THE OGIDIGBEN EPZ GAS PROJECT AND THE ENVIRONMENT: HEALTH AND HUMAN RIGHTS IMPLICATIONS

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Abstract

The Ogidigben Export Processing Zone (EPZ), also known as the Gas Revolution Industrial Park Project, is located on a land mass of about 2,560 Hectares situated between Ogidigben and Ajudaibo communities in Warri South West Local Government Area of Delta State of Nigeria. As a result of the soaring need for economic development, the Delta State Government decided to via into the establishment of EPZ which has been globally acclaimed as a panacea for guaranteeing foreign direct investment, foreign exchange earnings and technology transfer. The hue and cry in this paper is on the resultant environmental hazards which may arise from the operation of the EPZ and which may impair the health and violate the human rights to clean environment of the tenants, workers, and members of host communities of the EPZ, a situation which the Government failed to address.

Introduction

Export Processing Zones¹ have become rather popular trade policy instruments since their modern revival in the late 1950s.² Export

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¹ The "Ogidigben Export Processing Zone (EPZ), also known as the Gas Revolution Industrial Park Project", is located on a land mass of about 2,560 hectares situated between Ogidigben and Ajudaibo communities in Warri South West Local Government Area of Delta State of Nigeria. See http://www.theopinion.ng/ogidigben-epz-between-ijaw-and-itsekiri/, last visited 10/5/2015.

Processing Zones³ are now an important factor within developing economies particularly for the purpose of employment generation, export diversification and investment creation.⁴ EPZs as an economic instrument has also played the prime role of attracting foreign direct investment, foreign exchange earnings and technology transfer.⁵ The demand for globalization in modern time has further made the concept of EPZ to become more significant for economic advancement.⁶ In fact, research has shown that establishment of EPZs has snowballed globally in recent time with dramatic increase from 79 EPZs in 1975 in 25 countries to about 3000 EPZs in 2003 around 116 countries.⁷ In 2007, the International Labour Organisation recorded 3,500 EPZs in more than 130 nations employing more than 60 million people worldwide.⁸

In line with the development goals of government everywhere to diversify its economy and advance its economic boundaries, the then Delta State government decided to collaborate with the Federal Government of Nigeria for the establishment of the Ogidigben Export Processing Zone.⁹ The Delta State Commissioner for Oil and Gas was reported to have said that 'the EPZ would house a gas hub, a petrol-chemical plant, a methanol

²D Madani, 'A Review of the Role and Impact of Export Processing Zones' available at http://siteresources.worldbank.org/INTRANETTRADE/Resources/MadaniEPZ.pdf, last visited 10/5/2015.

³ Hereafter referred to as EPZs.

⁴ See Islam, Z. and Mukthar, U. "EPZ History in Bangladesh and its Administration and Legislation for Economic Enclave" (2011) 1 (7) *Business and Management Review* 86 also available at http://www.businessjournalz.org/articlepdf/BMR_1709_a.pdf, last visited 10 May 2015.

⁵ *Id*.

⁶ *Id*.

⁷ *Id*.

⁸ P Neveling, 'A Global History of Export Processing Zones, 1947 – 2007' available at http://www.hist.unibe.ch/content/forschungsprojekte/export_processing_zones/index_ger.html last visited 11 May 2015.

⁹See generally The Pointer News online, "Delta to Commence Work on Ogidigben EPZ" available at http://thepointernewsonline.com/?p=27579 last visited 10 May 2015.

plant, a fertiliser plant, a seaport, a five-star hotel, banks and about 5.000 housing units."10

What are EPZs?

In general, EPZs are described as "geographically or juridically bounded areas in which [different levels of] free trade, including duty-free import of intermediate goods, is permitted provided that all [or most] goods produced within the zone are exported."11 They are "proven policy tools which Government can use in all countries to ease the pain of delay, red tape, bureaucracy and lack of welcome and assistance inflicted on manufacturers trying to be involved in unfamiliar environments to produce for the global market."12 Lang puts it as follows:

EPZs are a creature of trade policy in the sense that they are designed to facilitate the insertion of a country into the global trading system. They help to expand and diversify the export base of the host country, shape the kinds of import and export flows which result from liberalization of the domestic trading environment, and in that way help set the terms for the host country's integration into the global trading system. Furthermore, EPZs are creatures of the host country's domestic law and policy. Despite their close connection with broader trends towards trade liberalization, they are in no way required or established by operation of WTO law, regional trade agreements, or any other body of international law.¹³

¹⁰ *Id*.

¹¹ K U Shah, & J E Rivera, 'Export Processing Zones and Corporate Environmental Performance in Emerging Economies: The Case of the Oil, Gas and Chemical Sectors of Trinidad and Tobago', 3 available at http://www.gwu.edu/~clai/working_papers/Jorge_Rivera_04-07.pdf last visited 10 May 2015.

¹² See R L Bolin 'Why Export Processing Zones are necessary' available at www.wepza.org/s/Why-Export-Processing-Zones-are-Necessary.pdf last visited in 11 May 2015.

¹³A Lang. 'Trade Agreements, Business and Human Rights: The Case of Export Zones' available at http://www.hks.harvard.edu/m-Processing rcbg/CSRI/publications/workingpaper 57 lan..pdf, last visited 13 May 2015.

EPZs have also been described as special industrial zones in which governments grant foreign investors financial incentives such as tax holidays, preferential treatment with respect to various fiscal and financial regulations, and exemptions from customs duties in order to attract investment.¹⁴ It is claimed that EPZs enable developing countries to attract foreign direct investment, increase domestic capacity, create new employment opportunities, increase exports and ultimately assist in poverty alleviation.¹⁵ While EPZs were originally introduced as enclaves into developing countries' economies, and are now found all over the globe, most are concentrated in less than a dozen countries. 16 EPZs also have their shortcomings. The debate on the merits of EPZs touches on a host of issues: from social issues, like labour rights (including the effect on women and children), environmental protection and urban planning, to macro-economic issues which have impact on government revenue, employment, trade and foreign exchange earnings.¹⁷ They also take a variety of forms, including multiple or "single-industry, single-commodity, single-factory, and singlecompany zones' with varying environmental and human rights challenges. Thus, apart from the economic benefits for which EPZs are known, EPZs are also associated with a pocket of issues which could be social, legal or economic. While acknowledging the relevance of all these issues, the focus of this paper is narrowed down to examination of the possible environmental, health and human rights challenges which the Ogidigben EPZ may pose to the

¹⁴See International Labour Organization, 'Export Processing Zones: Addressing the Social and Labour Issues' cited in 'The Likely Impact of Proposed Industrial Zones on Conditions in Cambodian Garment Factories' http://www.womynsagenda.org/documents/IZs_in_Cambodia_Revised.pdf

¹⁶ J K McCallum, 'Export Processing Zones: Comparative Data from China, Honduras, Nicaragua and South Africa' available at http://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---dialogue/documents/publication/wcms_158364.pdf last visited 11/5/2015.

¹⁷ See Michael Engman, et. al. 'Export Processing Zones: Past and Future Role in Trade and Development' (OECD Trade Policy Working Paper No. 53) 9 available at http://www.oecd.org/officialdocuments/publicdisplaydocument pdf/?cote=TD/TC/WP(2006)39/FINAL&docLanguage=En last visited 11 May 2015.

immediate host community as well as to the tenants and employees within the EPZ.

Brief History of EPZs in Nigeria

The principal enactment for the establishment and management of Export Processing Zones in Nigeria is the Nigeria Export Processing Zones Decree. Invariably, the desire of the Federal Government to join the league of countries with EPZs started in 1992 by the promulgation of the said Decree. The Decree created the Nigerian Export Processing Zones Authority (NEPZA) and saddled it with the administration of the Nigerian EPZ programme. The NEPZA is empowered to grant all requisite permits and approvals to operators in EPZs to the exclusion of all other government agencies and bodies. The country's pioneer EPZ is the Calabar Processing Zone. The country has 25 free zones at the moment. In Processing Zone.

The overall objective for adoption of free zones in the country is to create an enabling environment aimed at enhancing economic growth and development of export oriented manufacturing in the non-oil sector of the economy, as well as the propagation of the Nigerian content policy in the oil and gas sector in order to diversify the country's economic base, attract foreign direct Investment (FDI), generate employment, increase foreign exchange earnings, enhance technology transfer, skill acquisition/upgrading as well as create backward leakages.²²

The Nigerian Export processing Zone Authority (NEPZA) claims that since the inception of the scheme, Nigeria's economy has witnessed tremendous patronage and steady growth through

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¹⁸ No. 63 of 1992, now the Nigeria Export Processing Zones Act CAP N 107 Laws of the Federation of Nigeria 2004 (hereafter referred to as "NEPZA Act"). ¹⁹ See sections 1 and 2 of NEPZA Act.

²⁰See The Nigerian Export Processing Zones Scheme available at *http://www.onlinenigeria.com/agriculture/?blurb=483* last visited 10/5/2015. See also Tinapa Free Zone and Resort Regulations, 2009.

²¹ Some are Kano Free Zone, Tinapa, Snake Island, Lagos, Brass Free Zones, etc. See *http://www.nepza.gov.ng/freezones.asp* last visited 30 May 2015.

²² See http://www.nepza.gov.ng/aboutus.asp

FDI inflow and revitalization of local industries.²³ NEPZA administers incentives for all Free Zones ranging from Export Processing Zones, Free Trade Zones, Border Free Zones, Export Farms, Science and Technology Parks, Tourism and Resort Centres, and other more specific specialized free zones. The various free zones in Nigeria are operated by the Federal Government or in conjunction with the state governments or by private sectors.

