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ADVOCATING FOR COMPREHENSIVE LEGAL PROTECTION AGAINST THE IMPACT OF WATER POLLUTION ON REPRODUCTIVE HEALTH

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ABSTRACT

This article examines the issue of the right to water, the concept of water pollution, its sources, and its consequences on both human beings and wildlife. It shows that water pollution affects humans' physical and reproductive health, livelihood, and aquatic organisms negatively. The article appraises the laws governing water pollution in Nigeria. The writer adopts a doctrinal approach and relies mostly on primary and secondary sources of information. The findings of the writer are that Nigeria is not lacking in laws regulating water pollution. Nigeria also has an agency charged with the responsibility of enforcing environmental laws, regulations, and standards in deterring people, industries, and organisations from polluting and degrading the environment, amongst other responsibilities. This is the National Environmental Standards and Regulations Enforcement Agency (NESREA). However, the laws make no provisions for victims of reproductive health diseases arising from water pollution. Nigeria is also beset with the challenge of enforcing the enacted laws. The article, therefore, recommends, among others, that provisions recognising the plight of victims of reproductive health diseases should be recognised, while proper enforcement mechanisms should be put in place to ensure that these laws are implemented.

1. INTRODUCTION

Freshwater is an absolute necessity for the survival of humans, plants, and animals.[1] Its importance cannot be overstated. The Global Water Partnership has explicitly emphasised the need for safe and sufficient water that is sustainable for everyone, both globally and locally.[2] While 97% of the Earth's water is found in the oceans and seas, it is unfit for use due to its high salt content. The remaining 2% is largely inaccessible, as it exists in polar ice caps, glaciers, the atmosphere, or underground. This leaves only 0.4% of freshwater available for various demands, such as rapid urbanisation and industrialisation.[3]

Nigeria, like many other countries, has experienced rapid urbanisation, industrialisation, and modernisation of agricultural practices, which have had detrimental effects on its water resources. These developments have led to an increase in pollutants in water reservoirs and overall water pollution. Consequently, water quality has significantly declined due to the higher concentration of pollutants in bodies of water.[4] Water pollution not

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1 GO Obiechina, R. Rimande Joel, 'Water Pollution and Environmental Challenges in Nigeria', *Educational Research International (ERI)* (2018) 7(1) <www.erint.savap.org.pk>, accessed 10 July 2024

2 GWP (Global Water Partnership). (2003). *Towards water security*: *A framework for action*. Hague: World Water Forum

3 K Abhijeet, *Governing Water Pollution Effectively: A Comparative Study of Legal Frameworks & Their Implementation in India & Sweden*, (TRITA LWR Degree Project 2013) 13, 39

4 Obiechina and Joel (n.1) *Ibid*.

only negatively impacts human health but also affects wildlife and the environment as a whole. This article explores the concept of water pollution and its effects on human physical and reproductive health, animals, agriculture, and the environment. It also examines the laws governing water pollution and reproductive health in Nigeria, setting out the challenges associated with their implementation. Finally, the article provides recommendations on how to minimise the impact of water pollution on the reproductive health of those living in the affected areas, through existing legislation.

1.1 Concept of Water Pollution

Water is deemed polluted when it contains substances or conditions to such an extent that it becomes unsuitable for specific purposes like drinking, bathing, cooking, or other uses.[5] Water pollution is characterised by the excessive presence of hazardous substances (pollutants) that render the water unfit for its intended purposes.[6] This pollution stems from industrial and commercial waste, agricultural practices, everyday human activities, and notably, transportation models.[7] Examples of water pollution include the discharge of wastewater from industrial and commercial waste, intentional or accidental spills into surface waters, untreated domestic sewage, chemical contaminants from treated sewage, release of waste and contaminants into surface runoff (including urban and agricultural runoff containing chemical fertilizers and pesticides), waste disposal and leaching into groundwater, eutrophication, and littering.[8]

Water pollution occurs when certain pollutants are introduced into water sources for an extended period, negatively affecting their physical, biological, and chemical qualities.[9] Notably, oil spillage is a prominent cause of water and land pollution in the Niger Delta and other oil-producing regions. The Niger Delta serves as Nigeria's primary oil-producing region. Extensive quantities of crude oil are extracted daily from this region, resulting in severe cases of oil spills,[10] which contaminate natural water sources, aquatic habitats, farmland, and mangroves.[11] The region also faces waterborne diseases spreading among communities that lack adequate health facilities and remedies for the local population.[12]

1.2 Causes of Water Pollution in Nigerian Communities

a. Domestic-Based Water Pollution:

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5 FD Owa, 'Water Pollution: Sources, Effects, Control, and Management', (2013) 4(8) Mediterranean Journal of Social Sciences, 65

6 NS Olaniran, Environment and Health: An Introduction, in NS Olaniran et al (eds), *Environment and Health* (Lagos: Macmillan, 1995) 34-151.

7 Owa (*n.5*) *Ibid*.

8 OO Aboyeji, 'Freshwater Pollution in Some Nigerian Local Communities, Causes, Consequences, and Probable Solutions', *Academic Journal of Interdisciplinary Studies*, (2013) 2(13) 112

9 IE Nwosu and VO Uffoh, *Environmental Public Relations Management* (Enugu: IDS University of Nigeria Enugu Campus, 2005).

