

AN EVALUATION OF THE ROLE OF THE NIGERIAN PORTS AUTHORITY IN THE PROTECTION OF NIGERIA'S MARINE ENVIRONMENT*

Abstract

The marine environment is facing a number of pressures, arising out of the needs of people, and the multiple uses that coastal and marine areas can be put to. These pressures contribute to the depletion of marine resources and degradation of the marine environment. There is therefore the need for the proper management and protection of marine resources through the aid of institutional framework. No amount or quantity of legislations can effectively protect the marine environment without the aid of institutional framework. It is on this premise that this paper examines the role of the Nigerian Port Authority in the protection of marine environment. The discussion in this paper is limited to namely: the importance of Nigerian maritime environment, the key challenges to marine environment and the role of Nigerian Port Authority in the security of maritime environment with a view to make the necessary suggestions to improve the system.

1. Introduction

The marine environment includes the waters of seas and estuaries, the seabed and its subsoils, and all marine wildlife and its sea and coastal habitats.¹ It is a precious asset; a heritage that must be protected, conserved and properly valued. The ultimate aim is to keep our oceans and seas biologically diverse and dynamic, and also safe, clean, healthy and productive.² The marine environment is a vital resource for life on Earth. Marine ecosystems perform a number of key environmental functions they regulate the climate, prevent erosion, accumulate and distribute solar energy, absorb carbon dioxide, and maintain biological control. The seas and oceans are our greatest source of biodiversity.³ They cover 71 % of the Earth's surface and they contain 90 % of the biosphere.⁴ The marine environment is also a great contributor to economic prosperity, social well-being and quality of life. It constitutes a fund of resources which can be used to achieve greater economic potential, so its protection is crucial at a time a nation is seeking to revitalize its economy. The marine environment is faced with a number of increasingly severe threats. These include loss or degradation of biodiversity and changes in its structures, loss of

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¹ D Pauly, J Dalsgaard, R Froese, and F Torres Jr. (1998) 'Fishing Down Marine Food Webs' *Science* 279: 860-863; N T Shear, R C Babcock, 'Continuing Trophic Cascade Effects After 25 Years Of No-Take Marine Reserve Protection'. (2003), *Marine Ecology Progress Series* 246: 1-16.

² M J Kaiser, *Marine Ecology: Processes, Systems, and Impacts* (Oxford: Oxford University Press, 2005), pp87-95.

³ UNEP; Vital Water Graphics: An Overview of the State of the World's Fresh and Marine Waters. United Nations Environment Programme, Nairobi. <http://www.unep.org/vitalwater> [last visited 26th November, 2012]

⁴ Natural and Cultural Heritage Department for Environment and Heritage for the Government of South Australia (2004) 'Living Coast Strategy' 1-4. S J Bache, 'Turtles, Tuna and Treaties: Strengthening the Links between International Fisheries Management and Marine Species Conservation', *Journal of Wildlife Law and Policy*, 2002, Vol. 5, No. 3, pp. 49-64 at p. 49.

habitats, contamination from dangerous substances, and the impacts of climate change.⁵ These threats are caused by pressures from various sea-based activities like oil and gas exploration, dredging and extraction of sand and gravel, shipping, commercial fisheries and tourism.⁶ Meanwhile, land-based activities (agriculture and industry in general) account for 80 % of marine pollution. These pressures are exacerbated by the increasing impact of climate change.

The marine environment is a precious asset; a heritage that must be protected, conserved and properly valued. The ultimate aim is to keep our oceans and seas biologically diverse and dynamic, and also safe, clean, healthy and productive. The marine environment is a vital resource for life on Earth. It is our greatest source of biodiversity and thus essential for our economic prosperity, social well-being and quality of life. It is on this premise that this paper examines the roles of Nigerian Port Authority in the protection of Nigerian Marine environment.

Therefore, this paper is divided into eight parts. This introduction which set the tone of the paper is the first part. The second part discusses the concept of maritime environment and security with a view to underscore the significance of protecting the marine environment. The third part examines the key challenges to the marine environment. The fourth part discusses the state of Nigerian maritime domain with specific focus on the policy. The fifth part looks into the history, objective and functions of the Nigerian Port Authority and measures put in place by the Nigerian Port Authority to ensure maritime safety in Nigeria. The sixth part examines the relevance of Merchant Shipping Act in pollution control, *viz a viz* the role of Nigeria Port Authority. The seven part looks into the Court with jurisdiction in marine pollution. Part eight focuses on judicial analysis of pollution cases. The focus of part nine is on the challenges facing the Nigerian Port Authority in the performance of its duty. The last part is the conclusion.

2. Maritime Environment and Security

Depending on the context, 'maritime' is defined to include matters relating to ships or shipping or navigation or seamen in a nautical or marine sense or, bordering on or living or characteristic of those near the sea, located on or near or bordering on a coast, in the coastal sense. By inference then, those who utilize the sea off the coasts are included in this definition. Further, the 'maritime environment' may be defined as 'the oceans, seas, bays, estuaries, islands, coastal areas, and the airspace above these, including the littorals.

⁵ See C J Carr, and H N Scheiber, 'Dealing with a Resource Crisis: Regulatory Regimes for Managing World's Marine Fisheries' *Stanford Environmental Law Journal*, 2002, Vol. 21, Issue 1, pp. 45-79 at p. 56; A Fagenholz, (2004) 'A Fish in Water: Sustainable Canadian Atlantic Fisheries Management and International Law' *University of Pennsylvania Journal of International Economic Law*, Vol. 25, Issue 2, pp. 639-667 at p. 645. Oceana (2007) *Towards Sustainable Fishing*, Washington, D. C: Oceana, p. 1. Available at http://training.oceana.org/fileadmin/oceana/uploads/dirt_fishing/for_amanda/Towards_Sustainable_Fishing_Paper_Nov07.pdf (last visited October 6, 20013).

⁶R C Thompson, T P Crowe, S J Hawkins, 'Rocky Intertidal Communities: Past Environmental Changes, Present Status and Predictions For The Next 25 Years' *Environmental Conservation* 29(2): (2002), 168–191.

The term ‘maritime security’ is defined as the freedom from or absence of those acts which could negatively impact on the natural integrity and resilience of any navigable waterway or undermine the safety of persons, infrastructure, cargo, vessels and other conveyances legitimately existing in, conducting lawful transactions on, or transiting through territorial and international waterways. In other words, maritime security incorporates unhindered oceanic trade, safe navigation, the safeguarding of coastal communities and their livelihoods, protecting the food chain and preserving the oceanic contribution to the health of the planet.⁷ Gilpin defines it simply as the ‘prevention of unlawful acts in the maritime domain, whether they directly impact the country or region in question, or the perpetrators are in transit.’⁸ Thus, the maritime province encompasses all areas and things of, on, under, relating to, adjacent to or bordering on a sea, ocean or other navigable waterway, including all maritime-related activities, infrastructure, people, cargo and vessels and other conveyances. Geologically, the maritime domain of a coastal state includes territorial waters, calculated as 12 nautical miles from the coast, the contiguous zone or coastal waters, measured as 24 nautical miles from the coast, the exclusive economic zone, which is 200 nautical miles from the coast, and last, the continental shelf, which can widen up to 350 nautical miles from the coast.⁹

There are two prominent faces to maritime security. The first is the inherent aspect, which has to do with the intrinsic integrity of all components that made up of the essential and indispensable features of the maritime zone, such as the immaculate quality of the waters and the quantity of fish and other marine resources. Arguably, the degradation of the intrinsic integrity of the marine ecological unit by such activities as dumping/leakage of toxic waste and poaching amount to threats to the natural dimension of maritime security. The second viewpoint, the extrinsic aspects of maritime security, comprises of the safety of all ‘foreign’ objects existing in or making use of the maritime domain. This then relates to the safety of among others vessels, persons and infrastructure, which do not constitute part of the fundamental and vital features of the marine ecosystem but which are of importance to a State or entity which has the permissible and lawful right to make use of the maritime environment.