The Ogidigben EPZ is a joint venture between the Federal Government and the Delta State Government. The Ogidigben EPZ is the latest EPZ in the country at the moment. Its establishment occupied the front page of almost every leading national newspaper in Nigeria for a long time as a result of the surrounding community crisis particularly relating to where the zone should be cited, what name to give to it and what benefits host communities would derive from its establishment. These agitations led to heightened tension and social disturbances within the Ijaw and Itsekiri communities and eventually to several postponements by the President of the EPZ ground breaking ceremony, as a result of threat to lives posed by one of the contesting communities who claimed to be co-owners of the *locus* of the zone.

Environmental and Health related Issues in EPZs

While the concerns of the host communities about the benefits to be derived from hosting the EPZ are understandably well placed, none of their agitations borders on the possible health, environmental and human right challenges apparently associated with the use of the environment for purposes for which the Ogidigben EPZ was established, namely – to house a gas hub, to build a petrol-chemical plant, a methanol plant, a fertiliser plant, etc. EPZs are associated with a number of health and human Right challenges arising from the use of the environment. There is a clear connection between our environment and our health and between our health and human right. Health is affected to a great measure

²³ *Id*.

by environmental conditions.²⁴ Characteristically, in developing countries like Nigeria, most EPZs are planned and operated with little concern for their environmental impacts and thus are more likely to produce greater environmental harm. According to Shah and Rivera:

...EPZs lead to heightened negative environmental impacts associated with the deliberate concentration of factories and facilities in one designated area. These environmental impacts come about through the day-to-day operations of the industrial park's tenants. With the high concentration of facilities, environmental impacts can be intense and accumulative. Depending on the types of facilities, environmental problems may include air and water pollution, accumulation of solid/hazardous wastes, noise/radiation, soil contamination, and chemical and fuel spills among others. There may also be environmental problems not associated with particular industrial tenants but rather with the existence of the EPZ estate itself. These problems can include habitat and biodiversity loss, depletion of water resources, and landscape disturbances. Growth of industrial estates is also frequently accompanied by unplanned population migrations that can cause public health problems, additional environmental stress, and social dislocation.²⁵

Obviously, most local communities where EPZs are established do not have full grasp of the grave implications connected with them. What is coming to Ogidigben and its environs as a blessing has as part of it certain challenges which the government, as usual, may not be prepared to handle. It is a

²⁴ W Onvizu, 'International Environmental Law, the Public's Health, and Domestic Environmental Governance in Developing Countries' (2005) 21 American University International Law Review, 601. The World Health Organisation has reported that: 'Many human rights – such as the right to life and the right to food – are frustrated by an unhealthy environment' and that 'this is underscored by the fact that the right to health extends to the underlying determinants of health, which include a healthy environment.' See Human Right-Based Approach to Health and Environment: Report of a Regional Seminar, by World Health Organization, Bangkok, Thailand, 20-21 August 2007, 13 available at www.apps.searo.who.int/pds-doc/B3222.pdf last visited on 13 January, 2015.

²⁵ (citations omitted) *Id.* pp. 8-9.

common knowledge that the business of oil exploration came in this manner in Nigeria. Today, the Nigerian economy is heavily driven by resources from oil and gas, ²⁶ a phenomenon that has not only generated a very high magnitude of tension and crisis but which has crippled other sectors of the economy and devastated the Niger Delta environment.²⁷ According to Oshwofasa, Anuta, & Aiyedogbon,²⁸ "the discovery of crude oil by Shell D'Arcy in the Oloibiri oil field changed not only the economic landscape of the Nigerian states and its external relations, but also the social, economic and ecological fate of communities in the Niger Delta region." Today what came as oil boom has been described as oil doom.²⁹ The health of Nigerians living within gas flaring sites, around contaminated and polluted waters and in the middle of black fumes have been greatly impaired. No meaningful environmental right can thrive in the absence of a guaranteed right to health.

²⁶ As stated by Yusuf 'Nigeria, bolstered by soaring oil prices in the late 1960s and early 1970s, quickly shifted emphasis in its economy from agriculture to crude oil production. Oil currently accounts for over 90% of the country's total revenue. Nigeria's 35.9 billion barrels of proven oil reserves ensures its place as the largest producer of oil in Africa" H O Yusuf, 'Oil on Troubled Waters: Multinational Corporations and Realising Human Rights in the Developing World, with Specific Reference to Nigeria' (2008) African Human Right Journal 82.

²⁷ See generally P B Eregha & I R Irughe 'Oil Induced Environmental Degradation in the Nigeria's Niger-Delta: The Multiplier Effects' (2009) 11(4) Journal of Sustainable Development in Africa 160-175; I. Akhakpe, "Oil-Environmental Degradation and Human Security in the Niger-Delta Region of Nigeria: Challenges and Possibilities" Vol. 8, No.26, European Scientific Journal 77-92 also available at http://eujournal.org/index.php/esj/article /viewFile/570/639 and D F Tom, 'The Tragedy of Oil in Niger Delta: Resource Control and Constitutional Overview' (2012) 4/1 Delsu Law Review 1-21.

²⁸ B O Oshwofasa, et al 'Environmental Degradation and Oil Industry Activities in the Niger-Delta Region' (2012) 9(1) African Journal of Scientific Research 454.

²⁹ E C Erunke & M G Alalana, 'Globalization of Nigeria's Oil Industry: An Overview of the Unending Terrorism in the Niger-Delta Region' (2013) 3(7) International Journal of Business, Humanities and Technology 100.

The World Health Organization (WHO) defines environment and health as including both the direct pathological effects of chemicals, radiation and some biological agents, and the effects on health and well-being of the broad physical, psychological, social and aesthetic environment, which includes housing, urban development, land use and transport.³⁰ 'Health' on the other hand is defined as "a complete state of physical, mental and social wellbeing, and not merely the absence of disease or infirmity?"³¹ Besides, there are several generally accepted definitions of the word 'health.' Bircher³² defines health as "a dynamic state of wellbeing characterised by a physical and mental potential, which satisfies the demands of life commensurate with age, culture, and personal responsibility." Saracci³³ says it is "a condition of well being, free of disease or infirmity, and a basic and universal human right." The Australian Aboriginal people generally have this to say about health: "...Health does not just mean the physical well-being of the individual but refers to the social, emotional, spiritual and cultural well-being of the whole community."³⁴ Health can be "a

³⁰ See generally Environment and Health: The European Charter and Commentary (WHO Regional Office for Europe, 1989) cited in (Onvizu, n24 above) 601.

³¹ See the Principles of the WHO Constitution available at www.who.int/governance/eb/who_constitution_en.pdf last visited June 16, 2015. A critic however, argues that the "WHO's definition of health is utopian, inflexible, and unrealistic, and that the inclusion of the word "complete" in the definition makes it highly unlikely that anyone would be healthy for a reasonable period of time. It also appears that 'a state of complete physical mental and social well-being' corresponds more to happiness than to health." See, Niyi Awofeso, Re-defining 'Health' available at http://www.who.int/bulletin_board/83/ustun11051/en/last visited on 29th January, 2015.

³² J Bircher, *Towards a Dynamic Definition of Health and Disease* (Med. Health Care Philos, 2005) 335-41 cited in Niyi Awofeso, *Id*.

³³ R Saracci, *The World Health Organization needs to Reconsider its Definition of Health*. (BMJ 1997) 409-10 cited in Niyi Awofeso, *Id.*

³⁴ See the Final Report and Recommendations of the National Health and Medical Research Council-Promoting the Health of Indigenous Australians: A Review of Infrastructure Support for Aboriginal and Torres Strait Islander Health Advancement (Canberra: NHMRC, 1996) part 2, cited in Niyi Awofeso, *Id.* Although, this Report was rescinded by the National Health and Medical Research Council on 24 March 2005, for the disclaimer see

whole of life view and includes the cyclical concept of life-death-life."35

Apparently, guaranteeing a healthy environment in a free zone appears to be much more difficult considering the connotation of the word *health* from the WHO standpoint. This is because of the practice of freeing EPZs from some form of laws protecting the environment and human rights in spite of the fact that there are diverse forms of pollution associated with EPZs. Land, water and air pollutions are much more rampant in EPZs. Hence, in most developing countries, investors within EPZs have not been known to be so willing to comply with regnant environmental laws³⁶ even though there exist sufficient environmental policies, rules, regulations and guidelines for maintaining a healthy and habitable environment. For instance, there are standard regulations which businesses operating in EPZs in Nigeria are required to comply with. An example is the Investment Procedures, Regulations and Operational Guidelines for Free Zones in Nigeria³⁷ which provides as follows:

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³⁵ H G Nijhuis & L J G Van der Maesen *The Philosophical Foundations of Public Health: An Invitation to Debate* (J. Epidemiol. Community Health, 1994) 1-3, cited in Niyi Awofeso, *Id*.

³⁶ Some of those laws in Nigeria are Animal Disease (Control) Act Cap.A.17 Laws of the Federation of Nigeria, 2010; Associated Gas Re-injection Act Cap. A. 25 Laws of the Federation of Nigeria, 2010, Environmental Impact Assessment Act Cap. E.12 Laws of the Federation of Nigeria, 2010, Federal Environmental Protection Act Cap. F.10 Laws of the Federation of Nigeria, 2010, Harmful Wastes (Special Criminal Provisions, etc) Act 1988; National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007, Oil in Navigable Water Act Cap. 0. 6 Laws of the Federation of Nigeria, 2010; Oil Pipeline Act Cap. O.7 Laws of the Federation of Nigeria, 2010. In Delta State, some of the laws are Delta State Environmental Sanitation Law Cap. D. 17 Laws of Delta State 2006; Delta State Environmental Protection Agency Law Cap. D. 16 Laws of Delta State 2006.