10 SO Aghalino, 'Petroleum Exploitation and the Agitation for Compensation by Oil Producing Communities in Nigeria', *GeoStudies Forum*, (2002) 11-20

11 Olaniran, (n. 6) *Ibid*.

12 LA Afinotan and V Ojakorotu, 'The Niger Delta Crisis: Issues, Challenges, and Prospects', *African Journal of Political Science and International Relations*, (2009) 3(5) 191-198 <http://www.academicjournals.org/journal/AJPSIR/article-full-text-pdf/B2D13D17551>. Accessed 30 June 2024

One of the most significant issues in developing countries is the mismanagement of the vast amount of waste generated by various human activities. Improper disposal of these wastes into the environment, especially in freshwater reservoirs, poses a severe problem.[13]

b. Industrial-Based Water Pollution:

Many industries in Nigeria produce wastewater as a by-product of their operations and processes. The composition of this wastewater varies depending on the industry and water usage, but often contains suspended solids, biodegradable and non-biodegradable organics, oils and greases, heavy metal ions, dissolved inorganic, acids, bases, and colour compounds.[14]

c. Agricultural Pollution:

Agriculture, being the largest consumer of freshwater globally, contributes significantly to the degradation of surface and groundwater resources through erosion and chemical runoff.[15] Concerns about water quality arise due to the use of nutrients (nitrogen and phosphorus), sediment, animal waste, pesticides, and salts in agricultural practices. These pollutants enter surface water through surface runoff or seepage to groundwater, ultimately reaching surface water outlets.[16] Pesticides used in agriculture can also contaminate surface and groundwater, with some containing endocrine-disrupting chemicals that can have adverse effects on organisms' development, reproduction, and survival.[17] Fish caught in polluted waters may be unsafe to consume, and individuals who ingest polluted water can become ill, with prolonged exposure potentially leading to cancers or birth defects.[18]

d. Water Pollution Due to Oil Spills and Gas Flaring:

Oil spills result from the leakage of hydrocarbons from pipes, often due to poor maintenance and inadequate monitoring of pressure.[19] Oil industry operators blame a substantial part of oil spills on sabotage by third parties.[20] For example, the SPDC blamed 40 per cent of oil spills resulting from its operations in 2000 on sabotage. Although local communities dispute such claims, the fact of the matter is that such events take place.[21] Oil and gas production also generates substantial amounts of wastewater in the form of brines, which contain sodium, calcium, ammonia, boron, trace metals, and high total dissolved solids (TDS).[22] Nigeria has experienced several oil spill incidents in different coastal areas, leading to contamination of

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13 Aboyeji (n.8)

14 N Kosaric, 'Treatment of Industrial Waste Waters by Anaerobic Processes - New Developments', in F. Vardar-Sukan and S. S. Sukan (eds), *Recent Advances in Biotechnology* (Netherlands: Kluwer Academic Publishers, 1992).

15 A Galadima et al, 'Domestic Water Pollution among Local Communities in Nigeria - Causes and Consequences', *European Journal of Scientific Research*, (2011) 4(52), 592 <http://www.eurojournals.com/ejsr.htm>. Accessed 29 June 2024.

16 Ayobeji (*n.8*)

17 P Burkhardt-Holm, 'Endocrine Disruptors and Water Quality', *International Journal of Water Resources Development*, (2010) 26(3) 477-493

18 Ibid.

19 Ayobeji (*n.8*) 114

20 IS Ibaba and JC Olumati, 'Sabotage Induced Oil Spillages and Human Rights Violation in Nigeria's Niger Delta,' *Journal of Sustainable Development in Africa* (2009) 11(4) 53

21 Ibid.

22 Galadima *et al* (*n. 19*) 596

soil, terrestrial life, and aquatic ecosystems. This includes the Ughelli Oil spill of 2005, where 10,000 barrels of oil were spilled into the environment in Delta state; the Etiama oil spill of 2000, where 11000 barrels of oil were spilled in Bayelsa state and the Idoho Oil spill of 1983, where 21000 barrels of oil was spilled in Akwa Ibom state.[23] Gas flaring, the burning of associated natural gas during crude oil extraction, is employed when insufficient infrastructure is in place to utilise the gas.[24] It contributes to water pollution along with emissions from chemical factories, oil refineries, oil wells, rigs, and landfills, which release gaseous waste products through elevated chimneys known as gas flares.[25] Gas flaring activities commonly impact water quality. Various studies have reported that surface water, groundwater, and rainwater parameters are affected in gas-flaring locations within the Niger Delta.[26]

1.3 The Impact of Water Pollution on Physical and Reproductive Health

The pollution of water by chemicals and other substances can have significant impacts on physical and reproductive health. Consuming polluted water can lead to waterborne diseases such as Giardiasis, Amoebiasis, Hookworm, Ascariasis, Typhoid, and damage to the liver, kidneys, and nervous system.[27] It can also be linked to conditions like Alzheimer's disease, non-Hodgkin Lymphoma, Multiple Sclerosis, hormonal problems affecting developmental and reproductive processes, cancer, heart disease, and even death.[28] Mercury present in water can result in reduced reproduction, slower growth and development, abnormal behaviour, and death.[29] Consuming fish caught from such contaminated bodies of water poses health hazards to both children and adults.[30] Methyl mercury passed from fish to the mother through the placenta to the foetus can cause severe brain and nervous system damage in infants.[31]

Gas flaring in the Niger Delta has been associated with several diseases, including gastrointestinal problems, skin diseases, cancer, neurological, reproductive, and developmental effects, haematological and respiratory ailments,[32] heart-related illnesses,[33]

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23 CO Opukri and IS Ibaba, 'Oil-Induced Environmental Degradation and Internal Population Displacement in Nigeria's Niger Delta', *Journal of Sustainable Development*, (2008) 10(1) 181

24 AO Ajugwo, 'Negative Effects of Gas Flaring: The Nigerian Experience', *Journal of Environment Pollution and Human Health*, (2013) 1(1) 6 <http://pubs.sciepub.com/jephh/1/1/2>. Accessed 13 June 2024.