As coastal populace in Africa keep on growing, and stresses on the environment from land-based and marine human activities intensify, coastal and marine existing resources and their habitations are being vanished or spoiled in ways that are retreating biodiversity and thus decreasing income opportunities and aggravating poverty. Pollution has become more and more sensitive within the last fifty years. The foremost causes of this degradation, besides natural disasters, are poverty and the pressures of economic development at local to global scales. Other vital concerns that impacted on the marine environment are the alteration of river flows to the coast by damming and irrigation, and pollution from land, marine and atmospheric

⁷ M Pugh, ‘Towards a Maritime Regime’ in Michael Pugh (ed), *Maritime Security and Peacekeeping: A Framework for United Nations Operations*, (New York: Manchester University Press, 1994), 24.

⁸ R Gilpin, ‘Enhancing Maritime Security in The Gulf of Guinea’, *Strategic Insights* 6(1) (2007), <http://www.ccc.nps.navy.mil/si/2007/Jan/gilpinJan07.asp> (accessed 12 July 2012).

⁹ C Frank van Rooyen, ‘Africa’s Maritime Dimension: Unlocking and Securing The Potentials of Its Seas – Interventions and Opportunities’, *African Security Review* (2007), Vol 16(2), p *Fish Markets, and Fishermen: The Economics of Overfishing*. 112.

sources. There are offshore commercial oil and natural gas reserves in some countries and many of these are being developed to supply the global energy market as well as domestic needs. All these are posing irreversible threats to the marine environment. Therefore, the protection, preservation and sustainability of the marine ecosystems become paramount in the interest of future generations.

3. Key Challenges to The Marine Environment

The following are some of the notable challenges facing the marine environment:

i. Over Fishing

Fishing is central to the livelihood and food security of 200 million people, especially in the developing world, while one of five people on this planet depends on fish as the primary source of protein. Despite its crucial importance for the survival of humanity, marine biodiversity is in ever-greater danger, with the depletion of fisheries among biggest concerns.¹⁰ This is due to the over exploitation of fish stocks.¹¹ Overfishing is a form of overexploitation where fish stocks are reduced to below acceptable levels. It can occur in water bodies of any size, such as ponds, rivers, lakes or oceans, and can result in resource depletion, reduced biological growth rates and low biomass levels. Sustained overfishing can lead to a critical situation, where the fish population is no longer able to sustain itself.¹² Some forms of overfishing, for example the overfishing of sharks, have led to the upset of entire marine ecosystems. Worldwide, about 90% of the stocks of large predatory fish stocks are already gone.¹³

Examples of overfishing exist in areas such as the North Sea, the Grand Banks of Newfoundland and the East China Sea. In these locations, overfishing has not only proved disastrous to fish stocks but also to the fishing communities relying on the harvest.¹⁴ According to a 2008 UN report, the world's fishing fleets are losing US\$50 billion each year through depleted stocks and poor fisheries management. The report, produced jointly by the World Bank and the UN Food and Agriculture Organization (FAO), asserts that half the world's fishing fleet could be scrapped with no change in catch.¹⁵ Growth overfishing occurs when fish are harvested at an average size that is smaller than the size that would produce the maximum yield per recruit. A recruit is an individual that makes it to maturity, or into the limits specified by a fishery, which are usually size or age. It can be countered by reducing fishing mortality to lower levels and increasing the average size of harvested fish to a size that will allow maximum yield per recruit

ii. Population Increase

¹⁰ S Ludicello., M Weber and R Wieland, (London: Earthscan Publications Ltd., 1999), p. 8.

¹¹ <http://www.un.org/events/tenstories/06/story.asp?storyID=800> [accessed on 25th August, 2015]

¹² B Worm, 'Impacts of Biodiversity Loss on Ocean Ecosystem Services' *Science* 314, 787-790 ; R C Thompson, T P Crowe, S J Hawkins, 'Rocky Intertidal Communities: Past Environmental Changes, Present Status And Predictions For The Next 25 Years', 2002, *Environmental Conservation* 29(2): pp168–191.

¹³ http://overfishing.org/pages/Overfishing_in_one_minute.php?w=pages [accessed on 25th August, 2015]

¹⁴ S Jennings, & M Kaiser, 'The Effects of Fishing on Marine Ecosystems', *Strategic Insights*, 1998.

¹⁵ S Ludicello, M Weber, and R Wieland, R. *Fish Markets and Fishermen: The Economics of Overfishing*, (London: Earthscan Publications Ltd., 1999) p. 8.

Population is an important source of development, yet it is a major source of environmental degradation when it exceeds the threshold limits of the support systems. Unless the relationship between the multiplying population and the life support system can be stabilized, development programs, however, innovative are not likely to yield desired results.¹⁶ Population impacts on the environment primarily through the use of natural resources and production of wastes and is associated with environmental stresses like loss of biodiversity, air and water pollution and increased pressure on marine ecosystem. Human population issues are extremely important when it comes to our way of life and our future on this planet.

As stated above, a growing population poses some serious environmental threats. More people means less forest, water, soil, and other natural resources, but more waste, pollution, and greenhouse gases. As coastal populations in Africa continue to grow, and pressures on the environment from land-based and marine human activities increase, coastal and marine living resources and their habitats are being lost or damaged in ways that are diminishing biodiversity and thus decreasing livelihood opportunities and aggravating poverty. Human overpopulation on Earth's land masses is drastically compromising the productivity and health of the sea. It was recognition of this stark reality that led the legendary ocean explorer and documentary filmmaker Jacques Cousteau to comment on his 85th birthday in 1996 that: "The monumental problem for the future is overpopulation."¹⁷ Around the world, human populations have been concentrated in coastal regions for millennia. In the 20th century, global human population quadrupled from about 1.5 billion to 6 billion. Populations already clustered in villages and cities along coasts multiplied even more rapidly than the booming population in general.

iii. Poverty and Coastal Settlement

The coastal zone, with their vast resources of food, energy, and minerals, not only are composed of various fragile ecosystems, but are scenes of a variety of often conflicting uses. At present, the uncontrolled development of the coastal zone and the almost haphazard exploitation of their natural resources threaten to turn the promise of economic prosperity into an environmental nightmare that portends great dangers for present and future generations. A report released by the UN warns that the number of people in extreme poverty could rise by 3 billion in 2050 unless immediate action is taken to combat environmental threats.¹⁸ The 2013 Human Development Report had stated that more than 40 countries have shown significant improvement on health, wealth and education with rapid increases in Brazil, China, India as well as many other developing countries. The percentage of those living in extreme poverty, or living on \$1.25 a day or less, had fallen from 43% to 22% from 1990 to 2008. This is attributed

¹⁶ World Bank 'World Development Indicators: Population Dynamics', Washington D. C , World Bank, (2007), p. 42. Available at http://siteresources.worldbank.org/DATASTATISTICS/Resources/table2_1.pdf [Accessed last April 12 2013]; World Bank (2010) World Development Indicators & Global Development Finance 2010. See the section on Population total. Available at <http://search.worldbank.org/data?qterm=population&language=EN&format=html> (accessed 3 September 2013).