³⁷ Investment Procedures, Regulations and Operational Guidelines for Free Zones in Nigeria 2004, part 10 para 6 available at http://www.nepza.gov.ng/filedownload.asp?file=downloads/NEPZA2004Regulat ions.pdf 2004

- Α. Approved enterprise shall abide with applicable environmental pollution laws and regulations and shall ensure that pollution treatment facilities or other suitable devices are used to ensure that wastes and pollutants caused by their production processes are kept within tolerable limits as prescribed by applicable laws and regulations.
- B. Waste management and pollution control plan shall be submitted to the Authority/Zone Management for approval before commencement of machine installation.
- C. The Authority shall inspect and monitor the operations of antipollution devices and measures in a Zone in conjunction with relevant Government agencies and shall apply appropriate sanctions for breaches of applicable laws and regulations as provided by said laws and regulation.

Section 82 of the Tinapa Free Zone and Resort Regulations,³⁸ 2009 also sets out certain environmental condition for the operation of the said free zone. The Regulations provide as follows:

- (1) All employers of service providers within TFZR³⁹ and their staff shall comply with any statutory regulations and guidelines set out for the control of hazardous substances using the manufacturers' and suppliers' HSE guide and their own knowledge of the work processes.
- (2) All employers and service providers and their staff shall ensure that exposure of workers to hazardous substances will receive thorough and adequate training and information on the HSE issues relating to such type of work and it shall be mandatory for such workers to undergo periodic medical checks.
- (3) All waste materials shall be disposed of carefully and in such a way that they do not constitute any hazard to employees, clients, the general public and the environment.

However, because of the general unwillingness and lack of political zeal to strictly enforce environmental laws⁴⁰ in

³⁸ Made pursuant to the Nigeria Export Processing Zones Act, Cap. N 107 Laws of the Federation of Nigeria, 2010.

³⁹ Acronym for Tinapa Free Zone and Resort.

⁴⁰ The author has identified previously that "lack of political will to enforce... [Environmental] laws and over dependence on oil and oil companies" have not brought the desired environmental protection that can guarantee a right to clean

developing countries, and for the fact that the EPZs are free zones, several laws including tax laws, labour laws, environmental laws and even human right laws⁴¹ are relaxed to the disadvantage of workers and persons living within the Zone in the interest of foreign investment. For instance, an EPZ in Dakar started its operation back in 1993 and as at 2011 has not set up a Central Effluent Treatment Plant (ETP) instead keep discharging untreated effluent into the low-lying natural water body.⁴²

Talking seriously, the Ogidigben EPZ which is expected to house a gas hub, a petrol-chemical plant, a methanol plant, a fertiliser plant, a seaport, etc, will no doubt generate a considerable measure of environmental and health concerns if proper regulatory frame work is not put in place and enforced strictly. It is worthy of note that some of these health hazards are systemic and may not even show up until a very long time. An occupational health clinic

environment in Nigeria. See B E Umukoro, 'Gas Flaring, Environmental Corporate Responsibility and the Right to a Healthy Environment: The Case of the Niger Delta' F Emiri & G Deinduomo (eds.) in *Law and Petroleum Industry in Nigeria: Current Challenges* 63.

⁴¹ For instance, on 13 August 2003, the UN Sub-Commission on the Promotion and Protection of Human Rights adopted by consensus the draft Norms on the responsibilities of Transnational Corporations and other Business Enterprises with regard to human rights together with a commentary that is intended to provide practical interpretation. Principle 1 of the Norms reads as follows:

'States have the primary responsibility to promote, secure the fulfilment of, respect, ensure respect and protect human rights recognized in international as well as national law, including ensuring that transnational corporations and other business enterprises respect human rights. Within their respective spheres of activity and influence, transnational corporations and other business enterprises have the obligation to promote, secure the fulfilment of, respect, ensure respect of and protect human rights recognized in international as well as national law, including the rights and interests of indigenous peoples and other vulnerable groups'.

Unfortunately, these norms are respected more in their breaches than in their obedience.

⁴²M K A Khan, *et. al.* 'Environmental Pollution Around Dhaka EPZ and its Impact on Surface and Groundwater' (2011) 46 (2) *Bangladesh J. Sci. Ind. Res.* 153.

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for EPZ workers in Nicaragua, for instance, found a higher number of serious musculoskeletal symptoms than expected in a general health examination of all workers in a limited number of factories. Many workers also had symptoms of airways problems. An unpublished study from Nicaragua found the psycho-social environment to be so humiliating, especially for the women, that they turned to repression or expressed that life as a machinist was not their "real life". 43

It has been observed that contact with unsafe drinking or bathing water can impose serious risks (both acute and delayed) to human health. Microbe contamination of groundwater due to sewage outfalls and high concentration of nutrients in marine and coastal waters due to agricultural runoff are among the most serious threats. According to the European Commission's (EC) recent statistics, 20 percent of all surface water in the EU is seriously threatened by pollution. In the infrastructurally disadvantaged developing world the water contamination problem is even more prominent.

Obviously, the most frequent and dangerous forms of pollution in Nigeria is water pollution. Many Nigerians have no potable water for drinking even in cities.⁴⁶ In the rural areas many

⁴³ Jesper Nielsen, "Export Processing Zones or Free Zones - The Experience seen from a Trade Union Point of View" available at http://www.labour-inspection.org/EPZ.experiences.tradeunionpoint.htm. See also Jinky Leilanie Lu "Occupational Hazards and Illnesses of Filipino Women Workers in Export Processing Zones" *International Journal of Occupational Safety and Ergonomics* 2008, Vol. 14, No. 3, 333–342 also available at http://archiwum.ciop.pl/27076.

⁴⁴ K Remoundou & Phoebe Koundouri, 'Environmental Effects on Public Health: An Economic Perspective' available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2738880/ last visited on 5 June 2015.

⁴⁵ *Id*.

⁴⁶ This is majorly because 'sanitation and sewage system are poor. Several people do not care of (sic) how to dispose of their trash' see H Ijaiya 'The Legal Regime of Water Pollution in Nigeria' 5 available at http://www.law.unilorin.edu.ng/publications/private/ho_ijaiya/4.pdf. According to Longe, et al "Industries are the leading surface water pollution contributors in Nigeria because of the high volume of water required to carry out their

fetch drinking water from the rivers and the streams. This is commoner in riverine areas like Ogidigben. Wastes are more likely to be disposed indiscriminately on waterways without regards to the health implications. 'The nation's water sources [generally] are under serious threat from inadequate catchment management and widespread pollution, including the indiscriminate disposal of hazardous substances.'⁴⁷ While we admit that environmental related health issues are a global concern, no doubt, the Ogidigben EPZ given the businesses it is intended to house, will witness increase generation of wastes and more pollution cases leading to enormous health challenges for the host communities and occupants of the zone if adequate measures are not put in place to ensure maximum compliance with applicable environmental laws. Unfortunately, some of these health problems may not disclose

economic activities. Studies carried out by FEPA in 1995 on 200 industries in Lagos revealed that only 18% of them performed any form of primary treatment on their wastewaters before discharging them into nearby surface waters' citations omitted. See E O Longe, et. al. 'Water Resources Use, Abuse and Regulations in Nigeria' (2010) 12/2 Journal of Sustainable Development in Africa 40 also available at eprints.covenantuniversity.edu.ng/id/file/20378 last visited 21 June 2015. Even where the government undertakes to provide water there is usually non consultation with the intended consumers, thus water projects are sited in places where they are not wanted or are abandoned shortly after commissioning. More worrisome is the fact that most water resource infrastructures appeared to have been built without: (a) sufficient data and environmental impact assessment, (b) sufficient intra-basin, inter-sectoral, interstate consultation and consideration of upstream/downstream users of water, (c) any or sufficient consultation with beneficiary communities, and (d) even without the existence of any community to benefit from the assets. Olawale Ajai, 'Law, Water and Sustainable Development: Framework of Nigerian Law', 8/1 Law, Environment and Development Journal (2012), p. 98 available at http://www.lead-journal.org/content/12089.pdf. The National Water Resources Policy states that, 'in most cases, stakeholders are not consulted or otherwise involved in planning, development and management of the nation's water resources. The result has been a vicious cycle of unreliable projects that provide services that do not meet consumer needs and for which the consumers are unwilling to pay.' See National Water Policy: Federal Republic of Nigeria, 2004, at 5, available at http://www.wsssrp.org/document/Draft%20National% 20Water%20Resources%20Policy%20%20July%202004.pdf cited in Ajai, *Id.* ⁴⁷ National Water Policy, July 2004 available at http://www.awdrop.org/uploads /3/1/7/8/3178681/national-water-policy.pdf

themselves early enough to allow for a meaningful remedy. According to Kimani:⁴⁸

Over the last three decades there has been increasing global concern over the public health impacts attributed to environmental pollution, in particular, the global burden of disease... due to prolonged exposure to environmental pollution. Most of these environment-related diseases are however not easily detected and may be acquired during childhood and manifested later in adulthood. Improper management of solid waste is one of the main causes of environmental pollution and degradation in many cities, especially in developing countries. Many of these cities lack solid waste regulations and proper disposal facilities, including for harmful waste. Such waste may be infectious, toxic or radioactive. Municipal waste dumping sites are designated places set aside for waste disposal. Depending on a city's level of waste management, such waste may be dumped in an uncontrolled manner, segregated for recycling purposes, or simply burnt. Poor waste management poses a great challenge to the well-being of city residents, particularly those living adjacent the dumpsites due to the potential of the waste to pollute water, food sources, land, air and vegetation. The poor disposal and handling of waste thus leads to environmental degradation, destruction of the ecosystem and poses great risks to public health.