25 *Ibid*.

26 A Dami et al, 'Effects of Gas Flaring and Oil Spillage on Rainwater Collected for Drinking in Okpai and Beneku, Delta State, Nigeria', *Journal of Environmental Research and Management*, (2013) 4(1) 0175 <http://www.e3journals.org>. Accessed 12 June 2024; CN Nwankwo and DO Ogagarue, 'Effects of Gas Flaring on Surface and Ground Waters in Delta State, Nigeria', *Journal of Geology and Mining Research*, (2011) 3(5) 131-136.

27 MA Khan and AM Ghouri, 'Environmental Pollution: Its Effects on Life and Its Remedies', *Journal of Arts, Science & Commerce* (2011) 2(2) <www.Researchersworld.com>. Accessed 6 June 2024.

28 *Ibid*.

29 *Ibid*.

30 SM Maton et al, 'Environmental Implications of Increased Discharge of Pollutants into Nigeria's Fresh Water Resources', *British Journal of Applied Science & Technology*, (2016) 16(5) 1-12.

31 TC Uzomah, 'Chemical Pollutants and the Environment', in C. Agugoesi (ed), *Introduction to Population and Environmental Education* (Owerri: Grace of God Publisher, 1999) 167-183.

32 PA Donwa et al, 'Gas Flaring in the Oil and Gas Sector in Nigeria', *International Journal of Commerce and Management Research*, (2015) 1(1) 28-39.

33 JN Egwurugwu et al, 'Effects of Prolonged Exposure to Gas Flares on the Lipid Profile of Humans in the Niger Delta Region, Nigeria', *American Journal of Research Communication*, (2013) 1(5) 115-145; JN

renal and related diseases,[34] bronchitis, asthma, and other ailments.[35] There is also the issue of excessive heat and discomfort arising from gas flaring.[36]

Aromatic hydrocarbons released during oil spills can lead to reduced birth weight and decreased semen quality.[37] Solvents released into the environment during water pollution can be absorbed through dermal contact when contaminated water is used for bathing or consumed.[38] The effects of consuming or ingesting polluted water include increased susceptibility to testicular cancer,[39] childhood cancers such as leukaemia[40] and brain tumours,[41] spontaneous abortion and foetal loss,[42] decreased foetal and birth weight,[43] and congenital malformations.[44]

1.4 The Right to Water under International Law

In the 21st century, the global population has tripled, while water demand has grown sixfold.[45] Today, it's estimated that just 0.01% of all water on Earth is fresh and drinkable.[46]

Egwurugwu and A Nwafor, 'Prolonged Exposure to Oil and Gas Flares Ups the Risks for Hypertension', *American Journal of Health Research*, (2013) 1(3) 65-72

34 JN Egwurugwu et al, 'Impact of Prolonged Exposure to Oil and Gas Flares on Human Renal Functions', *International Research Journal of Medical Sciences*, (2013) 1(11) 9-16.

35 OAP Olukoya, 'Negative Effects of Gas Flaring on Buildings and Public Health in Oil-Producing Communities: The Ogbia Community, Bayelsa State Case', *International Journal of Environmental Monitoring and Protection*, (2015) 2(5) 52-61.

36 O Anomohanran, 'Thermal Effect of Gas Flaring at Ebedei Area of Delta State, Nigeria', *The Pacific Journal of Science and Technology*, (2012) 13(2) 555-560.

37 R De Celis et al, 'Semen Quality of Workers Occupationally Exposed to Hydrocarbons', *Fertility and Sterility*, (2000) 73(2) 224.

38 A Wang et al, 'Environmental Influences on Reproductive Health: The Importance of Chemical Exposures', *Fertility and Sterility Journal*, (2016) 106(4) 905.

39 BA Cohn et al, 'Prenatal DDT Exposure and Testicular Cancer: A Nested Case-Control Study', *Archives of Environmental and Occupational Health*, (2010) (65) 127-134.

40 DT Wigle et al, 'Epidemiologic Evidence of Relationships Between Reproductive and Child Health Outcomes and Environmental Chemical Contaminants', *Journal of Toxicological and Environmental Health*, (2008) (11) 373-517; see also G Van Maele-Fabry et al, 'Childhood Leukaemia and Parental Occupational Exposure to Pesticides: A Systematic Review and Meta-Analysis', *Cancer Causes and Control*, (2010) (21) 787-809.

41 G Van Maele-Fabry et al, 'Parental Occupational Exposure to Pesticides as Risk Factor for Brain Tumours in Children and Young Adults: A Systematic Review and Meta-Analysis', *Environmental International*, (2013) 56 19-31.

42 T Schettler et al, *Generations at Risk: Reproductive Health and the Environment* (Cambridge, MA: MIT Press, 1999).

43 P Ahmed and JJK Jaakkola, 'Exposure to Organic Solvents and Adverse Pregnancy Outcomes', *Journal of Human Reproduction*, (2007) (22) 2751-2757.

44 KP Stillerman et al, 'Environmental Exposures and Adverse Pregnancy Outcomes: A Review of the Science', *Journal of Reproductive Science*, (2008) (15) 631-650.

