow, hail fog etc, which when brought in contact with condition of dampness results in acidic variation. Acidity, as condition can be analyzed by using the pH scale when one is examining the prevalence of hydrogen ions in the liquid form. This is because the A pH of 7 is known to be neutral, ranging around 0 and 7 and gives an indication of alkaline in its basic form. It is also important to note that there are three major acids in the stratosphere which are: (i) the sulphuric acids, (ii) the nitric acids (iii) carbon acids. These acids in stratosphere, when coming in contact with atmospheric water are known to form impurities in gases, in addition to the well-known impurities in gases coming from normal fundamental states. However, about 50 percent of impurities in gases are caused by human activities.[15] This is perhaps, why acid rain is prevalent in areas where there are heavy industrial operations where gases are produced in large quantity as found in

[11] Ibid; I Ehigehelua *Environmental Protection Law* (New Pages Law Publishing Co. 2, Alegbo Road, Effurun/Warri Delta State, Nigeria) 2007 in association with Ikhide Ehighelua & Co. Onoriode Chambers 2, Alegbo Road, Effurun, Pp. 1-3

[12] Ibid. see also Margaret T. Olorodudu – Fubara, *Law of Environmental Protection* (Caltop Publications (Nigeria) Limited, Ariwoola House, Eleyele/Polytechnic Express Way, Ibadan – Nigeria), 1998. pp 386 – 419.

[13] Savitt, William and Paula Bottorf, Global Development A Reference Handbook. ABC-CLIO, Inc. Santa Barbara, California, 1995 P. 211; O P Dokun Oyeshola, *Politics of International Environmental Regulations*, p. 32.

[14] Worldwatch Institute, State of the World (Earthscan Publication, London) 1997, p. 168; Oyeshola, *Politics of International Environmental Regulations*, p. 32.

[15] The sources discussed in this section are derived from D. Elsom, *Atmospheric Pollution: A Global Problem*, (2d ed.) 1992, pp 369-70; M. Squillace, *Environmental Law: Air Pollution* (2d ed.) 1992, pp 1-12; Urban Air Pollution in Megacities of the World, (WHO/UNEP Publication, Blackwell Publishers, London 1992), A. Wild, *Soils and the Environment* (Cambridge, 1996) pp 211-232.

north-east the United States, the Far East, Western Europe and the Niger Delta region of Nigeria. The major impacts of the deposition of acid and acid rain are predominantly felt on lakes, rivers, buildings, trees etc. Findings exist to demonstrate the fact that high prevalence of acidity in lakes and rivers is known to cause the death of several known living organisms therein.

The effects of acidic rain expose metals contained in soils into the rivers and lakes. Similarly, aluminum has also been found to clog the gills of fishers where, they survive (after an attack on their bones) as same has also been discovered to contain calcium in the skeletal structure and also found to become brittle and unable to withstand the pull of muscle, resulting in abnormality. It has also been discovered, as shown below that when there is leaching of chemical form, the affected soils creates toxic effects on trees growing thereon leading to deficiency minerals indicating a premature discoloration and dropping of leaves or needles in plants. Acid rain or deposition of acids on buildings destroys the roofs of buildings. Others scientific findings which nations of the world must take swift interventions chronicled by *Dr. Dokun Oyeshola,* set-out *in extenso* below, show the impacts of global warming, economic impacts and impacts on humanity generally as follows:

> …The resultant effect of global warming may be catastrophic; it will include a rise of the ocean waters, (when water is heated, it expands and occupies more space). [16] The water from the increasing melting of the polar ice cap will add to this....[17] since 1990, the world-wide insurance industry has paid out $48 billion for weather-related losses, compared with losses of $14 billion for the entire decade of the eighties. If the trend should continue, some industry analysts believe that another 'bad year' or two, or even a single catastrophic storm, could force many major companies out of business…[18] [the releases of gases] from high-flying aircraft is (also) a contributing factor… [19]
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> …The dose, the mixture of pollutants and the effects of other stresses such as pest, frost, drought, disease and acidification determine the sensitivity of plants to atmospheric pollutant. Also, air pollution is, known to dim visibility, city skylines and scenic beauty, interferes with the safe operation of aircrafts and automobiles and disrupts transportation schedules.[20]

The above quoted portion shows the multiple negative impacts of air pollution which may become very prominent in all the nations of the word in few years to come except proactive steps are taken to combat air pollution in all the nations of the world.