Notwithstanding the benefits⁴⁹ of EPZs, the fact that the Ogidigben EPZ is meant to house a petro-chemical plant, methanol and fertilizer plants, etc, is sufficient to generate reasonable anxiety about the immediate environment of the EPZ. It is superfluous to say that environmental pollutants and petrochemical hazards in particular, have adverse health effects. Some of the most serious harmful effects have been identified as perinatal disorders,

⁴⁸ N G Kimani 'Environmental Pollution and Impacts on Public Health: Implications of the Dandora Municipal Dumping Site in Nairobi, Kenya' in cooperation with United Nations Environment Programme, Summary Report available at http://www.unep.org/urban_environment/PDFs/DandoraWasteDump-ReportSummary.pdf

⁴⁹ It has been said that "Petrochemicals, particularly, provide the foundation for manufacturing industries like textiles, construction, packaging, pharmaceuticals, agriculture, etc." See *Quantum Petrochemical to set up methanol plant in Nigeria, http://www.fibre2fashion.com/news/textile-news/nigeria/newsdetails. aspx?news_id=167176* last accessed 10 June 2015.

infant mortality, respiratory disorders, allergy, malignancies, cardiovascular disorders, increase in stress oxidative, endothelial dysfunction, mental disorders, and various other harmful effects.⁵⁰ According to Pasetto,

The available epidemiological evidence of health effects of residence in the neighbourhood of petrochemical plants is coherently pointing to an increased risk for respiratory diseases, including lung cancer. An augmented risk for lung cancer among petrochemical workers was observed in some occupational cohort studies. ⁵¹

It has also been observed that "petrochemical hazards have effects on the environment ranging from loss of vegetation, climate change, landslide, flooding, extreme weather condition, disruption of economic activities and loss of occupation for people who primarily depended on agriculture..." A number of theorists have revealed that despite improvements in methods of dealing with disasters, disasters and petrochemical hazards still pose a serious threat and more attention should be given to preparing for disasters. Operation of methanol plant is not devoid of health hazards too. For example, 'animal studies demonstrate that methanol is a developmental toxicant, and some of these studies suggest that developmental effects can be induced by relatively

⁵⁰R. Kelishadi "Environmental Pollution: Health Effects and Operational Implications for Pollutants Removal" available at http://www.hindawi.com/journals/jeph/2012/341637/

⁵¹Roberto Pasetto, et. al. 'Mortality and Morbidity Study of Petrochemical Employees in a Polluted Site' available at http://www.ehjournal.net/content/11/1/34 last accessed 7 June 2015 (citation omitted).

⁵² A M Al-Qahtani, "Disaster Risks and Preparedness: Effects of Petrochemical Hazards on the Environment in Saudi Arabia" (2014) 4/14 *Journal of Environment and Earth Science*, p. 137 available at file:///C:/Users/USER/Downloads/14508-16817-1-PB.pdf
⁵³ Id.

brief exposure periods during gestation.'⁵⁴ A research carried out in California in 2001 revealed that:

To meet the potential demand for methanol, a nationwide distribution and storage system will have to be constructed. Methanol will be transported around the country in tanker trucks, rail cars, ships or barges, and possibly in pipelines. The methanol is then likely to be stored in underground storage tanks (USTs) located at gas stations that serve as refueling facilities. This increase in production, distribution, and storage of methanol poses a threat to the environment due to potential releases of the methanol fuels during its production, transport, storage, and use. The release of methanol fuels to the environment has the potential to cause deleterious impacts on water resources, including impacts on human health, ecosystems, and rendering water unsuitable for use, without treatment or remediation. The constituents in the methanol fuel, as well as transformation products of methanol and the additives, may contribute to these deleterious impacts. Knowledge of the environmental fate of methanol, the additives, and transformation byproducts in surface water and groundwater is relatively limited. The extent of the threat of increased methanol use on water quality, both with respect to ecological impacts and impacts on drinking water sources, have not been thoroughly evaluated. Because of its relatively high biodegradability, methanol itself is not expected to be a significant water quality concern.55

What is more, in China, a chemical plant exploded in 2005 as a result of the dumping of 100 tons of toxic chemicals into the Songhua River leaving millions of people stranded without running water for days.⁵⁶

Besides the effect of pollution on the human health and agriculture, there is also the issue of the grave danger to aquatic life. Environmental pollution caused by municipal waste generally assaults the environment in Nigeria. Ikpesa encapsulates the issue

⁵⁴ Issues in Methanol Research (Workshop Report, National Water Research Institute, Costa Mesa, California, 2001) 25 available at http://www.nwri-usa.org/pdfs/NGT_IssuesinMETHANOLResearch.pdf last visited 9 June 2015
⁵⁵ Id, at 7.

⁵⁶ M J D Akpan 'Oil and Gas Pollution, Prevention and Control: An Appraisal '(2014) 1(1) *ABUAD Law Journal* 122.

more succinctly when he says that 'residential and commercial areas are suffering in equal measure over non-disposal of municipal waste in many cities all over Nigeria..." He continues, "there is the problem of generation of vast amounts of waste daily as a result of human and industrial activities without the corresponding [and] adequate ...measures ... to handle the inevitable disposal responsibility that follows." In most cities in Nigeria, particularly, the overcrowded one where land space is very limited, wastes are more often than not, disposed into the waters thereby contaminating the water.

It was reported that the major reason for dropping Koko Town and choosing Ogidigben as the locus for the EPZ was because of the shallow nature of the Koko River. ⁵⁸ The port is too low for ship landing. It is therefore not in doubt that the EPZ will largely involve shipment and shipping activities which may involve the discharge of ballast water. It has been observed that ballast water is essential for safe and efficient operation of modern shipping. ⁵⁹ This is because it stabilizes ships and ensures efficient propeller and rudder generation. ⁶⁰ However, ballast water ⁶¹ serves

⁵⁷ See N Ikpeze, 'Safe Disposal of Municipal Wastes in Nigeria: Perspectives on a Rights Based Approach" (2014) 3 (1) *The Journal of Sustainable Development, Law and Policy* 175.

⁵⁸ See Fresh Angle, "Why Koko was Dropped as Host to EPZ Project-Uduaghan" available at http://www.freshangleng.com/news/1056-why_koko_was_dropped_as_host_to_epz_project_uduaghan#, last visited 10 June 2015.

⁵⁹ S C Efemeje & B Lawal 'The Protection of the Marine Environment and Biodiversity in Nigeria: A call for an Urgent Legislative Intervention' (2013) 5 UNIZIK Journal of Public and Private Law 96.
⁶⁰ Id.

⁶¹ Wikipedia, states that 'ballast water discharges (sic) by ships can have a negative impact on the marine environment. Cruise ships, large tankers, and bulk cargo carriers use a huge amount of ballast water, which is often taken on in the coastal waters in one region after ships discharge wastewater or unload cargo, and discharged at the next port of call, wherever more cargo is loaded. Ballast water discharge typically contains a variety of biological materials, including plants, animals, viruses, and bacteria. These materials often include non-native, nuisance, exotic species that can cause extensive ecological and economic damage to aquatic ecosystems, along with serious human health issues including death.' See Wikipedia, the Free encyclopedia available at

as a vector through which harmful aquatic organization and pathogens are transferred from one locality to another leaving a spectrum of effect ranging from ecological, economic to impacts on human health.⁶² According to Efemeje Sylvia and Bose:

Ecologically, many of the HAOP compete with indigenous species for both food and space. Sometimes, these organisms feed on the indigenous specie and in most cases, on their egg. By all these the food chain and the local ecological system is affected. For instance, the European green crab or *carcinus maenas* established itself on the east coast of North America, Australia and South Africa subsisting on a variety of food organisms, fish, local crabs, algae, etc... the zebra mussel competes with native fish for plankton. ⁶³

It has been reported too that,

invasive alien species can compete with native biota, displace them, predate upon them parasites and transmit or causes diseases, reduce growth and survival rates, cause decline, extirpation (local extinction) of populations... thereby altering community structure..., affect growth and survival of other organisms in aquatic and marine environment by... decreasing the amount of dissolved oxygen in water, changing soil chemistry and its structure...⁶⁴

Environmental Degradation and the Human Right Implications

http://en.wikipedia.org/wiki/Ballast_water_discharge_and_the_environment, last accessed 10 June 2015. A form of cholera, Vibrio cholerae, which broke out only in Bangladesh arrived via ballast water in Peru in 1991, killing more than 10,000 people over the following three years. Id.

⁶² *Id*.

⁶³ *Id*.

⁶⁴ See The United Nations Environmental Programme (UNEP), Subsidiary Body on Scientific, Technical and Technological Advice, Invasive Alien Specie: Status, Impacts and Trends of Alien Species that threaten Ecosystem, Habitats and species, (United Nations doc. UNEP/CBD/SBSTTA/6/INF/11,2001), available at http://www.cbd.int/doc/meetings/sbstta-06/information/sbstta-06-inf-11-en.pdf.at7 cited in (Efemeje n59 above) 97.

Fifty years ago, the concept of a human right to a healthy environment was viewed as a novel, even radical, idea. Today, it is widely recognised in international law and endorsed by an overwhelming proportion of countries.⁶⁵ Over the past decades, human rights have been identified and codified in a vast body of international and regional agreements. 66 However, the earliest legal instrument linking human right to the environment is the Universal Declaration of Human Rights, ⁶⁷ which obliges members of the international community to respect the rights of all human beings to life, to an adequate standard of living, to liberty and security, 68 to freedom of opinion and expression 69, and to participate in the government of the country. 70 Since 1972 the trend has been to seek a platform for the enforcement of environment human right. In the United Nations Conference on the Human Environment held in Stockholm, the international community adopted the Stockholm Declaration. 71 Today there are over 130 countries spanning Europe, Asia, the Americas, the Caribbean, Africa, and the Middle East which have entrenched this right as constitutional rights.⁷² This growing global awareness

⁶⁵ D Boyd, 'The Constitutional Right to a Healthy Environment' http://www.environmentmagazine.org/Archives/Back%20Issues/2012/July-August %202012/constitutional-rights-full.html.

⁶⁶ A Otubu, 'Environmental and Human Rights: An Overview of Current Trends in Nigeria' (2013) 2 *The Nigerian Journal of Public Law* 211.