¹⁷ <http://www.capsweb.org/caps-issues/overpopulation-and-ocean> [accessed on 25th August, 2015]

¹⁸ In 2005, it was estimated that approximately 2.2 billion people or 39% of the world's population live within 100 km of a coastline and that this figure is set to double by 2025. Kaiser, M. J., et al., (2005) Marine Ecology: Processes, Systems, and Impacts, Oxford: Oxford University Press. See particularly the preface of this textbook. See also para. 17.3 of Chapter 17, Report of the United Nations Conference on Environment and Development (Agenda 21).

to significant successes in poverty reduction and economic growth in China and India. In response to this statistic, the World Bank has said that the Millennium Development Goal of decreasing extreme poverty by half by 2015 was ahead of schedule.¹⁹

However, the UN had also reported that if environmental challenges such as climate change, deforestation, and air and water pollution were left unaddressed, human development progress in the poorest countries could come to a halt and possibly be reversed. Environmental threats and ecosystem losses are worsening the living situations and hindering the livelihood opportunities of many poor people. Building on the 2011 edition of the report arguing for sustainable development, the UN warns that unless coordinated global action is taken to combat environmental issues, the number of people in extreme poverty could rise.

iv. Pollution

Marine pollution includes a range of threats including from land-based sources, oil spills, untreated sewage, heavy siltation, eutrophication (nutrient enrichment), invasive species, persistent organic pollutants (POP's), heavy metals from mine tailings and other sources, acidification, radioactive substances, marine litter, overfishing and destruction of coastal and marine habitats.²⁰ A major threat beyond overexploitation of fisheries and physical destruction of marine coastal habitats by dredging, is undoubtedly the strong increase in coastal development and discharge of untreated sewage into the near-shore waters, resulting in enormous amounts of nutrients spreading into the sea and coastal zones.²¹ This, together with changes in salinity, melting sea ice, increased sea temperatures and future changes in sea currents may severely affect marine life and their ability to recover from extreme climatic events.²² Coastal sources are either point sources or diffuse sources. Point sources include direct outfall through pipes discharging contaminated water from coastal industry, sewage discharges and development sites. Contrary to site-specific discharges, diffuse sources result from broad-scale activities, e.g. agriculture and forestry, and are mostly associated with leakage of nutrients into groundwater, which are later transported into the sea.²³ Around 60% of the wastewater discharged into the Caspian Sea is untreated, in Latin America and the Caribbean the figure is close to 80%, and in large parts of Africa and the Indo-Pacific the proportion is as high as 80-90% (UNEP, 2006). Generally marine pollution affects ecosystem health, public health, recreational water quality and economic viability of marine ecosystems.²⁴

¹⁹ <http://borgenproject.org/un-warns-environmental-threats-increase-poverty> [accessed on 25th August, 2015]

²⁰ Marine Biodiversity Wikki, 'Environmental Risk Assessment of Marine Activities' retrieved from http://www.marbef.org/wiki/Environmental_risk_assessment_of_marine_activities [accessed on November 2013].

²¹ N Robbe and T Hengstermann, 'Remote Sensing Of Marine Oil Spills From Airborne Platforms Using Multi-Sensor Systems', *WIT Transactions on Ecology and the Environment*, 2006, Vol. 95, 347.

²² GESAMP, Protecting the Oceans from Land-Based Activities, GESAMP Report and Studies No. 71 (Nairobi: UNEP Publication 2001), p. 17; see also See GESAMP, *Impact of Oil and Related Chemicals and Wastes on the Marine Environment*, GESAMP Report and Studies No. 50 (London: IMO Publication 1993), p. iii.

²³ See W James and M D. Bertness, *Marine Biology – an Environmental Approach*, Sixth Ed. (San Francisco: Benjamin Cummings 2005), p. 476.

²⁴ S J Bache, 'Turtles, Tuna and Treaties: Strengthening the Links between International Fisheries Management and Marine Species Conservation', *Journal of Wildlife Law and Policy*, 2002, Vol. 5, No. 3, pp. 49-64 at p. 49.

4. Nigeria's Marine Environment

Marine environment is one of earth's most precious and delicate resources and there is a growing awareness amongst nations of the world that drastic and sustainable measures need to be adopted and implemented to protect it from further deterioration. Nigeria is a maritime nation with a coastline of approximately 853km on its southern border and a population of over 120 million inhabitants, 20% of which inhabit the coastal zone.²⁵ The importance of the marine environment to Nigeria is underscored by the fact that about 90% of its international trade i.e. imports and exports are dependent on marine transport.²⁶ Nigeria has about 9 major ports which are for navigational and administrative purposes divided into 5 Navigational Districts namely: Port Harcourt, Warri, Lagos, Calabar and Onne navigational districts. Ship traffic into these ports excluding tankers is estimated at approximately 3,500 vessels per annum. Out of the total traffic, ports within the Lagos area account for 50%, Rivers ports 25% and Delta ports 15%.²⁷ Overall cargo throughout (excluding crude) is estimated at 22.23 million tones.²⁸ The total number of passengers that pass through the sea ports is estimated at 1500 per year. Nigeria being a major oil producing and exporting country records approximately 1,000 petroleum tanker vessels calling at her ports annually, with an average tanker size of about 95,000 GRT.²⁹

All the vessels calling at these ports carry enormous amount of waste including bilge, sludge, garbage, sewage, chemical waste (toxic and non-toxic) and in the absence of Reception Facilities all the ship generated waste are discharged into the sea within the vicinity of the ports. Recent events including the oil spill resulting from collision of The Agulhas and The Asian Star, the Marina Bay rice pollution and Tank farm spillage at Tin Can Island of June 2002 together emphasize threats to marine environment. One must not forget the constant damage and threat to the marine environment posed by industries in Nigeria especially oil and gas industries in the Niger Delta. The marine environment is polluted from two major sources i.e. from *ships, offshore installations and pipelines; and from land based* sources. Technically, these sources of marine pollution can be divided into two broad categories: (1) point-source pollution i.e. oil and waste dumped by ships, offshore, pipelines, factories and sewage plants directly into the sea or watercourses; and (2) non-point-source pollution otherwise called polluted run-off i.e. discharge of sewage, agricultural and toxic industrial chemicals that seep underground, pollute underground water and finally gets deposited in the sea through rivers and estuaries.