45 UNFPA, Population Issues (1999) Population and Sustainable Development, available at: <http://www.unfpa.org/modules/6billion/populationissues/dvelopment.htm>, accessed 8th November, 2024

The World Health Organization reports that over one billion people lack basic access to clean water, with 80% of them living in rural areas.[47] This basic access is defined as having 50–100 litres available daily within one kilometre of home. Each year, more than two billion people suffer from water-related diseases,[48] and roughly 3,900 children die each day due to inadequate water and sanitation.[49] If these trends continue, by 2025, two-thirds of the global population could face severe water shortages.[50] Therefore, ensuring sufficient water supply is essential for human well-being, as a water crisis would have profound effects on health, the environment, and economies worldwide.[51]

To address these concerns, the United Nations designated 2003 as the International Year of Freshwater. One aim was to reaffirm the UN's Millennium Declaration Goal, which sought to halve the proportion of people without access to safe drinking water by 2015[52] and to end the unsustainable exploitation of water resources.[53] This commitment, reinforced at the 2002 World Summit on Sustainable Development, underscored that the availability of fresh water is among humanity's most pressing challenges.[54] Likewise, one of the Sustainable Development Goals (SDGs) aims to achieve universal access to safe, affordable drinking water by 2030.[55]

Many advocates argue that water access should be recognised as a human right. Recognising water as a human right, particularly in developing countries, would place a clear obligation on governments to ensure adequate availability and accessibility. Although water is not yet explicitly recognised as an independent human right in international treaties, human rights law imposes obligations on states to ensure that everyone has enough safe drinking water for personal and domestic uses, sanitation, and hygiene.[56] Access to water, therefore, is regarded as a right, not a privilege.

This right to water has been articulated in various non-legally binding resolutions and declarations, including:

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46 Andrew L. Magaziner, The Trickle Down Effect: The Phiri Water Rights Application and Evaluating, Understanding and Enforcing the South African Constitutional Right to Water, 33 North Carolina Journal of International Law and Commercial Regulation (2008), 509, 550

47 UNICEF 2014 in Paul Nelson, "The Human Right to Water and Advocacy for Urban Water Supply: After the Privatization Struggle" in J.R. Pruce (eds.), The Social Practice of Human Rights (New York: Palgrave Macmillan, 2015); United Nations Development Programme, Human Development Report: Beyond Scarcity: Power, Poverty And The Global Water Crisis (2006), p. 5

48 UN Commission on Sustainable Development Comprehensive Assessment of the Freshwater Resources of the World (New York: United Nations, 1997), p. 39.

49 Malcolm Langford, The United Nations Concept of Water as a Human Right: A New Paradigm for Old Problems?, 21 International Journal of Water Resources Development, no. 2 (2005), 273

50 UNESCO Courier, February 1999.

51 John Scanlon, Angela Cassar and Noemi Nemes, Water as a Human Right? IUCN Environmental Policy and Law Paper, no. 51 (Cambridge UK: IUCN, 2006), p. 1.

52 Para. 19, Millennium Declaration (2000) Resolution referred by the General Assembly at its fifty-forth session (A/55/2) Adoption by fifty-fifth session.

53 Para 123, Ibid

54 UN Press Release, Water Year 2003: International Year Aims to Galvanize Action on Critical Water Problems' (United Nations Department of Public Information, DPI/2293A, December 2002).

55 Goal 6, Sustainable Development Goals (SDGs) 2015.

56 13 UN Human Rights/UN Habitat/WHO The Right to Water Fact Sheet No 35, p. 5, available at: <http://www.refworld.org/docid/4ca45fed2.html>, accessed 29 July 2017

(a) Stockholm Declaration (1972): One of the earliest environmental agreements, it acknowledges the "fundamental right to … an environment of a quality that permits a life of dignity and well-being."[57]
(b) Dublin Statement: The Dublin Conference on Water and Sustainable Development's Principle 4 reaffirms the human right to clean water and affordable sanitation.
(c) Agenda 21: Widely considered a framework for sustainable development,[58] it defines the right to water as including access, quality, and quantity, emphasising that "all peoples… have the right to have access to drinking water in quantities and of a quality equal to their basic human needs."[59]

Human rights provide a universal framework to advance justice in water and sanitation policy.[60] However, the UN human rights system did not initially address water and sanitation when drafting key documents such as the 1948 Universal Declaration of Human Rights (UDHR) and the 1966 International Covenant on Economic, Social and Cultural Rights (ICESCR). The right to water was first recognised internationally in 1977 at the UN Water Conference in Mar del Plata[61], which declared that all people "have the right to have access to drinking water in quantities and of a quality equal to their basic needs."[62] This statement began a consensus around water access and quality as fundamental rights.[63]

Over the following decades, the UN extended this recognition of water rights through treaties, declarations, and committee interpretations. This broader recognition includes:

The Convention on the Elimination of All Forms of Discrimination Against Women (1979) establishes that states must ensure rural women's right to adequate living conditions, including housing, sanitation, and water supply.[64] It highlights that women in poverty often have the least access to essential resources, including water.[65] Although focused on gender discrimination, the Convention's emphasis on health care access reinforces the right to water as a minimum standard.[66] These developments reflect a growing international consensus that access to water and sanitation is fundamental to human rights and well-being.