⁶⁷ G.A. Res 217A, U.N GAOR 3rd Sess. 1st Plen. Mtg, U.N Doc. A/810 (Dec.10, 1948), also available at http://www.supremecourt.ge/files/upload-file/pdf/act3.pdf (hereafter, UDHR). The concept of environment right started emerging when the UDHR came into existence recognizing the link between human and environmental rights. See generally, J R May & E Daly, 'Vindicating Fundamental Environmental Rights Worldwide' 2 Oregon Review of International Law, (2009) 367-368.

⁶⁸ Article 3, UDHR.

⁶⁹ Article 19, *Id*.

⁷⁰ Article 21, *Id*.

⁷¹ Stockholm Declaration on the Human Environment, *Report of the United Nations Conference on the Human Environment* (New York, 1973), UN Doc. A/CONF.48/14/Rev.1. See generally L B Sohn, 'The Stockholm Declaration on Human Environment' (1973) 14/3 *The Harvard International Law Journal* 423-515.

⁷² Boyd, (n65 above).

towards the protection of the right to the environment as human right is as a result of the undeniable link between the environment and human right and the serious challenges which environmental degradation poses to the realisation of human rights.⁷³ Judge Weeremantry of the International Court of Justice put the position as follows:

The protection of the environment is... a vital part of contemporary human rights doctrine, for it is a *sine qua non* for numerous human rights such as the right to health and the right to life itself. It is scarcely necessary to elaborate on this, as damage to the environment can impair and undermine all the human rights

⁷³ According to Boyle, a chief proponent of environmental rights, the nexus between the environment and human rights "amounts to 'greening' human rights law." See A Boyle, 'Human Rights or Environmental Rights? A Reassessment' 1-2 available at http://www.law.ed.ac.uk/file-download/publications/0-221humanjusticeorenvironmental rightsreassess.pdf. See also, The Ksentini Report (Sub Commission of the United Nations Commission on Human Rights) UN. Doc. E/CN.4/sub.2/1989/C23(1989). According to Ako 'The Ksentini Report offers what may be the broadest definition, or better still, components, of environmental rights. It suggests that the possible components of substantive human rights or perhaps several environmental rights can be seen in one source which sets out no less than fifteen rights relative to environmental quality.' See Rhuks Ako "The Judicial Recognition and Enforcement of the Right to Environment: Differing Perspectives from Nigeria and India" (2010) 3 NUJS Law Review 426. These include (a) Freedom from pollution, environmental degradation and activities that adversely affect the environment or threaten life, health, livelihood, well-being or sustainable development; (b) protection and preservation of the air, soil, water, sea-ice, flora and fauna, and the essential processes and areas necessary to maintain biological diversity and ecosystems; (c) the highest attainable standards of health; (d) safe and healthy food, water and working environment; (e) adequate housing, land tenure and living conditions in a secure, healthy and ecologically sound environment; (f) ecologically sound access to nature and the conservation and the use of nature and natural resources; (g) preservation of unique sites, and (h) enjoyment of traditional life and subsistence for indigenous peoples. Thus, Para. 2 of the Draft Principles On Human Rights and the Environment E/CN.4/Sub.2/1994/9, Annex I (1994), which provides that "All persons have the right to a secure, healthy and ecologically sound environment" and that "this right and other human rights, including civil, cultural, economic, political and social rights, are universal, interdependent and indivisible" was a follow up of the Ksentini Report.

spoken of in the Universal Declaration and other human rights instruments.⁷⁴

Environmental hazards affect the enjoyment of basic human rights as well as those rights which are referred to as fundamental rights under Chapter 4 of the Constitution of the Federal Republic of Nigeria, 1999 (amended). This is so as certain human rights can only be enjoyed in a pollution free and healthy environment.⁷⁵ It has been observed that 'where the environment is polluted beyond repair, the basic human rights will be put at risk.'76 Thus, the concept of environmental right advances the right of the citizens or aggrieved persons to access and ventilate cases of environmental justice 'under the umbrella of human rights.'77 The campaign for the 'greening' of human rights law has been heightened majorly because the environment is the immediate physical surroundings and natural habitation of man and other living things. The proponents of environmental rights therefore believe that human rights can be used to restore clean environment or control those whose activities pollute human ecosystem. Thus, in spite of the 'calamities which have arisen as a result of industrialisation and particularly the exploration and exploitation of oil and gas resources, human rights laws have a place to prevent, reduce or eliminate self-destructive human activities against environment.'78

Human rights are not abstract rights or abstraction. Hence human right law is connecting with a host of other allied rights

⁷⁴ See, Gabçikovo-Nagymaros Project (Hung. v. Slovk.), 1997 I.C.J. 92 (Sept. 27) (separate opinion of Judge Weeremantry) cited in D Shelton, 'Human Right and the Environment: What Specific Environmental Right have been Recognized?' 35 (1) *Denver Journal of International Law & Policy* (2008) 131.

⁷⁵ See, L Atsegbua, 'A Critical Appraisal of Environmental Rights under the Nigerian Constitution' (2004) 2/1 *Benin Journal of Public Law*, 46.

⁷⁶ See A B Abdulkadir, 'The Rights to a Healthful Environment in Nigeria." A Review of Alternative Pathways to Environmental Justice in Nigeria' (2014) 3(1) *The Journal of Sustainable Development Law and Policy* 131.

⁷⁸ N G Ikpeze, 'The Environment, Oil and Human Rights in Nigeria' available at *file:///C:/Users/USER/Downloads/82388-197867-1-PB.pdf;* last visited 10 March 2015.

without which the enjoyment of human rights may be difficult if not impossible. Thus, there is no right to life if there is no right to health. A contaminated environment impacts not only the health of people but destroys lives. It is therefore apparently theoretical to advance the course of fundamental rights as though they stand in isolation. If the police shoot at one without lawful excuse, that is a clear case of human right abuse under our laws but where environmental pollution kills people it is a case of environmental degradation and the question is why. What does the right to life protect – does it protect the method of violation or the violation itself? How is it important therefore if a man dies from bullet wounds shot by his assailants or from bad environmental condition created by multinationals? I do not think there is any difference. If the wrong handling of the environment can affect health, then that act itself is a violation of human rights. The right to clean environment is indispensable for the exercise of human rights and 'the realization of the right to health may be pursued through various complementary approaches.'79 Nigerians are entitled to the right to health and this should not be taken away under the guise of EPZ. This right exists not only under the International Covenant on Economic, Social and Cultural Rights but also under the African Charter on Human and Peoples Right Act. 80 According to Odunsi "this, conceivably, puts the right to health on a strong legal footing in Nigeria as it would be quite permissible for one to invoke relevant provisions of the Act to ground a claim for the right to health to certain extent.⁸¹ Ajigboye, on the other hand, observes that "...there is a platform for the protection of health rights in Nigeria through various international instruments which Nigeria is a party and signatory."82

⁷⁹ See O Ajigboye, 'Realization of Health Right in Nigeria: A Case for Judicial Activism' (2014) 14(3) *Global Journal of Human-Social Science*, 23.

⁸⁰ See article 16 of African Charter on Human and Peoples' Rights (Ratification and Enforcement) Act Cap. A 9 L.F.N. 2010.

⁸¹ B Odunsi, 'Health Law and the Environment: Nigeria Malaria Epidemic in Perspective' (2012) 2(8) *NIALS Journal of Environmental Law* 8.

⁸² O Ajigboye, 'An Overview of the Legal Framework for the Protection of the Right to Health in Nigeria.' (2013) 1(1) *ABUAD Law Journal* 285.

In some jurisdictions like India, the scope of human right law has been expounded to include the right to clean and healthy environment. Consequently, right to health or to clean environment is directly enforceable in India even before the inclusion of a straight constitutional backing. According to Sandip B. Satbhai⁸³

Part III of the Indian Constitution deals with fundamental rights. The fundamental rights are not absolute; they are subject to reasonable restrictions. The prime function of the Supreme Court is to interpret the law. The Constitution of India has not included right to health i.e. right to enjoy the highest attainable standard of physical and mental health under a specific provision. But it is the Indian judiciary who treat right to health an integral part of right to life which is fundamental for all human beings under Article 21 of the Constitution. The Supreme Court has given recognition to right to health vide different techniques of interpretation. "The government is under Constitutional obligation to provide health facilities." Right to health is also one of the rights, which is implied under right to life and personal liberty as guaranteed by the Constitution of India.

The views of Ajigboye expressed below are very apt too. He says:

Although in Nigeria, the right to health is enshrined impliedly in the Constitution, it does provide a foundation for action, whether

⁸³ S B Satbhai, 'Right to Health in India-A Study of Constitutional and Judicial Attitude' 7, available at https://www.academia.edu/7692842/Right_to_Health_in_India-_Study_of_Constitutional_and_Judicial_Attitude,last, last visited 13 June 2015. According to Cheema and Virk "Indian environmental jurisprudence brings out the unique characteristic of the new legal order which has been gradually established in India during the late 1970s and throughout the 1980s and early 1990s. India not only enacted various specific laws to control environmental pollution but has incorporated significant provisions for the protection of the environment into its Constitution." See A A Cheema, & Virk, A. 'Human Rights Aspect of Clean Environment: Pollution in the State of Indian Punjab' (2012) 2(1) Sacha Journal of Human Rights 4, available at http://www.sachajournals.com/user/image/sjhr2012asishvirk228129002.pdf, last visited 14th February, 2015.

catalyzing legal and policy reforms or unlocking the potential for litigation to enforce this right whereas other routes (for example, constitutional right to life, judicially enforceability of international treaties, and legislation) are unavailable or insufficient. It is therefore submitted that given the situation in Nigeria, there are adequate laws on the issue of health right and health care, what is lacking is its realization."⁸⁴

The state of our laws in Nigeria is sufficient to canvass the right to health in our court of law except that our courts have not accepted to tread the path of radicalism like other jurisdictions.⁸⁵ Thus, advancing the provision of the Constitution and other laws "to provide remedies for victims of environmental violation may depend largely on the discretion and creativity of Judges.⁸⁶

Striking a Balance between Economic Development and a Healthy Environment

There is no doubt that 'global economic and environmental systems are under significant stress'⁸⁷ as some hold the view that protecting our environment constitutes a huge expense to our economy.⁸⁸ There is huge demand on modern governments to diversify, industrialize, promote and sustain a sound economy, create jobs, provide housing and meet its human and capital needs.⁸⁹ While these goals are very fundamental, their realisation

⁸⁴ See (Ajigboye, n82) 285.