The activities associated with oil exploration in Nigeria have brought about major challenges to coastal ecosystem. One of the many challenges is oil spillage, characterized by pipeline corrosion, sabotage, inadequate care in loading and offloading oil vessels etc. there is therefore the need to protect the marine environment from unnecessary threats because it serves as the resource base that support human life.³⁰ It is against this background that the Nigerian

²⁵ See <http://www.paulusoro.com.ng/publications/portpollution.pdf> [accessed 11/1/2013]

²⁶ See <http://www.nigerianports.org/dynamicdata/HQStatistics.aspx?id=178> [accessed on the 11/1/2013]

²⁷ *Ibid.*

²⁸ *Ibid.*

²⁹ *Ibid.*

³⁰ See paragraph 4(10) of the National Policy on Environment for Nigeria 1989 revised in 1998

Environmental Policy acknowledged that in order to maintain and improve the quality of the unique environmental resource endowment and the physical characteristics of the coastal areas, Ecological Master Plans (EMP) must be prepared based on detailed baseline ecological data to guide the use of coastal areas for the diverse and often conflicting industrial and social needs of the nation so that continued viability of all aspects of the ecosystems will be secured.³¹To achieve this objective, it is the requirement that all applications for project development in the coastal and near shore areas must mandatorily be accompanied by Environmental Impact Assessments with strict adherence to public hearings before permission is given for such developments. Further, to ensure sustainability of marine environment, the policy set a standard of strategies for comprehensive long term national plans for marine resources management and conservation. Some of which are:³²

- a. study and highlight the vulnerable components of the marine and coastal ecosystems bearing in mind their limited stocks of living and non-living exploitable resources;
- b. identify and map critical and sensitive habitats (Environmental Sensitivity Index maps) to enable project planners and developers to incorporate appropriate measures to minimize damage and disturbance to breeding, nesting and feeding areas of estuarine and coastal water species;
- c. production platforms and loading terminals, dredging, pipe laying and seabed mining;
- d. study the prevalent coastal and nearshore geomorphologic processes and identify the land forms that are indicative of coastline changes over time especially with regard to coastal submergence/emergence, subsidence, sediment balance, coastal sand transport with depositional or erosive tendencies, sediment compaction and tidal and current erosion;
- e. monitor the rate of coastline procreation or recession and establish coastal protection measures with a view to timely intervention to arrest irreversible negative changes;
- f. establish measures to discourage and prevent or at best minimize point and non-point pollution of the entire coastline and nearshore marine waters;
- g. prepare Ecological Master Plans for the management and control of coastal and nearshore marine industrial and social development activities to minimize pollution and protect the resources;
- h. encourage the recreational use of coastal and nearshore marine water-fronts areas for the enhancement of tourism and;

³¹ *Ibid.*

³² *Ibid.*

- i. discourage upstream water use that can negatively impact estuarine and coastal habitats, water quality and quantity and thus endanger marine life living and/or reproducing in such habitats.

In a bid to prevent, control and reduce the incidence of oil pollution, different regulatory institutions such as the Nigerian Port Authority (NPA) and Nigerian Maritime Administration and Safety Agency (NIMASA) have been put in place by the Federal Government of Nigeria to act in response to all matters dealing with maritime security, which include protection of marine resources. However, the discussion in this paper is limited to the role of NPA in the protection of marine environment.

5. History, Objectives and Functions of The Nigerian Port Authority

The significance of the marine environment to Nigeria is underlined by the fact that about 90% of its international trade i.e. imports and exports are dependent on marine transport. Nigeria has about 9 major ports which are for navigational and administrative purposes divided into 5 Navigational Districts namely: Port Harcourt, Warri, Lagos, Calabar and One navigational districts. Nigeria being a major oil producing and exporting country records approximately 1,000 petroleum tanker vessels calling at her ports annually, with an average tanker size of about 95,000 GRT. All the vessels calling at these ports carry enormous amount of waste including bilge, sludge, garbage, sewage, chemical waste (toxic and non-toxic) and in the absence of Reception Facilities all the ship generated waste are discharged into the sea within the vicinity of the ports. Recent events including the oil spill resulting from collision of The Agulhas and The Asian Star, the Marina Bay rice pollution and Tank farm spillage at Tin Can Island of June 2002 together emphasis the problem of pollution in the ports. Thus, the Nigerian Port Authority was set up to regulate and control safety of activities at the port. The functions of the Authority are as stated in section 7 of the Nigerian Ports Authority Act 2004.³³The section provides:

The functions of the Authority shall be to-

- (a) provide and operate, in the ports, such facilities as appear to it best calculated to serve the interest of Nigeria;
- (b) maintain, improve and regulate the use of the ports;
- (c) ensure the efficient management of port operations, optimal allocation and use of resources, diversification of sources of revenue and guaranteeing adequate returns on its investments, in order to contribute effectively to the wellbeing of the Nigerian society;
- (d) provide, for the approaches to all ports and the territorial waters of Nigeria, such pilotage services and lights, marks and other navigational services and aids, including cleaning, deepening and improving of all waterways;³⁴
- (e) provide facilities for-

³³ Chapter N126 Laws of Federation of Nigeria 2004.

³⁴ *Ibid*

- (i) berthing, towing, mooring, moving or dry-docking of ships, in entering or leaving a port or its approaches;
 - (ii) the loading and unloading of goods or embarking or disembarking of passengers in or from a ship;
 - (iii) the lighterage or the sorting, weighing, warehousing and handling of goods;
- And;
- (iv) for the carriage of passengers or goods;
 - (f) manage, supervise and control or take part in the management, supervision or control of any company or undertaking in which the Authority is interested, by reason of shareholding or otherwise and for that purpose appoint and remunerate directors, accountants, other experts and agents;
 - (g) provide and use appliances for the towage or protection, or salvage of life and property or for the prevention of fire within Nigeria and on vessels on the high seas;
 - (h) supply water to shipping vessels;
 - (i) control pollution arising from oil or any other substance from ships using the port limits or their approaches;
 - (j) provide and operate such other services as the Minister may, from time to time, require; and (k) carry out such other activities which are connected with or incidental to its other functions under this Act.³⁵

In an attempt to put something in a new place and improve the nationwide economy, the Federal Government embarked on a variety of reorganization initiatives in the public sector, which includes the maritime sub-sector.³⁶ This initiative was to promote an economy that is friendly, robust, private sector oriented and in line with the global best practices. In line with the reform programme, the transactions commenced with the advertisement for Expression of Interest EOIs on the 3rd of December 2003 by the National Council on Privatization with the Bureau of Public Enterprises acting as the transaction agent. A total of 110 EOIs were harvested out of which 94 were pre-qualified. Prior bid conferences were held and request for proposals sent out to bidders. Technical bids were submitted and evaluated and financial offers also opened to determine the successful bidders.³⁷ All the successful bidders negotiated their concession agreements with a public sector team made up of Nigerian Ports Authority and the Bureau of Public Enterprises. Successfully negotiated agreements were signed and transaction programmes initiated preparatory to handing over. Under this new agreement, the Authority conceded a number of her functions and responsibilities as itemized below:

³⁵ *Ibid.*

³⁶ *Ibid.*

³⁷ A Mbu, 'NIMASA the Regulation of the Maritime Industry in Nigeria', *This Day Newspaper*, Lagos, Nigeria, Available at: <https://www.thisdaylive.com/index.php/2016/05/24/nimasa-and-the-regulation-of-the-maritime-industry-in-nigeria/> Accessed January 31, 2019

- (a) Ownership and administration of land and water within port limits.
- (b) Planning and development of port operational infrastructure.
- © Leasing and concession of port infrastructure and setting benchmark for tariff structure
- (d) Responsible for nautical/Harbour operations and hydrographic survey.
- (e) Marine incidents and pollution
- (f) Maintenance of safety and security at the common user areas.
- (g) Enacting port regulations and bye-laws as well as monitor and enforce them
- (h) Day to day monitoring of operations and enforcement of relevant sections of respective agreements.³⁸