The Convention on the Rights of the Child (1989) highlights the essential link between water, sanitation, and children's health. It establishes state obligations to combat disease and malnutrition through providing adequate food and clean drinking water. The Convention also

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57 Principle 1, Stockholm Declaration 1972
58 Scanlon et al., (n. 51) p.4
59 Agenda 21, para. 18.47.
60 Benjamin M. Meier, Ryan Cronk and Jamie Bartram, "Monitoring the Progressive Realization of the Human Rights to Water and Sanitation: Frontier Analysis as a Basis to Enhance Human Rights Accountability" in Ken Conca and Erika Weinthal (eds.), The Oxford Handbook of Water Politics and Policy (Oxford: Oxford University Press, 2015), p. 4.
61 Ibid. p. 3
62 Preamble, United Nations (1977), Report of the United Nations Conference, Mar Del Plata, 14–25 March 1997. No E 77 I A 12, New York: United Nations Publication.
63 Benjamin Jason Meier and Yuna Kim, Human Rights Accountability Through Treaty Bodies: Examining Human Rights Treaty Monitoring for Water and Sanitation, 26 Duke Journal of Comparative & International Law (2015), 162.
64 Convention on the Elimination of All Forms of Discrimination against Women, G. A. Res. 34/180. Art. 16 (Dec 18, 1979); Meier and Kim, (n. 63), p. 163.
65 CEDAW, ibid., Article 15
66 L. Watrous, The Right to Water –From Paper to Practice, 8 Regent Journal International Law (2011), 109, 116.

mandates that children be educated about hygiene and environmental sanitation, promoting both awareness and health protections.[67]

General Comment No. 15 of the International Covenant on Economic, Social and Cultural Rights (ICESCR) was adopted by the United Nations Committee on Economic, Social and Cultural Rights (CESCR) in 2002. This comment provides a guiding interpretation of the right to water under the ICESCR, even though it is not legally binding.[68] It emphasises that the right to water is crucial for human dignity and necessary for the fulfilment of other rights.[69] General Comment 15 asserts that the human right to water ensures access to adequate, safe, and affordable water for personal and domestic uses. Access to sufficient clean water helps prevent dehydration, lowers waterborne disease risks, and supports basic needs such as drinking, cooking, and hygiene.[70]

The CESCR outlines five key elements for the right to water. First, water must be available in quantities sufficient for personal and domestic use.[71] Second, water must meet quality standards, implying protections against pollutants and environmental hazards,[72] and it must be sustainably managed to secure availability for future generations.[73] Third, water must be physically accessible within or near households. This includes:

1. Physical accessibility—water should be within safe reach and located near homes and institutions.
2. Economic accessibility—water should be affordable for all.
3. Nondiscrimination—equal access without discrimination; and
4. Information accessibility—everyone should be able to access water-related information.[74]

Fourth, the right to water includes a focus on equity, ensuring that all individuals, especially those vulnerable to discrimination (e.g., women, children, people with disabilities, refugees), have equal access.[75] Fifth, affordability is emphasised, though the CESCR refrains from mandating free water.[76] Instead, water should be priced so that it is accessible without compromising basic human rights. This allows flexibility for governments to determine the best means of affordability.[77]

General Comment 15 also establishes procedural rights linked to water access. These include the right to information on water issues, participation in water-related decisions, and recourse to effective remedies for rights violations.[78] This procedural approach calls for transparency, requiring that people be informed of and involved in decisions affecting water

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67 Convention on the Rights of the Child, G. A. Res. 44/25, art. 24 (20 November 1989).
68 Langford, supra note 49, p. 276. This Covenant has been ratified by 165 States, including Nigeria.
69 OHCR General Comment No 15: The Right to Water (Arts 11 and 12 of the Covenant) Adopted at the Twenty-ninth Session of the Committee on Economic, Social and Cultural Rights, on 20 January 2003, Document E/C.12/2002/11 (Geneva: CESCR).
70 Ibid. General Comment 15, para. 2, supra note 50
71 Langford, (n. 49), p. 276.
72 Melina Williams, Privatization and the Human Right to Water: Challenges for the New Century, 28 Michigan Journal of International Law (2006–2007), 469, 481; General Comment 15. Para. 12.
73 Ibid., General Comment 15, para. 11
74 Williams, (n. 72), p. 481; General Comment 15, para. 12(c)
75 Langford, (n. 49), p. 277.
76 Ibid.
77 Ibid.
78 paras. 12, 48 and 55, 28, General Comment 15; Williams, supra note 28, p. 481.

supplies and services.[79] Furthermore, the Comment mandates that states fulfil their obligations deliberately, in ways targeted to fully realise the right to water.[80] It specifies that governments bear a threefold responsibility:[81]

- Respect: Governments must avoid obstructing people's access to water.[82]
- Protect: Governments must prevent third parties from interfering with access to water, such as by regulating private operators and protecting community rights to water.[83]
- Fulfil: Governments should actively promote access to water through laws, policies, and educational initiatives to ensure the right is fully realised.[84]

In July 2010, the UN General Assembly passed a resolution that:

1. Recognised the right to safe, clean drinking water and sanitation as fundamental for the full enjoyment of life and human rights.
2. Called on states and international bodies to provide resources, capacity-building, and technology transfer to help developing countries expand access to safe, clean, affordable water and sanitation.[85]

In September 2010, the UN Human Rights Council affirmed the human right to safe drinking water and sanitation as legally binding,[86] though these pronouncements, known as "soft law," lack binding force in international law. However, they reinforce the legitimacy of these rights on a global scale.[87] The 2030 Agenda for Sustainable Development (2015) continues to support water rights globally through Sustainable Development Goal 6, which envisions universal access to water and sanitation. This goal includes targets to ensure safe, affordable drinking water for all by 2030, improve water quality by reducing pollution and hazardous waste, and increase recycling and safe reuse. Furthermore, it promotes water-use efficiency to address water scarcity and seeks to reduce the number of people affected by it

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79 These rights would imply that if a government wishes to privatize water resources, it must satisfy certain procedural obligations, including a right to public participation. Maria McFarland Sanchez-Moreno and Tracy Higgins, No Recourse: Transnational Corporations and the Protection of Economic, Social and Cultural Rights in Bolivia, 27 Fordham International Law Journal (2004), 1781; Williams, (n.72), p. 481

80 paras. 17; 21–29, General Comment 15; Amy Hardberger, Life, Liberty, and the Pursuit of Water: Evaluating Water as a Human Right and the Duties and Obligations it Creates, 4 Northwestern University School of Law, no. 2 (2005), p. 349.