⁸⁵ *Id*.

⁸⁶ B R Akinbola & T T Onifade 'Legal and Administrative Remedies in Environmental law in Nigeria: Reform Proposition' (2013) 1(1) *ABUAD Journal of Law* 332.

⁸⁷ See Ambler, et al. 'Deciding by Impact: Balancing Economic and Environmental Resilience' available at www.pwc.com/gx/en/governance-risk-compliance-consulting-service/resileince/publications/balancing-economic-environmental-resilience.jhtml last visited 13 June 2015.

⁸⁸ Dennis Church, 'The Economy vs. Environment: Is there a Conflict' available at *www.ecoig.com/dc-products/prod conflict.html*, visited last 13 June 2015.

⁸⁹ The necessity for development appears antithetical to the demand for a clean environment. As it is observed, "environmental concerns can negatively affect the short term needs and objectives of human beings. States and individuals could be in a situation of disadvantage, if they neglect their economic development in favour of environmental protection. Especially in developing

has thrown nature 'out of balance.'90 Today, man is now fighting with a legion of environmental challenges.⁹¹ As a follow up, many countries, including Nigeria⁹² have had to adopt several approaches— legislative⁹³, ministerial,⁹⁴ economic and even

countries, the struggle of parts of the population against poverty is often considered as more important than environmental protection." See S Nijhawan, 'Human Rights to a Clean Environment' (Unpublished Essay) submitted to the Faculty of Law and Social Sciences (London: School of Oriental and African Studies, 2004) 3-4, available at www.subin.de/environmen.pdf last visited on 14 January, 2015.

⁹⁰ See E Daly, 'Constitutional Protection for Environmental Rights: The Benefits of Environmental Process' (2012) 17 *International Journal of Peace Studies*, 76 citing Philippines Justice Feliciano in *Minors Oposa v. Factoran* Jr., G.R. No. 10183, 224 S.C.R.A. 792 (July 30, 1993).

⁹¹ See B E Umukoro, 'Understanding the Scope and Nature of the Right to Clean Environment' (Unpublished Ph.D Seminar Series No.1, Faculty of Law, Delta State University, 2015) 1.

⁹² In Nigeria, environmental consciousness did not begin much early. As at 1990 there were still complaints about the pace of the awareness of environmental problems in Nigeria. See, J A Omotola, (ed.) Environmental Laws in Nigeria including Compensation (Lagos: Faculty of Law, University of Lagos, 1990) 201. Until 1988 when the Federal Environmental Protection Agency Decree was promulgated, there was no distinct environmental regulatory regime in Nigeria. In fact, it was the national environmental emergency situation i.e. the discharged of imported containers of toxic waste product in Koko in 1988 that led to the promulgation of the Federal Environmental Protection Act. See Martin -Joe, Ezeudu 'Revisiting Corporate Violations of Human Rights in Nigeria's Niger Delta Region: Canvassing the Potential Role of the International Criminal Court' (2011) 11 African Human Rights Law Journal, 36. Apart from scanty legislative instruments, legal discourse on the Nigerian environment too was rare until 1988 when the Faculty of Law of the University of Ibadan organized a conference on Environmental Law as part of the activities marking the 40th anniversary celebration of the University. Most of the papers presented at that conference were edited by Folarin Shyllon into a book and formed one of the earliest works on environmental law in Nigeria. See the Introduction by F Shyllon, to *The law and* the Environment in Nigeria (Ibadan: Faculty of Law, University of Ibadan, 1989) p. i.

⁹³Several environmental legislations exist in Nigeria, some of them enacted in the hope of curtailing the rising temple of environmental degradation. Examples are the Environmental Impact Assessment Act Cap. E.12 Laws of the Federation of Nigeria (LFN), 2010, Federal Environmental Protection Act Cap. F.10 LFN, 2010, Harmful Wastes (Special Criminal Provisions, etc.) Act, 1988, and

political to address the evolving environmental concerns. It should be stated however, that this research is not intended to play down on the enormous benefits which are derived from the operation of export processing zones but to balance the same against the need to protect the inalienable right of man to a healthy environment.

It is a common knowledge that the demand for development, especially in the developing world, is an enormous contemporary challenge. Modern governments are, thus, saddled with the critical decision of drawing the line between a meaningful exploitation of the ecosystem in guaranteeing a reasonable living standard and the need to preserve and protect man's natural habitation for the present and the future generations. It has been said that "a healthy environment and a vibrant economy are synonymous." However, given that human rights or fundamental rights rank far and above every other kind of rights, be it economic, political or social, whether under international or Nigerian law, ⁹⁷ government must avoid development strategies

National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007.

⁹⁴ There is in Nigerian, both at the Federal and State levels, ministries of environment as well as departments, boards, agencies, commissions, etc specially established to monitor the environment.

⁹⁵ This brings us closer to Principle 1 of the Stockholm Declaration which states that "Man has a fundamental right to freedom, equality and adequate condition of life, in environment of a quality that permits a life of dignity and well-being and we bear a solemn responsibility to protect and improve on the environment for present and future generations..." See Atsegbua, (n75 above) 46 where Atsegbua identifies this principle as a governing principle which provides for the right of present and future generation to enjoy a healthy environment and decent quality of life.

⁹⁶ Development & Environmental Protection: Achieving a Balance March 2008 A Position Paper on Economic Development Working Together to Protect Muskoka's Watersheds available at http://muskokawatershed.org/wp-content/uploads last visited June 13, 2015.

⁹⁷ In *Ransome-Kuti & Ors. v. AG Federation & ors* (1985) LPELR-2940(SC) the Supreme Court Per Eso J.S.C. explained the purport of fundamental right as follows: "What is the nature of a fundamental right? It is a right which stands above the ordinary laws of the land and which in fact is antecedent to the political society itself. It is a primary condition to a civilised existence and what has been done by our constitution, since independence, starting with the

that offer short-term benefits while eroding our natural resources.⁹⁸ Strengthening nature's capacity to cope with economic changes is a potential factor for national development. While the environment must offer assistance to economic growth it must at the same time be protected not only from being unable to further protect the economy but also from being unable to sustain its natural occupants. Now, the question is: how far can we push economic needs without causing disadvantage to the environment given the relevance of the environment to other rights? It has been suggested that 'if our economy is to evolve towards sustainability, forwardlooking businesses will need to adapt new processes and standards consistent with society's interests in respect for the environment.'99 There is therefore the dire need to strike a balance between promoting sound economy vide EPZs and ensuring the protection of the environment, health and the human rights of those likely to be affected by operations in the EPZ, particularly at Ogidigben. According to Timoshenko:

Independence Constitution, that is, the Nigeria (Constitution) Order in Council 1960 up to the present Constitution, that is, the Constitution of the Federal Republic of Nigeria, 1979 (the latter does not in fact apply to this case: it is the 1963 Constitution that applies) is to have these rights enshrined in the Constitution so that the rights could be "immutable" to the extent of the "nonimmutability" of the Constitution itself. It is not in all countries that the Fundamental Rights guaranteed to the citizen are written into the Constitution. For instance, in England, where there is no written constitution, it stands to reason that a written code of fundamental rights could not be expected. But notwithstanding, there are fundamental rights. The guarantee against inhuman treatment, as specified in section 19 of the 1963 Constitution, would, for instance, appear to be the same as some of the fundamental rights guaranteed in England, contained in the Magna Carter 1215 - Articles 19 and 40 which provide - "no freeman may be taken or imprisoned, or disused of his freehold or liabilities in free customs or be outlawed or exiled or in any way molested nor judged or condemned except by lawful judgment or in accordance with the law of the land And the crown or its ministers may not imprison or coerce the subject in an arbitrary manner" ... In the United States, the Eighth Amendment to the United States Constitution provides - "Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishment inflicted."

⁹⁸ See Development & Environmental Protection, *Supra* note 96 at 12.

⁹⁹ *Id*. at 13.

Prevention of ecological damage is a fundamental problem in balancing environmental protection and efficient utilization of natural resources. Avoiding harm to the natural environment, as opposed to replacing and restoring natural equilibrium, is not only desirable from the point of view of ecological requirements, but is vastly more advantageous from the standpoint of long-term economic and social interests. ¹⁰⁰

Most governments and economists hold the view that pollution is (the unintended consequences of economic decisions¹⁰¹) inseparable from a viable use of the economy whether strictly for industrial purposes or for agricultural needs. This is particularly so in Nigeria where the government easily recounts on the front page of newspapers economic losses in terms of number of barrels of crude oil lost per day as against the degree of environmental damages and health implications caused when pipelines explode. Thus, economic decisions of governments, multinationals and mega market operators especially in developing nations, do not always put non-economic factors first or at least second, but most times, last. The reason behind this is not far from the thinking that most times those who take key decisions in the economic sphere

¹⁰⁰ Timoshenko, A. S. "The Problem of Preventing Damage to the Environment in National and International Law" (1988) 5/3 *Pace Environmental Law Review* at 1.