The Authority in relation to private sector exercises the following functions:

- (a) Cargo handling, stevedoring, warehousing and delivery.
- (b) Acquisition of cargo handling and operations related equipment
- © Development and maintenance of ports' superstructure
- (d) Maintenance of safety and security within the terminal and
- (e) Towage, mooring, bunkering, ship chandelling and ship repairs.³⁹

As shipping is central to the maritime industry, the Nigerian Port Authority has a fundamental role to play in the maritime safety in terms of trade and marine ecosystem protection. One of the functions of Nigerian Port Authority is to control pollution arising from oil, from ships using the port limits. The essence of this is to ensure maritime protection. An attempt to ensure maritime protection led to the establishment of the NPA hydrographic, oceanographic & dredging services.⁴⁰

The NPA Hydro & Dredging office is a department in NPA with offices in all ports in the country, providing an up-to-date series of charts for navigation and commercial use. In order to realize this mandate, the NPA Hydro & Dredging office receives all new navigational and related data on any modifications (installation of new buoyage, new port facilities, old or newly discovered wrecks, dredging, Jetty construction, coastal engineering structures and changes in the characteristics of a light or radio-communication service). Reports on changes in depths of channels alongside piers, new dangers (wrecks, sandbars), and other information in the approaches to harbours, as well as information on coastal waters which is obtained from ships sailing through national waters are also received. Others statutory responsibilities of this department are:

³⁸ *Ibid.*

³⁹ *Ibid.*

⁴⁰ NIMASA, 'Nigeria's Maritime Industry Forecast, 2018-2019: Emerging Challenges and Opportunities', NIMASA, Abuja, Nigeria [Online] Available: https://www.nimasa.org.Ng/nigeria;s_maritime_industry_forecasts.pdf

Maintaining, improving and regulating the harbours and approaches in all the ports presently open to ocean going vessels and in such other ports as may be designated by the Minister of Transport. Dredging to desired depths and providing, as well as maintaining lighting, lighthouses, buoys and other navigational aids in all Nigerian ports. Ensuring that hydrographic and bathymetric information is available easily, widely and equitably to all users.⁴¹

Certain measures have been put in place by the NPA to ensure maritime safety. These measures are briefly discussed below:

i. Aids to Navigation

An element for improving maritime safety is the establishment and maintenance of a suitable number of navigational aids such as floating, fixed, and electronic (floating lights, lighthouses), and radio-navigational systems such as GPS, DGPS, beacons, etc. which is done by the channel management companies in the NPA pilotage districts. Navigating at night requires special care.⁴² It is essential to see other boats and have them see you. Navigation lights are required to be shown on ships operating between sunset and sunrise, and in restricted visibility. Navigation lights indicate the size of the ship, the angle where you see them, the direction the ship is travelling, or if the ship is anchored. Navigation lights should be fitted by the manufacturer or an authorized person.

ii. Survey

Bathymetric surveys have been carried out regularly in the last years and ranges from extensive team surveys to surveys of a small project areas carried out with open survey boats. Charts of all navigable channels within Port limits are available for a fee on request from the Port Hydrographers at all Hydrographic Offices or Harbour Masters in each pilotage district of the Nigerian Ports Authority. Bathymetry is the study of underwater depth of lake or ocean floors. The name comes from Greek (*bathus*), "deep" and (*metron*), "measure". Bathymetric (or hydrographic) charts are typically produced to support safety of surface or sub-surface navigation, and usually show seafloor relief or terrain as contour lines (called depth contours or isobaths) and selected depths (soundings), and typically also provide surface navigational information.⁴³ It is the marine equivalent to topography. Bathymetric surveys are generally conducted with a transducer which both transmits a sound pulse from the water surface (usually attached to a boat) and records that same signal when it bounces from the bottom of the water body. An echo sounder attached to the transducer filters and records the travel time of the pulse. At the same time that the pulse occurs, a GPS unit can record the location of the reading. After

⁴¹ N Raymond, & L Ofose-Boateng, 'Oil, Risk Analysis Techniques, Maritime Security and Safe Passage in Pirate Infested Gulf of Guinea Waters'. *Scientific Research*, 2017, 5, 98-109.

⁴² F Onuoha; 'Piracy and Maritime Security in the Gulf of Guinea: Trends, Concerns, and Propositions'. *Journal of the Middle East & Africa*, Vol, 3, 2013, pp267-293.

⁴³ M Martin, 'The Troubled Waters of Africa: Piracy in the African Littoral'. *Journal of the Middle East & Africa*, (2011) 2, pp65-83.

many of these readings are taken, corrections are made based on fluctuations in the water surface elevation that may have occurred during the survey. The individual points are then mapped; easily done in a GIS. Bathymetric surveys are used to characterize contaminated sediment sites for a number of reasons. The surveys record the sediment surface prior to remediation to assist in the remediation process.⁴⁴ Surveys taken over time assist project managers in determining the transience of bottom sediments. This information can determine whether the contaminated sediment is stable or is susceptible to re-suspension. Surveys can also check on the efficiency of dredging operations.

iii. Removal of Wrecks

In the Lagos and Bonny pilotage areas, the channel management companies, under a Joint Venture arrangement with the Nigerian Port Authority ensure wrecks are removed to keep the channels wreck free as much as possible. In the marine industry, “wrecks” refers to a vessel that is sunk, stranded, or abandoned in a harbour, dock, pier, tidal water, or port approaches under the control of a harbour authority. Wrecks include jetsam, floatsam, lagan, and all derelicts (including logs) floating or submerged in the tidal waters or the operational shores of a nation. Wrecks are perceived with gravity in the global shipping industry because they constitute hazard to maritime safety and to lifeboats engaged in rescue operations and other services at a country’s harbour and waters.⁴⁵

This is the reason why the International Maritime Organization (IMO) persists that member states must have a clear waterway and a regime of clean navigable waters. In developed countries, very special attention is given to the issue of wrecks. Apart from imposing stiff penalties on owners of wrecks, the English Law also empowers nearly all harbour authorities with dual and, to some extent, overlapping power to remove wrecks where the wrecks pose significant dangers. Under the Merchant Shipping Act.⁴⁶

Section 273 contains provisions dealing with wrecks. However, the Act did not deal on how to swiftly deal with the problem of wrecks, even when they constitute severe threat to navigation and/or the environment. It is not surprising, therefore, that wrecks litter Nigerian waters, posing countless hazards to navigation, pilotage, search and rescue, recreational boating and routine patrol. In recent times, there have been reports of dumped ships at the ports at territorial waters of Nigeria, which constitute danger to maritime safety and to national security. For instance, in 2009, Nigerian Ports Authority (NPA) and Nigerian Maritime Administration and Safety Agency (NIMASA) got Federal Government approval to remove wrecks from the nation’s waters at a cost of N3.4 billion. It is necessary for the NPA to intensify effort to remove all wrecks from the Nigerian water so as not hampered businesses.

iv. Dredging Campaign

⁴⁴ I E Ibas, ‘Security of the Nigerian Maritime Domain Issues and Options’. Remarks Made at the West African Shipping Summit Held during the London International Shipping Week on 10 Sep. 19, 26 September 2019.