81 UN Association in Canada A Human Right to Water Summary Report of a Seminar jointly organized by the United Nations Association in Canada and the Human Security and Human Rights Bureau, department of Foreign Affairs and International Trade, Ottawa, 29 & 30 March 2007, p. 5; para. 20, General Comment 15.

82 paras 21 and 22, General Comment 15

83 A Human Right to Water, (n. 81), p. 5; paras 23–24, General Comment 15.

84 paras 25–29, General Comment 15; Antti Belinskij et al., Louis J Kotze and Oliver Fuo, Domestic Manifestations of International Law's Right to Water: A Comparative Analysis of Emerging Rights Obligations in Finland and South Africa, 25 African Journal of International and Comparative Law, no. 2 (2017), 267

85 United Nations (2010). Resolution on human right to water and sanitation. UN General Assembly Resolution. A/64/292.

86 See Special Rapporteur on the Human Right to Safe Drinking Water and Sanitation, Rep. on the Human Right to Safe Drinking Water and Sanitation, U.N. Doc. A/66/255 (Aug. 3, 2011) (by Catarina de Albuquerque); Right to Water and Sanitation is Legally Binding, Affirms Key UN Body, UN News Centre (1 October 2010), available at: <http://www.un.org/apps/news/story.asp? NewsID=36308#.ViqYSxCrSRt>

87 Rebecca Bates, The Road to the Well: An Evaluation of the Customary Right to Water, 19 Review of European Community & International Law (2010), 282, 284–85 (arguing that the right to water, following from the UN resolutions, has now achieved international legal status as customary international law). See also Meier and Kim, supra note 63, p. 169.

globally.[88]

1.5 Laws Governing Water Pollution and Reproductive Health in Nigeria

There are various laws governing water pollution in Nigeria, and some of them will be examined below.

Constitution of the Federal Republic of Nigeria 1999 (As amended): The Constitution is the supreme law of a state. All other laws derive their relevance from it, and any law inconsistent with the provision of the constitution is void to the extent of its inconsistency.[89] Naturally, there have been a lot of environmental menaces, that most environmentally conscious countries have handled through legislative action; some countries have given these problems constitutional status for the state to deal with and many third-world countries have enacted laws to minimize the menace; such countries include Nigeria, South Africa, Mali, India, Chile just to mention a few.

In Nigeria, this is seen in section 20 of the 1999 Nigerian Constitution, which states that: "The state shall protect and improve the environment and safeguard the water, air and land, forest and wildlife of Nigeria." The elevation of environmental concerns to constitutional status has no doubt enhanced the priority to be accorded by the Government to sound environmental management and sustainable development. Thus, the inclusion of the environmental clause into the CFRN 1999 can be said to be a milestone in the quest for the protection and sustainability of the Nigerian environment. By these provisions, the ultimate responsibility for managing risks to human safety and the environment is that of the Nigerian government. Ambitunni *et al* have stated that the active involvement of the Federal Government in oil industry operations, either through equity participation or as outright ownership, including downstream, means that the Federal Government is also potentially a polluter.[90] Indeed, all the refineries owned by the Federal Government, through the State-owned NNPC, have been implicated in some of the major downstream pollution incidents.[91] For example, Vivan *et al*. examined the effect of the Kaduna refinery on its host environment and asserted that, in addition to gaseous pollutants that are released during oil refining, solid and liquid waste emanating from the refinery pollute the study area.[92] The evidence is seen in the pollution of the River Romi and the high number of adverse health issues within the community.[93] Thus, while the Constitution of Nigeria vests the responsibility of protecting human health and improving the quality of the environment on the government, the same

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88 See Goals 6.1–6.4, SDGs. See also UN GA (United Nations General Assembly). (2015b). Transforming Our World: The 2030 Agenda for Sustainable Development A/RES/70/1. United Nations, New York, available at: <https://webcache.googleusercontent.com/search?q=cache:

G5YqmceTNJQJ:https://sustainabledevelopment.un.org/post2015/transformingourworld+&cd=4&hl=en&ct=clnk&gl=ng>, accessed 28 July 2017.

89 Section 1(3) of the 1999 Constitution (as amended)

90 A Ambituuni et al, 'Analysis of Safety and Environmental Regulations for Downstream Petroleum Industry Operations in Nigeria: Problems and Prospects', *Environmental Development*, (2014) (9) 43-60..

91 *Ibid*.

92 EI Vivan, VN Blamah, and I Ezemokwe, 'Socio-Economic Impact of the Kaduna Refining and Petrochemical Company (KPRC) on the Rido Area of Kaduna Metropolis', *Journal of Environmental Management and Safety*, (2012) 3(15) 124-139.

93 *Ibid*. 135

government, through its corporation, is, in this case, polluting the environment and endangering the health of its citizens.

With respect to health, Section 17 of the Constitution provides that the State shall direct its policy towards ensuring that the health, safety and welfare of all persons in employment are safeguarded and not endangered or abused;[94] and that there are adequate medical and health facilities for all persons.[95] This can be interpreted to mean that Nigerian citizens are entitled to a right to health, which includes sexual and reproductive health.