¹⁰¹ According to Stavins R. N., "Environmental Protection and Economic Well-Being: How Does (and How Should) Government Balance These Two Important Values?" (Discussion Paper 03-48, August 2003) at 2 available at http://www.rff.org/documents/RFF-DP-03-48.pdf. last visited June 13, 2015 "The fundamental theoretical argument for government activity in the environmental realm is that pollution is a classic example of an externality (an unintended consequence of market decisions, which affects individuals other than the decision maker). Because firm-level decisions do not take into account full social costs, pollutant emissions tend to be higher than socially optimal levels." Others proposes that environmental and economic interests are aligned when environmental regulation allows flexible, cost-effective and market based approaches to achieving desired environmental result. See Balancing Environmental & Economic Interests www.integrysgroup.com/news/balancing_interests.aspx last visited June 13, 2015.

do not directly suffer from the side effects of such decisions. Those who bear the brunt of these decisions are always the unprotected, oppressed and marginalised grass root dwellers. They are closer to nature than the economists and the high profile and siren driven political gladiators.

Setting environmental standards for the Ogidigben EPZ

Apart from statutes directly regulating EPZs in Nigeria several other laws exist which are enacted for the purpose of protecting the environment from contamination. Besides statutes, there is also a body of case law and common law principles which have played prominent role in the development of environmental protection law in Nigeria. However, there is fear that the Ogidigben EPZ, like other EPZs, may not observe basic environmental norms. It has been observed that: "Ensuring that EPZs comply with labour laws and environmental standards has been a major challenge. While the Government is committed to maintaining the highest possible standards of employment for all workers in the Country, the concessions that have been given to EPZ companies so as to attract and retain the equally important Foreign Direct Investment (FDI) negate some of the gains made in protecting the rights of workers...". 103

Having said that, it becomes imperative to consider some of the statutes which impose standards on the use of the environment in Nigeria. One of such statutes is the National Environmental Standards and Regulation Enforcement Agency (NESREA) Act 2007. The NESREA Act establishes an Agency 105 and

¹⁰² Treaty to Establish Rotterdam Convention on the prior Informed Consent Procedure for certain Hazardous Chemicals and Pesticides in International Trade (Ratification and Enforcement) Act, 2005; National Environmental Protection (Effluent Limitation) Regulations 1991; National Environmental Standards and Regulations Enforcement Agency (Establishment) Act, 2007.

¹⁰³ Economic Development or Human Rights? Assessing the Impact of Kenya's Trade and Investment Policies and Agreements on Human Rights available at http://www2.ohchr.org/english/bodies/cescr/docs/info-ngos/FIDHKenya_41.pdf Hereafter referred to as NESREA Act. This Act was formerly the Federal Environmental Protection Agency Act (FEPA) 1988 promulgated during the military era.

authorises it to enforce compliance with laws, guidelines, policies and standards on environmental matters¹⁰⁶ and in collaboration with other relevant agencies and with the approval of the Minister, establish programmes for setting standards and regulations for the prevention, reduction and elimination of pollution and other forms of environmental degradation in the nation's air, land, oceans, seas and other water bodies and for restoration and enhancement of the nation's environment and natural resources.¹⁰⁷

The Agency is also authorised to enforce compliance with laws, guidelines, policies and standards of environmental matters, 108 such as the National Policy on the Environment. 109 Other mandate of the Agency is to enforce compliance with the provisions of international agreements, protocols, conventions and treaties on the environment and such other agreement as may from time to time come into force. 110 These provisions appear very mouth-watery and promising since Nigeria has ratified a number of treaties and international agreements. 111 But how the court is to construe these provisions is a separate debate given the

¹⁰⁵ *Id*. Section 1(1).

¹⁰⁶ *Id*. Section 7(a).

¹⁰⁷ *Id.* section 7 (o).

¹⁰⁸ Id.

¹⁰⁹ See M T Ladan, 'Review of NESREA Act and Regulations 2001-2009: A New Dawn in Environmental Protection in Nigeria' (2010) 6/1 Nigerian Bar Journal Law, 179. The learned Professor in examining the powers of NESREA states that the fact that NESREA is authorized to enforce environmental guidelines and policies like the National Policy on the Environment is "indicative of the importance and reliance on standards, rules, policies and guidelines on the environment. Although they may not have the force of law, they are a vital and necessary element in the protection and preservation of the environment." It is worthy of note that the NESREA Act incorporates most of the government policies and commitment on environmental management enshrined in the National Policy on the Environment (NPE) launched in 1989. See O Irekpitan, 'Nesrea and the Legal Control of Noise Pollution in Nigeria' (2010-2012) 13/1 UNIBEN Law Journal, 77.

¹¹⁰ Section 7(c) NESREA Act.

¹¹¹ Some of these treaties and agreements touch on marine, oil and gas, hazardous waste, biodiversity, climate change, etc.

conventional nature of the Nigerian judiciary¹¹² and the position of the Nigerian courts on the status of treaties and international agreements which have not been domesticated in Nigeria¹¹³.

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¹¹² As regards the Nigerian environment and the role of the judiciary in the protection of the environment against the degrading effects of oil pollution, see S G Ogbodo, 'The Role of the Nigerian Judiciary in the Environmental Protection against Oil Pollution: Is it Active Enough?' available at http://www.nigerianlawguru.com/articles/environmental.pdf. Ogbodo states that "it is our hope that the Nigerian judiciary will strive to achieve social justice as they interpret, expound and expand the law on environmental protection." He recommends that "the Nigerian judiciary should endeavour to integrate both the procedural and substantive aspects of environmental protection driven by the conviction that a clean and healthy environment is an intrinsic component of human rights." Id. In fact, given the traditional approach of the Nigerian judiciary towards evolving rights in the field of environmental law, aggrieved parties and victims of environmental degradation now resort to litigating environmental wrongs before international courts. See R A Mmadu, 'Judicial Attitude to Environmental Litigation and Access to Environmental Justice in Nigeria: Lesson from Kiobel' (2013 2(1) Journal of Sustainable Development, Law and Policy 152. Ladan, on the other hands, posits that "there is a lot of merit in ...[the] attitude of judicial activism by the judiciary in environmental matters, not only because administrative and legislative review of administrative action is weak and judicial review dependant on the accident of litigation, but also because of the grave consequences of delinquent environmental management in the socio-economic life of a developing nation like Nigeria. See M T Ladan, 'A Critical Appraisal of Judicial Attitude towards Environmental Litigation and Access to Environmental Justice in Nigeria,' being a text of paper presented at the 5th IUCN Academy Global Symposium, Rio de Janeiro, Brazil, 2007, 32-33 available at http://adu.edu.ng/publications/2009-07-03-15041_3901.doc last visited 19 June 2015. However, K Ebeku, 'Judicial Attitudes to Redress for Oil Related Damages in Nigeria' RECIEL (2003) 12(2) 199 holds the view that "the Nigerian judiciary now (unlike hitherto) protect individual /communal victims of environmental damages, as well as the Nigerian environment."

¹¹³ Ayewa has rightly opined that the rule of law on the application of international law within the Nigerian municipal law has generated a lot of mixed reactions from legal scholars. See S O Ayewa, 'The Symmetry between International Law and Municipal Law: A Nigerian Perspective' (2004)1 *DELSU Public Law Series* 90. In fact, in Nigeria, it can be stated that treaties are not part of the sources of Nigerian law. B I Olutoyin, 'Treaty Making and Its Application under Nigerian Law: The Journey So Far' (2014)3(3) *International Journal of Business and Management Invention*, 13 available at http://www.ijbmi.org/papers/Vol(3)3/Version-3/B033307018.pdf. For further

According to Ladan, the provisions of section 7(c) can be interpreted in two ways:

First it could be interpreted in terms of giving NESREA the authority to enforce such environmental treaties, in Nigeria whether or not they have been domesticated in the country. This would be based on the fact that by ratifying the relevant treaty, Nigeria has signified its intention to be bound by the provision of the treaty... this principle is enshrined in Article 26 of the Vienna Convention on the Law of Treaties..., Secondly, the provision could be interpreted in such a way as to limit the enforcement powers of NESREA to those international agreement and treaties on the environment that have specifically been domesticated in Nigeria by an Act of the National Assembly. 114

The Act further empowers the Agency to enforce through compliance monitoring, the environmental regulations and standards on noise, air, land, sea, oceans and other water bodies other than in the oil and gas sector. 115 The role of NESREA in environmental protection is crucial. Thus, if the Agency is given the necessary logistic, funding and support by the government in the discharge of its duties, it will go a long way putting a check on most activities which are having negative impact on the environment.116 The NESREA Act is comprehensive enough to adequately provide a strong foothold for optimal environmental protection. In order to give more teeth to the Agency, the Act

legal discourse on the issue of application of international law in Nigeria, see generally C N Okeke, 'International Law in the Nigerian Legal System' (1997) 27 Cal. W. Int'l.L. J. 311-355 also available http://digitalcommons.law.ggu.edu/cgi/viewcontent.cgi?article=1009&context= *pubs* last visited 19 June, 2015. ¹¹⁴ Ladan, (n109 above) 184.

¹¹⁵ Section 7(b) and (c) NESREA Act. Section 7(c) appears contradictory to section 7(h), (j), (k) and (l) of the Act. Paragraphs (h), (j), (k) and (l) of section 7 exclude the 'oil and gas sector' from the ambit of the operation of the Agency while section 7c extends the Agency's power to the same oil and gas sector. According to Ladan 'the phrase "oil and gas" should therefore be struck out [from section 7c] to bring section 7c into conformity with the rest of the Act and to give effect to the legislation which was to clearly remove the oil and gas sector from the authority of NESREA.' Id. at 186.