⁴⁵ M Esposito, ‘The 2017 Oceans beyond Piracy Report. Critical Maritime Routes Programme,’ 25th May 2018.

⁴⁶ Cap 224 Laws of Federation of Nigeria 1990

A Joint Venture arrangement has been put in place with technical partners to ensure continuous maintenance dredging to provide navigable channels all year round in the two pilotage districts. The essence of dredging is to ensure safety at sea. Safety at sea applies to all vessels and personnel working in the maritime sector.⁴⁷ It also covers the safety of the marine environment, waterborne global trade and consequently in all these aspects to the dredging industry. Safety on dredging vessels and during dredging operations embraces an overall approach towards ensuring the safety and health of personnel, the safety of the ships and the quality of the marine environment. Safety standards must be applied at every stage of a dredging project, paying close attention to the protection of ships, crews and all other personnel as well as marine life. Ships, operations and offices must conform with the strictest of international standards regarding Quality, Health, Safety and Environment (QHSE), such as ISO 9001, 2008 for the execution of quality assurance; ISO 14001, 2004 for the execution of environmental protection; SCC and OHSAS 18001, 2007 for the execution of occupational health and safety; ISM for the execution of safety at sea and marine-environmental protection; and ISPS for the execution of security on vessels.

6. Merchant Shipping Act (MSA),⁴⁸ The Marine Environment and The NPA

The Merchant Shipping Act (MSA) is a separate significant international instrument on maritime practice and management. The Nigerian MSA was enacted in 2007 and it specifies the licensing prerequisites that must be satisfied so as for a vessel to operate in Nigeria. These include registration in Nigeria or abroad, with the exemption of a ship certified to operate exclusively in Nigerian waters.⁴⁹ It is a crime to operate in Nigeria in the absence of the certificate of license, and any violator who so does upon conviction will be liable to pay a fine of 500,000 and the ship may be put in detention by an officer of customs or any other officer.⁵⁰ Therefore, among the security provisions of the MSA is the inability and failure of a vessel to hoist a flag, as an offence carrying a punishment with a fine of not less than 100,000 thousand.⁵¹ Similarly, the unlawful use of a ship's name is as well a fine carrying a punishment of not less than 100,000 naira fine.⁵² The fake documents or forged declaration can as well be an issue of maritime security, whether by presenting documents containing false declaration or as to a person's identity or declaration of interest, a person who is found guilty of the offence may be required to pay a fine of not less of 200 thousand naira.⁵³ The MSA gives precedence to the wellbeing of seafarers and team members; as such failure to give sufficient accommodation, water and medical provisions for the crew is an offence.⁵⁴

⁴⁷ E Ekhtator, 'Protection of the Environment and the International Salvage Convention, 1989: An Assessment'. *Mizan Law Review*, 2016, 10, pp 73-99.

⁴⁸ Cap 224 Laws of Federation of Nigeria 1990

⁴⁹ *Ibid*, see part 5 of the Act

⁵⁰ *Ibid* see section 5(5)

⁵¹ *Ibid* section 6(2)

⁵² *Ibid* section 13(5)

⁵³ *Ibid* section 53

⁵⁴ *Ibid* section 179-182

Likewise, in case of a misconduct on a ship by a master of cadet which endangers the life of passengers or result into the loss of lives, the person or officer so liable will upon conviction be liable to pay a fine not less than 500,000 or imprisonment for not more than two years.⁵⁵ Another vital security connected provision of the MSA as to do with the carriage of hazardous goods. This is because carriage of hazardous goods is only allowed after conformity and compliance with applicable international instruments on maritime security such as the SOLAS Convention, International Maritime Dangerous Goods Code of the International Maritime Organization, the requirement as to package, appropriate notice and disclosure of the features and volume of the goods must be complied with.⁵⁶

With special reference to the marine environment, which is the focus of this paper and the issue of prevention of pollution, the MSA requires that specific international law instruments on maritime pollution should be complied with.⁵⁷ These include International Convention for the Prevention of Pollution from Ships, 1973/1978 and the Annexes thereto; Convention relating to Intervention on the High Seas in cases of Threatened Oil Pollution Casualties, J 969; International Convention on Prevention of Marine Pollution by Dumping of Wastes and Other Matters, 1972; International Convention on Oil Pollution Preparedness, Response and Cooperation, 1990; International Convention on Civil Liability for Oil Pollution Damage 1992; Convention on Limitation of Liability for Maritime Claims, 1976 and the 1996 Protocol thereto; Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, and its Protocol of 1992 and Basel Convention on the Control of Transboundary Movements of Wastes and their Disposal, 1989. The recognition of these Conventions in the MSA are indeed commendable as this show willingness on the part of the Nigeria Government to abide by its international agreements. The Nigeria Port Authority has a role to play in this perspective considering its general functions under section 7 of the Nigeria Port Authority Act. Specifically, section 7 (h) and (i) of the Nigeria Port Authority requires the NPA to control pollution arising from oil or any other substance from ships using the port limits or their approaches. This has widely covered powers on the NPA has one of the implementing agencies of the MSA to enforce the provisions of MSA in this perspective. This is in view of the fact that most of these ships are foreign ships and thus subject to international laws on pollution control of marine environment.

It is observable that the MSA contains extensive general provision on maritime practice and administration, applicable to domestic vessels and foreign vessel navigating in the Nigerian waters. It also prescribes the application of other relevant international treaties such as those anti-pollution treaties. A major limitation of the MSA is section 12 of the Constitution of the Federal Republic of Nigeria which makes application of any international treaty subject to the ratification of the National Assembly. The implication of this limitation is that those conventions stated in section 336 of the MSA may not be given ample legal recognition until they are enacted as Nigeria Law. Notwithstanding this limitation, it is the opinion of this writer

⁵⁵ *Ibid* section 195

⁵⁶ *Ibid* section 322-323

⁵⁷ *Ibid* Part XXIII of the Act, specifically, section 336

that foreigners cannot rely on this as basis of not complying with those international laws because they are subject to both our local laws and international laws regulating shipping. Another limitation is that most of the prescribed penalty for offences is outdated as such they no longer commensurate with the severity of the offence which they are to punish. There is therefore the need to review this upward in view of the recent economic realities.

7. Jurisdictional Issues

It is a fact that in all fields of endeavor and as human beings relates with one another, it is necessary to put in place laws to offer them guidance, sanctions and with a structure for the settlement of disputes. It is as well a fact that the bulk of this globe is covered with seas and oceans and that to travel from one part of it to another, it has since time immemorial been needed to navigate large bodies of water. Over the ages, men have been compelled to navigate the oceans in vessels of increasing sophistication in quest of trade and commerce, acquirement of new territories, exchange of ideas, diplomatic relations, sporting relations and so on. As ships navigate from one country to another, they have to make sure that they abide by two sets of law; those relevant in their States of origin and those applicable in their States of destination. They have to be recognized as belonging to a particular country. Since all ships must carry goods and or passengers, there must as well be rules on the safety and welfare of passengers and on the storage and safe carriage of goods. Thus, where certainly disputes arise between persons, machinery must exist for the resolution of such disputes and this may raise jurisdictional issue as to which court has jurisdiction. However, since the focus of this paper is on Nigerian marine environment, it is expected that the Nigerian Courts will exercise jurisdictions.