Although the provisions of sections 17 and 20 of the constitution are laudable, their effect is whittled down by the fact that they are not justiciable. The implication is that a citizen of the Federal Republic of Nigeria cannot sue the Government for failing to provide good health facilities or for their inability to protect the environment from the activities of polluters. That is because Section 6(6)(c) of the 1999 Constitution excludes the jurisdiction of the courts on matters relating to the provisions in Chapter II – that is, on 'Fundamental Objectives and Directive Principles of State Policy'.

It is necessary to state that other countries in the African Region are making changes in their laws to accommodate reproductive health rights. For example, Guyana in 1995 passed legislation which made abortion legal, giving women access to safe abortion services.[96] The Bill of Rights in the South African Constitution mentions reproductive rights[97] , and in 1996, South Africa enacted the Choice on Termination of Pregnancy Act, which is very liberal in its permission of abortions.[98] Kenya has also done a lot in this regard, its present Constitution having been hailed as a victory for reproductive rights.[99] Article 43 of the Kenyan Constitution provides that every person has the right to the highest attainable standard of health. This includes the right to health care services, including reproductive health care. This directly incorporates reproductive rights into the Kenyan Constitution.[100]

In India, the right to health has been interpreted by the Supreme Court to form part of the right to life under section 21 of the Indian Constitution;[101] consequently, the right to health is directly enforceable and justiciable. This was the position in the case of *Francis Coralie Mullin v The Administrator, Union Territory of Delhi & Ors*[102] where the Supreme Court of India held that, "the right to life includes the right to live with human dignity and all

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94 Section 17(3)(c) *Ibid*.

95 Section 17(3)(d) *Ibid*.

96 Medical Termination of Pregnancy Act 1995, Guyana Act, No 7 of 1995 in A. I. Fenemigho and E. A. Iyamu-Ojo, 'Appraising Reproductive Rights as Human Rights: The Nigerian Experience', *Ife Journal of International and Comparative Law* (IJCIL), (2015) (1) & (2) 355.

97 Constitution of the Republic of South Africa, No. 108 of 1996, last accessed 29 June, 2015, http://www.gov.za/documents/constitution/1996/a108-96.pdf, Chapter 2 thereof. Section 12 (2) (a) states that everyone has the right to bodily and psychological integrity, which includes the right to make decisions concerning reproduction, and section 27 (1) (a) provides for the right to have access to health care services, including reproductive health care.

98 South Africa's Choice on Termination of Pregnancy Act, Act No 92, Art. 2 (1996) in Alero I. Fenemigho and Elizabeth A. Iyamu-Ojo (n. 96)

99 A. I. Fenemigho and E. A. Iyamu-Ojo, 'Appraising Reproductive Rights as Human Rights: The Nigerian Experience', Ife Journal of International and Comparative Law (IJCIL), (2015) (1) & (2) 355.

100 *Ibid*.

101 Section 21 of the Indian Constitution provides as follows: "No person shall be deprived of his life or personal liberty except according to procedure established by law" This provision is similar to the provisions of the Constitution of the Federal Republic of Nigeria on Right to life, however, the interpretation in Nigeria does not cover right to health.

102 (1981) 1 SCC 608

that goes with it, namely, the bare necessaries of life such as adequate nutrition, clothing and shelter."

The conclusion in the case of Nigeria is that even though our constitution has provisions on the right to health and an environment free from pollution, they are merely platitudes without any legal force. Whatever purpose they were supposed to serve has been defeated by the provisions of section 6(6)(c) of the constitution, which makes these provisions non-justiciable. We are therefore left with constitutional rights that are unenforceable and somewhat useless to the citizen.

The National Environmental Standards and Regulations Enforcement Agency (NESREA) Act[103] is the major environmental law in Nigeria. The Act creates an agency that is charged with the responsibility of enforcing environmental laws, regulations, and standards in deterring people, industries, and organizations from polluting and degrading the environment, biodiversity conservation, and sustainable development of Nigeria's natural resources in general and environmental technology including coordination and liaison with relevant stakeholders within and outside Nigeria on matters of enforcement of policies and guidelines.[104] NESREA also has the responsibility to enforce all environmental laws, guidelines, policies, standards, and regulations in Nigeria, as well as enforce compliance with the provisions of all international agreements, protocols, conventions, and treaties on the environment to which Nigeria is a signatory.[105]

The Agency is allowed to make regulations setting specifications and standards to protect resources to promote the public health or welfare, and the natural development and productive capacity of the nation's human, animal, marine, or plant life.[106] A person who violates any specifications and standards made by the Agency commits an offence and shall on conviction be liable to a fine not exceeding N200,000 or to imprisonment for a term not exceeding one year or to both such fine and imprisonment for a term not exceeding one year or to both such fine and imprisonment and an additional fine of N20, 000 for every day the offence subsists.[107] Where the violation is by a body corporate, it shall on conviction be liable to a fine not exceeding N2,000,000 and an additional fine of N50,000 for every day the offence subsists.[108]

The agency is also charged with the protection of public health and welfare and enhancing water quality in collaboration with other relevant agencies.[109] Any violation of standards and regulations related to public health and water quality will render a person liable on conviction to a fine not exceeding N50, 000 or imprisonment for a term of imprisonment not exceeding one year or both such fine and imprisonment and an additional N5,000 fine for every day the offence subsists.[110] Corporate violators are, however, expected to in addition pay a fine of N10,000 for every day the violation subsists.[111]