3. Laws, Policies and Strategies for Legal Control of Air Pollution

To attain optimal legal control of air pollution in the Nigeria especially the Niger Delta region the issue must be made a Federal matter including the responsibility for enforcement of regulations.[21] To do otherwise it to ignore the national and international dimensions of air pollution problems.[22] The situation is the Federal Government that has jurisdiction and right to protect the air space which must take in the ambient air. There are no delineations in the air as we have state limitations and because is air movements disperses pollution from habitation to habitation. The

[16] O Fagbohun, *the Law of Oil Pollution and Environmental Restoration* (Odade Polishers Comfort House (3rd Florr) 13, Hughes Avenue Alagomeji, Yaba Lagos State) 2010, pp. 175-181.
[17] Oyeshola, *Essentials of Environmental Issues: The World and Nigeria in Perspectives* (Daily Graphics Publications, Ibadan) 1995, p. 10; Oyeshola, *Politics of International Environmental Regulations* p. 33.
[18] S. Sell, 'North-South Environmental Bargaining: Ozone, Climate Change, and Biodiversity' in *Global Governance,* Vol. 2 No. 1 January-April, 1996 p. 98; Dokun Oyeshola, *Politics of International Environmental Regulations* p. 34.
[19]K A, Kiikpoye, p 272; S E Abila, 'Impacts of Oil/Gas operations on the environment and summary of the legal regime governing the exploration and exploitation of oil mineral resources in Nigeria's Niger Delta' (2018) *The University Of Port Harcourt Journal Of Private Law,* Vol. 3, pp. 162-166; O Osibanjo, 'Industrial Pollution Management in Nigeria' in E O A Aina, & N O Ededipe (eds), *Environmental Consciousness for Nigerian National Development,* Lagos, 1992, p. 97; I L Woika, *Environmental Law and Policy of Petroleum Development. (Strategy and Mechanism for Sustainable Management in Africa)* (Anpez Centre for Environment and Development, Port Harcourt, Rives State) p.45.
[20] Ibid.
[21] In the USA on the other hand main responsibility is placed on the states and local governments for prevention and control of air pollution at sources.
[22] This view is not reflected in the Federal Environmental Protection Agency Decree No, 85, 1988.

nature and cost of control can only be borne by the Federal Government. Besides it is the standards required for control of air pollution from certain sources, for example, motor vehicle emissions. For these reasons it is submitted that contrary to the practice in the U.S.A and United Kingdom specifications of standards of criteria for any air quality should be statutorily prescribed and not to be left to the discretion of administrative bodies, local or national. The National Assembly must realize that air pollution cannot be controlled by a once and for all legislation no matter how comprehensive. As society progresses in industrialization and the development or purchases or new technology, pollution will increase in degree and variety. Since no effective cure can be found for any problem unless it is properly diagnosed any air pollution control law must leave room for continuous research to discover new polluters or causes of pollution. No law, even if devised with the agility of a clairvoyant, can eradicate pollution entirely. The aim must be to control human activities that throw harmful pollutants into the air, it is not easy any more to keep the air completely free of pollution without drawing a curtain on human progress. Indeed, most of the activities that cause pollution are legitimate and beneficial. Others may in fact result from pollution removal or control activities like sweeping and burning refuse, clearing of wreckage, cleansing and dusting fabrics and other materials. In the circumstances, we can at best control pollution activities to reduce air contaminants or at least keep air quality at the present level. In order therefore to provide a workable and progressive air pollution control law it is suggested that each known case of air pollution should be isolated for a frontal attack or the law.

4. Conclusion and Recommendations

This paper has attempted to carry out a review of the sources and impacts of air pollution and applicable laws, legal strategies and policies as instruments for combating air pollution in Nigeria and other nations of the globe and made recommendations towards creating a sustainable environment. There should be deliberate policies aimed at reducing emissions from flare stacks, artisanal refineries, tyre burning, asphalt, abattoirs, vehicular emissions and all other sources of combustion. The reality of the times we live in imposes it on us, and the government, the need to establish an Air Quality Management Authority (AQMA), whose primary responsibility should include the development of ways and means of real time monitoring and documentation of the air quality index at various parts of the area. There should be a law on Clean Air and enforcement of same, as found in advanced nations of the world to monitor the level of clean air.