¹¹⁶ It appears that what killed FEPA was partly the issue of improper funding.

retains the provision of the Harmful Waste (Special Criminal Provision, etc.) Act. 117

The Harmful Waste (Special Criminal Provision, etc.) Act¹¹⁸ is another vital legislative piece whose enforcement in the Ogidigben EPZ must be encouraged. The Act punishes any person who without lawful excuse:

carries, deposits, dumps or causes to be carried, deposited or dumped, or is in possession for the purpose of carrying, depositing or dumping, any harmful waste on any land or in any territorial waters or contiguous zone or Exclusive Economic Zone of Nigeria or its inland waterways; or transports or causes to be transported or is in possession for the purpose of transporting any harmful waste; or imports or causes to be imported or negotiates for the purpose of importing harmful waste; or (d) sells, offers for sale, buys or otherwise deals in any harmful waste. ¹¹⁹

The Harmful Waste Act¹²⁰ stipulates life imprisonment without option of fine as penalty for violating provisions of the Act.¹²¹

¹¹⁷ Cap H1 LFN, 2004. See Section 27(5) of the NESREA Act. Some writers are however not satisfied with the rationale for retaining the Harmful Waste (Special Criminal Provision) Act in spite of the fact that there is not yet an effective prosecution since its promulgation as a decree in 1988. See Fagbongbe, M. "Criminal Penalties for Environmental Protection in Nigeria: A Review of Recent Regulations Introduced by NESREA (2012) *NIALS Journal of Environmental Law*, Vol. 2 at 155.

¹¹⁸ Cap H1 LFN, 2004, hereafter, Harmful Waste Act.

¹¹⁹ Section 1(2).

¹²⁰ The Act defined "harmful waste" 'as any injurious, poisonous, toxic or noxious substance and, in particular, includes nuclear waste emitting any radioactive substance if the waste is in such quantity, whether with any other consignment of the same or of different substance, as to subject any person to the risk of death, fatal injury or incurable impairment of physical and mental health; and the fact that the harmful waste is placed in a container shall not by itself be taken to exclude any risk which might be expected to arise from the harmful waste. Section 15.

¹²¹ See Section 6 of Harmful Waste Act. In addition to the punishment of life imprisonment, the Act further provides that :(a) any carrier, including aircraft, vehicle, container and any other thing whatsoever used in the transportation or importation of the harmful waste; and (b) any land on which the harmful waste was deposited or dumped, shall be forfeited to and vested in the Federal Government without any further assurance except as contained in this Act. The

Some have criticised this punishment as too strict and perhaps the reason while prosecution is rare under the Act in spite of the daily brazen violation of the provisions of the Act. The Act removes immunity from persons on whom immunity is conferred under the Diplomatic Immunities and Privileges Act.

The Act also provides for civil liability¹²² for violation of the provisions of the Act. Section 12 (1) provides:

Where any damage has been caused by any harmful waste which has been deposited or dumped on any land or territorial waters or contagious zone or Exclusive Economic Zone of Nigeria or its inland waterways, any person who deposited, dumped or imported the harmful waste or caused the harmful waste to be so deposited, dumped or imported shall be liable for the damage except where the damage-

- (a) was due wholly to the fault of the person who suffered it; or
- (b) was suffered by a person who voluntarily accepted the risk thereof.

Another relevant legislation is the Environmental Impact Assessment Act. ¹²³ EIA is a procedure that seeks to ensure that the acquisition of adequate and early information on likely environmental consequences of development projects, on possible alternatives, and on measures to mitigate harm." ¹²⁴ The government and stakeholders must ensure that investors comply with the E.I.A. Act. The Act makes the development of an E.I.A. mandatory for major projects that may have adverse effect on the environment. The Act also provides for the assessment of potential environmental impacts or effects of proposed activities including their direct or indirect cumulative short term and long term effect

stringency of these provisions appears to have been necessitated by the historical koko incident of 1988 and the need to cross to control the transboundary movement of hazardous waste. *Id.*

¹²² See generally, A O Ayodele, 'Civil Liability for Oil Pollution in Nigeria' available at *www.nials-nigeria.org/journals/Ayodele%20Oladiranlawp.pdf*. Last visited 30 June 2015.

¹²³ Cap. E. 12 LFN, 2010, hereafter referred to as E.I.A. Act.

¹²⁴ See E Onyeabor, 'Adopting Environmental Impact Assessment Act Methods in Assessing Damages in Environmental Litigation in the Oil Industry' (2009)1/2 Petroleum, Natural Resources and Environmental Law Journal 25.

and identifies measures available to mitigate adverse environmental impacts of proposed activities and assessment of those measures. The Act is principally aimed at the regulation of industrialisation process with respect to the environment. Development, it has been identified, goes with environmental challenges but where the environmental laws are obeyed, it reduces the extent and depth of environmental degradation. Apart from these legislations highlighted above, case law principles exist which may be relevant to remediating environmental wrongs and for the protection of the Ogidigben environment.

CONCLUSION

The Oil and Gas Sector has continued to be the backbone of the Nigerian economy, contributing over 90% of the nation's foreign exchange earnings and at least 80% of the GDP. Thus, there is the call for the sustainable development of the sector since virtually all of the activities in both the upstream and downstream sectors 'are not only pollution-prone, but readily provoke social

¹²⁵ Section of 16(1) (d) EIA Act. See also Akpan, Oil and Gas Pollution, *supra* note at p. 132.

¹²⁶ See E Echefu & E Akpofure, 'Environmental Impact Assessment in the Nigerian: Regulatory Background on Procedural Frame Work, 63 available at www.unep.ch/etu/publications/14)%2063%20to%2074.pdf, last visited 2 July, 2015

¹²⁷ See E Onyeabor, 'Expanding the Scope of Environmental Impact Assessment Requirement in the Nigerian Urban and Regional Planning Act 1992' (2005) 5(1) *UNIZIK Law Journal* 231 "...development carries with it, at times, adverse impact on the environment and E.I.A being a process used in determining level of impact of development project on the environment, it follows that the scope of E.I.A. requirement under the NUR.P Act be expanded in the light of enhancing realities of environmental protection."

¹²⁸ On relevant common law principles see generally E Onyeabor, 'Application of Common Law Principles in Adjudicating Water Pollution Violation: A Rethink' (2009)1(1) *Petroleum, Natural Resources and Environmental Law Journal*, 87-108; B A Oloworaran, 'Liability for Compensation for Oil Spillages Resulting from the Act of Strangers/Third Parties' (2009)1(3) *Petroleum, Natural Resources and Environmental Law Journal*, 66-86.

National Policy on Environment, para. 4.14 at p. 24 available at http://www.tradehub.gov.ng/organisations/vieworganisation.aspx?agencyld=7

discord.'130 This requires 'positive and realistic planning that balances human needs against the carrying capacity of the environment.'131

To ensure that the Ogidigben EPZ host community and those living within and around the zone continue to enjoy the healthy natural environment which is about to be disturbed, the government must discharge its duties and ensure reasonable compliance with appropriate environmental laws, even though EPZs are ordinarily free zones. There should as a matter of urgency be a law or regulation put in place specifically for the running and control of the Ogidigben EPZ. There is also the need to harmonise all EPZ Laws and regulations throughout the country. It has been suggested that 'there should be periodic environmental audits to ensure that there is compliance with environmentally sound practices by way of objective evaluation of how well environmental organization, its management, relevant equipment and related logistics are faring in their various tasks." ¹³² The move to amend the Oil and Gas Export Free Zone Act is good but more work is needed. 133 Furthermore, it is suggested that the host community should be involved directly in the discussions and dialogue not only in respect of the benefits accruable to them but also on the plan of government and the investors on how to handle the attendant environmental and health concerns. It has been observed that 'public participation [in the area of the environment]

¹³⁰ *Id*.

¹³¹ *Id.* at p 1. Part of the National Policy on the Environment requires "that a number of complementary policies, strategies and management approaches [be] put in place which should ensure, among others, that: environmental concerns are integrated into major economic decision-making process; environmental remediation costs are built into major development projects; economic instruments are employed in the management of natural resources; environmentally friendly technologies are applied; Environmental Impact Assessment is mandatorily carried out before any major development project is embarked on." *Id.* p. 1.

¹³² J O Offiong, 'The Dilemma of Implementing Effective Environmental Policies in Nigeria' (2011) 9(1) *JORIND* 429 available at www.ajol.info/journals/jorind last visited 21 June 2015.

http://pwcnigeria.typepad.com/files/pwc-tax-alert---proposed-amendments-to-tax-free-zone-act.pdf

is not statutorily protected [in Nigeria] yet current realities have encouraged public involvement as the communities have become aware of the need to protect the environment."¹³⁴ NEPZA should allow collaboration with the host community in ensuring that reasonable environmental standards are maintained as NEPZA alone cannot adequately handle the intricacies of the environmental challenges when they start presenting themselves. On this, Ikpeze notes that:

...the solution to healthy environment will never be realized by formation of Commissions, for example the Oil Mineral Production Areas Development Commission (OMPADEC), which has been scrapped, or the Niger Delta Development Commission (NDDC) which is currently experiencing financial setbacks or more recently, the (National Environmental Standards and Regulations Enforcement Agency (NESREA) and the National Oil Spill Detection and Response Agency (NOSDRA) established before it. But in protective MOUs and in educating the people on the importance of maintaining sustainable environment.¹³⁵

The implementation of most environmental principles and treaties will usually require legislative and enforcement measures to be taken by government. In general, these are part of the obligations of due diligence which states are called upon to perform. How the government will effect the performance of these obligations will depend on what is required by the particular law and the choice of means which is usually a matter of the discretion of the government. ¹³⁶

¹³⁴ See Echefu, & Akpofure (n 126 above) 72.

¹³⁵ Ikpeze, (n 57 above) 94. The learned author continues, "Suffice it to state that in the event of any environmental pollution and degradation, adequate compensation as of right must be paid to the affected people as well as effective machinery being put in place to restore the affected environment back to its prior condition as much as practicable." *Id*.

¹³⁶ A B Abdulkadir & I. Imam, 'An Examination of the Applicability of International Environmental Law Principles in National Court' (2009)1(3) *Petroleum, Natural Resources and Environmental Law Journal*, 60.