In view of the above, section 251 of the Constitution and section 1 of the Admiralty Jurisdiction Act has conferred on the Federal High Court exclusive jurisdiction in admiralty issues. For ease of clarity, it is necessary to reproduce section 1 of the Admiralty Jurisdiction Act⁵⁸ as follows: The admiralty jurisdiction of the Federal High Court (in this Act referred to as "the Court") includes the following, that is:

- (a) jurisdiction to hear and determine any question relating to a proprietary interest in a ship or aircraft or any maritime claim specified in section 2 of this Act;
- (b) any other admiralty jurisdiction being exercised by any other court in Nigeria immediately before the commencement of this Act;
- (c) any jurisdiction connected with any ship or aircraft which is vested in any other court in Nigeria immediately before the commencement of this Act;
- (d) any action or application relating to any cause or matter by any ship owner or aircraft operator or any other person under the Merchant Shipping Act or any other enactment relating to a ship or

⁵⁸ See Admiralty Jurisdiction Act, 2004

- an aircraft for the limitation of the amount of his liability in connection with the shipping or operation of aircraft or other property;
- (e) any claim for liability incurred for oil pollution damage;
- (f) any matter arising from shipping and navigation on any inland waters declared as national waterways;
- (g) any manner arising within a Federal port or national airport and its precincts, including claims for loss or damage to goods occurring between the off-loading of goods across space from a ship or an aircraft and their delivery at the consignee's premises, or during storage or transportation before delivery to the consignee;
- (h) any banking or letter of credit transaction involving the importation or exportation of goods to and from Nigeria in a ship or an aircraft, whether the importation is carried out or not and notwithstanding that the transaction is between a bank and its customer;
- (i) any cause or matter arising from the constitution and powers of all ports authorities, airport authority and the National Maritime Authority;
- (j) any criminal cause and matter arising out of or concerned with any of the matters in respect of which jurisdiction is conferred by paragraphs (a) to (i) of this subsection.⁵⁹

A careful look at the provision section 1 of the Admiralty Jurisdiction Act above shows that the jurisdictions of the Federal High Court extends to matters on pollution arising from ships within Nigeria water. Therefore, in case of pollution of marine environment by ships, the Federal High Court will exercise jurisdiction. However, up till this moment, the prevailing punishment has been payment of fines as prescribed by our anti-pollution law. The sanctions by means of fines or imprisonment or both stipulated under some anti-pollution laws are inadequate to ensure compliance with enabling statutes. For example, under the Oil in Navigable Water Act,⁶⁰ a fine of 2000 Naira, which is less than 20 USD, is imposed on any person found guilty of any offence under the law.⁶¹ In fact, some offences under section 10 of the Act for failure to report the discharge of oil into water only attracts a fine of not exceeding 400 Naira approximately 3 USD.⁶² Under the Oil Pipelines Act,⁶³ any person who operates, construct or maintain oil pipeline without a license is liable to a fine not exceeding 1000 Naira (approximately 5 USD).⁶⁴ The sum prescribed under the National Environmental Standards and

⁵⁹ Admiralty Jurisdiction Act, 2004 section 1.

⁶⁰ Cap. O 6 Laws of Federation of Nigeria, 2004

⁶¹ *Ibid* section 6

⁶² *Ibid* section 7, 9 and 10

⁶³ Oil, Pipelines Act, Cap. O 7 Laws of Federation of Nigeria, 2004.

⁶⁴ *Ibid* section 7(5)

Regulation Enforcement Agency Act (NESREA)⁶⁵ for offences created under the law ranges from 200,000 Naira⁶⁶ to 2,000,000 Naira⁶⁷ (approximately 20,000 USD) against the violators.⁶⁸

However, the law does not apply to oil and gas sector.⁶⁹ Also, under the Environmental Impact Assessment Act, the penalty for breaching the provisions of the Act is too small to prevent offenders, mostly corporate bodies. Section 62 of the Act which deals with offence and penalty stipulates N100, 000 fine (approximately 700 USD) or five years imprisonment for an individual offender, and a minimum of N1m for corporate offenders (approximately 6000 USD). Obviously, one Million Naira is too little an amount to ensure that oil companies comply with the requirements of law and prevent pollution of the environment. The amount imposed under the Nigerian laws are not comparable to what is imposed under some foreign laws like the Egyptian Hydrocarbon Prospection, Exploration, and Exploitation Law that imposes a fine of 1,780 000, 601 Euros on oil exploration companies for failure to comply with conditions for oil exploration, which include prevention of pollution.⁷⁰ In the case of second conviction, the law prescribed a fine of 8, 543 000, 7 Euros on any company that is found guilty.⁷¹ In addition to the prescription of fine under the Egyptian law, the appropriate authority may even revoke the authorization given to the holder of a license to explore oil or suspends its operation indefinitely.⁷²

It has been argued that the amount of fines imposed need to be reviewed in view of economic reality in order to ensure adequate regulation and control of oil and gas activities.⁷³ For instance, crude oil accounts for 75% of Nigeria GDP and 95% of Nigeria foreign earning.⁷⁴ In 2010, evidence shows that Nigeria realized a total sum of \$59 billion (dollars) from crude oil.⁷⁵ In addition, evidence has shown that Shell Nigeria Limited, which is the major oil explorer in Nigeria, recorded the sum of 6.1 billion USD as profits from crude oil in 2010 at an average of 500 Million USD per month.⁷⁶ Thus, the prescription of 5000 USD or 20,000 USD as fine is insignificant linked to the profit made by the company. This amount is very ridiculous compare to the level of damage done to the environment.⁷⁷ On this note, it is suggested that the amount payable as fine be increased because corporations tend to abide by the laws where the punitive measures or stipulated fine is on the high side. In fact, Environmental Rights Action, a non-

⁶⁵ National Environmental Standards Regulation Enforcement Agency Act, 2007.

⁶⁶ *Ibid*, section 20(3).

⁶⁷ *Ibid*, section 20(4).

⁶⁸ *Ibid*, section 21, 22, 23, 24, 26 and 27.

⁶⁹ *Ibid*, section 7.

⁷⁰ See the Egyptian Hydrocarbons Prospection, Exploration and Exploitation Law 2007.

⁷¹ *Ibid*, section 22

⁷² The Egyptian Hydrocarbons Prospection, Exploration and Exploitation Law 2007, Section 23

⁷³ Amnesty International, Nigeria: Petroleum, Pollution, and Poverty in the Niger Delta (Amnesty International Publication, United Kingdom, 2009) 42-45

⁷⁴ Nigeria Bureau of Statistics, 'Nigeria Oil Revenue Rose' *Business Day News Paper*, 15th April 2011.

⁷⁵ *Ibid*

⁷⁶ *Ibid*

⁷⁷ See chapter three of this thesis on how environmental problems affects the enjoyment of basic human rights in the Niger Delta.

governmental organization in an independent research conducted found that 96% out of over Ten Million adults interviewed in the Niger Delta are in support of the need to increase prescribed penalties against oil industries in order to control pollution and prevent further violation of human rights arising from the activities of these companies.⁷⁸ In this perspective, fines as stipulated in most anti-pollution laws are grossly small and there is need to review it upward to ensure that ships are more cautious not to cause damage to the marine environment.

8. A Review of Judicial Decisions

Between 1990 and 2004, there have been numerous oil related cases instituted in the Nigerian courts complaining pollution from oil exploration, loss of income, loss of property, contamination of drinking water leading to water borne diseases and so on.⁷⁹ The general feature that flows through all these cases are: they are all claims for compensation for the operation of oil companies in their local communities, they are regularly oil spillage claims for loss of income from fishing and farming, pollution of drinking water, damage to farmlands and crops, and damage to health as a result of water-borne diseases. In all these cases, the courts did not make an order for the remediation of damage done to the natural environment, the land, and water resources.

On the contrary, in the case of *Shell v. Farah*,⁸⁰ apart from asking for compensation, the plaintiffs purposely asked the court to make an order for the remediation of the polluted environment. The court was innovative in coming to a decision in this case and unlike other oil spillage cases in Nigeria where conflicting expert evidence is given for both parties, the court resolved the case by assigning two independent experts to help the court in reaching a decision whether the polluted land had been remediated to its pre-impact conditions. *Shell v. Farah* laid the foundation for transformation as it is the first case where apart from the award of compensation, the court ordered remediation of the damaged land.

The recent case of *Johnah Gbemre v Shell Petroleum Development Company of Nigeria Limited*⁸¹ shows the willingness of the Nigerian judiciary to construe the constitutional right to life lengthily to include the right to a healthy/clean environment. The order of the Federal High Court on the 14th of November 2005 symbolized a significant turning point in the great effort by local communities in the Niger Delta to save from harm their health, environment and their farmlands, and to put an end to gas flaring. In this case, that Mr. Gbemre in a representative capacity for himself and for each and every member of the Iwehereken community in Delta State Nigeria filed a case against Shell Nigeria and Nigerian National Petroleum Corporation (NNPC) for pollution arising from gas flaring. The court declared that the actions of the first and second respondents in continuing to flare gas in the course of their oil exploration and production activities in the applicants' community is a violation of the fundamental right to

⁷⁸ Environmental Rights Action, 'Factors Affecting Effective Implementation of Environmental Legislations in Nigeria' paper delivered at Nigerian Seminar on Improving Environmental Enforcement in Nigeria, 2012.

⁷⁹ *Shell v. Tiebo VII* (2001) 11 N.W.L.R. (Part 723) 168., *Seismograph Services v. Mark* [1993] 7 N.W.L.R. 203.

⁸⁰ (1995) 3 N.W.L.R. (Pt 382) P. 148.

⁸¹ Suit No. FHC/CS/B/153/2005 [Unreported]

life (including healthy environment) and dignity of human persons guaranteed by the Constitution and the African Charter. The court further declared that the first and second respondents; Shell Nigeria and NNPC were to be restrained from further flaring of gas in the applicant's community and were to take instantaneous measures to end the further flaring of gas in the applicant's community.

The case of *Gbemre v. Shell*⁸² is a celebrated case in Nigeria because it is the first judicial authority to declare that gas flaring is illegal, unconstitutional, and a breach of the fundamental human right to life. This case is a clear indication that a healthy environment is fundamental to the realization of basic human rights and is significant to Nigerians. This is landmark decision against pollution and such could be invoked against all ships operating in Nigeria Water.

9. Challenges

There are numerous challenges affecting NPA in the performance of its duties. However, only two challenges will be discussed in this paper. They are: inadequate funding and the issue of fines and punishment prescribed under the law.

i. Inadequate Funding

Regulatory institutions in developing countries usually lack sufficient funding and technical expertise. For instance, Nigerian Ports Authority (NPA), financially depend largely on the grant and allocation from the Federal Government to be able to execute their objectives. It is not unusual for an agency to rely on the government for funds but where adequate funds are not provided for the implementation of statutory duties, it may hinder the efficiency of an agency. By this, the agency may be opened to corruptions with a view to source assistance from outsiders or international corporations who are the parent company of most corporations in Nigeria. This is possible because NPA is given the right to receive grants and gifts as source of its revenue from the outsiders.⁸³ Thus, adequate and sufficient funding is fundamental to the success of an institution. Where this is lacking or inadequate, the agency will not be able to meet or perform up to its expectation. On this note, Ziakede Patrick Akpobolokemi lamented on this when he said:

It is common knowledge that the agency's operations require that its officers be able to move from one place to another within the maritime country's domain. Over the years, the agency lacked the necessary platforms (vessels) to enable it effectively police the Nigerian waters. This has necessitated the compelling need for the

⁸² *Ibid.*

⁸³ World Bank, 'Defining an Environmental Development Strategy for the Niger Delta' quoted in *Amnesty International*, 'Nigeria: Petroleum, Pollution and Poverty in the Niger Delta' Amnesty International Publication, United Kingdom, 2009, p112

agency to enter into a PPP arrangement with a private service provider to provide platforms for the use of the agency's staff.⁸⁴

ii. Fine and Punishment

The sanctions by means of fines or imprisonment or both stipulated under various laws in Nigeria are ridiculously inadequate. For instance, under the Nigeria Port Authority Act, if a ship enters any port or any approach to the port without an entry notice having been issued by the Authority in respect of the ship or enters any port or any approach to the port otherwise than as permitted by the entry notice, a fine of N10, 000 is prescribed for failure to comply in the case of an individual and N20, 000 for a corporate body. This prescription may not be commensurate with what the law seeks to avert and if compared with the situations in other countries, this amount is too low to control pollution. For instance, this is too low to what is imposed under some foreign laws like Clean Air Act⁸⁵ which impose a fine of \$ 250,000 (two hundred and fifty thousand dollars) per day for individual violators of the law and \$ 500,000 per day for corporate violators.⁸⁶ Therefore, in view of the prevailing economic realities and with a view to ensure maritime safety in Nigeria, it is exceptionally required for our anti-pollution laws to be reviewed upward.

10. Conclusion

Coastal and marine environments play numerous diverse roles in relation to public health, food security, economic and social benefits, cultural values and traditional livelihoods. The state of these environments is mirrored by activities carried out on land. These activities varying from industrial and agricultural production to daily domestic routines disturb the health of these ecosystems and of the people that depend on them. Although economic valuation of ecosystems needs to be treated with caution, it is generally accepted that the goods and services delivered by nature are worth trillions of dollars.

The state of Nigerian coastal and marine environments is mirrored by the activities carried out on land. Clearing vegetation, mining, and building roads, homes and hotels can destroy habitats and fill rivers and estuaries with mud and silt. Everyday living produces solid waste and sewage that poison groundwater, rivers and lakes, and eventually oceans. Industrial and agricultural production causes pollution of rivers and coastal waters, which can result in algal blooms and contaminated seafood products. Clearly, land-based activities generate harmful impacts and together affect the health of the invaluable salt and brackish water ecosystems and of the people who depend on them as a source of wealth, beauty and recreation.

Therefore, there is the need to safeguard our marine environment and this can only be possible if NPA and other similar agencies are adequately funded to enable them execute their statutory

⁸⁴ The Guardian 'Nigeria Lacks Capacity to Enforce Security on Water Ways, says NIMASA' retrieved from http://guardiannewsngr.com/index.php?option=com_content&id=93327:nigeria-lacks-capacity-to-enforce-security-on-waterways-says-nimasa [visited on 22/06/13]

⁸⁵ Clean Air Act, 1990 applicable in the United States of American.

⁸⁶ *Ibid.*

functions. Also, stringent penalty should be prescribed for the violators because polluters tend to follow and abide by the rules where the punishment prescribed is on the high side.