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103 National Environmental Standards and Regulations Enforcement Agency (NESREA) Act CAP N164 2010
104 Section 2 NESREA Act
105 *Ibid*. section 7(c)
106 Section 20 NESREA Act.
107 *Ibid*. section 20(3)
108 *Ibid*. section 20(4)
109 *Ibid*. Section 23(1)
110 *Ibid*. Section 23(3)
111 *Ibid*. Section 23(4)

The Agency prohibits the discharge in such harmful quantities of any hazardous substance into the air or upon land and waters of Nigeria or at the adjoining shoreline except where such discharge is permitted or authorised under any law in force in Nigeria.[112] Individual violators are liable on conviction to a fine not exceeding N1,000,000 or imprisonment for a term not exceeding 5 years.[113] Where the offender is a body corporate, it shall on conviction be liable to a fine not exceeding N1,000,000 and an additional fine of N50, 000 for every day the offence subsists.[114] Every person who at the time the offence was committed was in charge of the body corporate shall be deemed to be guilty of such offence and shall be liable to be proceeded against and punished except where the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.[115]

It would appear that the NESREA Act has little application to the activities in the petroleum industry when compared to its predecessor, the Federal Environment Protection Agency Act.[116] This is because except the functions which empower the Agency to enforce compliance with laws, guidelines, policies, and standards on environmental matters; coordinate and liaise with stakeholders, within and outside Nigeria, on matters of environmental standards, regulation, and enforcement; enforce compliance with policies, standards, legislation and guidelines on water quality, environmental health and sanitation, including pollution abatement,[117] all other functions of the Agency carefully excluded the oil and gas industry who is the major polluter of the Nigerian environment.[118] The NESREA Act excludes the NESREA from enforcing compliance within the oil and gas industry. The NESREA also does not have jurisdiction to regulate oil and gas activities resulting in noise, air, sea, and other water bodies' pollution. The exclusion of NESREA which is responsible for sustainable development, biodiversity conservation, protection of the environment, and development of environmental technology from enforcing compliance in the oil and gas sector has been described as a '… deeply questionable move and further entrenches government failures to ensure effective oversight of the oil industry and to protect the environment and human rights."[119]

It is this writer’s opinion that there is need to review the provisions of the NESREA ACT, to wit allowing the agency to investigate the activities of companies in the petroleum industry as it relates to pollution; the agency should also be allowed to prosecute individual and cooperate bodies in the industry that are guilty of water pollution. This will serve as a deterrent to other defaulters. It is recommended that the Act should be amended and NESREA, the major environmental law enforcement agency in Nigeria, should be restructured, giving it more authority on all environmental law enforcement efforts, including the environmental permitting and monitoring of all new and existing projects in the

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112 *Ibid*, s. 27 (1)
113 *Ibid*, s. 27 (2)
114 *Ibid*, s. 27 (3)
115 *Ibid*, s. 27 (4)
116 A Tanko, *An Analysis of the Efficacy of Fiscal Laws Relating to Petroleum Operations in Nigeria*, (Unpublished thesis: Ahmadu Bello University, Zaria, Nigeria, 2011) 120.
117 Section 7(a), (b), (c), (d), (e), (f),(i), and (m) of the NESREA Act
118 A. Tanko (n. 116) *Ibid*.
119 Amnesty International Report, June 2009, p. 43

petroleum industry. This should include the monitoring of environmental impact assessment activities purportedly carried out by these companies.

The Harmful Waste (Special Criminal Provision Etc.) Act[120] was enacted with the specific object of prohibiting the carrying, depositing, and dumping of hazardous wastes on any land, territorial waters, and matters relating thereto.[121] This Act is essentially a penal legislation. The offences constitute doing any of the acts or omissions stated in section 1(2) of the Act. The jurisdiction of the Act is far-reaching as it seeks to remove any immunity conferred by the Diplomatic Immunities and Privileges Act on any person for criminal prosecution.[122] While the long title of the Act states that it was enacted to prohibit the dumping of harmful waste into Nigerian waters, this activity goes on unabated. In fact, for many communities, the rivers and streams are sites for dumping domestic and other wastes, leading to water pollution. The wastewater from industries is also released into streams and rivers in the communities where these industries are based. Nobody monitors the water sources, leading to a situation where no individual or corporate body has been prosecuted under this law. This supports the assertion by some authors that the enforcement agencies, the police, the court, and the state and local government lack effective enforcement strategies for the implementation of the laws.[123] It is the writer's opinion that communities, Local Governments and even states should have independent supervisory and monitoring bodies that will be responsible for guarding the water sources while ensuring that defaulters are adequately punished. This is the only way to ensure that the populace has access to portable water while being protected from reproductive health diseases caused by water pollution.

It is important to note that despite its far-reaching jurisdiction, the Act focuses mainly on the criminal prosecution of defaulters and does not provide compensation to the victims of the damage.[124] Secondly, this law makes no provision for the protection and compensation of persons whose health has been affected by the discharge of hazardous substances. This is irrespective of the fact that the law describes harmful substances as any substance capable of impairing a person's mental or physical health.[125] These parts of the law need to be amended to enable them to meet the purpose for which it was enacted. After all, what is a law without a remedy?

The Oil in Navigable Waters Act (ONWA)[126] was enacted pursuant to the adoption of the International Convention for the Prevention and Control of Pollution of the Sea by Oil. The Act is the first law that deals specifically and solely with the industrial waste generated by oil production.[127] The Act makes the discharge of oil into a prohibited sea area an offence, and the owner or master of the ship responsible for such discharge is guilty of an offence.[128] The

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120 The Harmful Waste (Special Criminal Provision Etc) Act; CAP H1 LFN 2004

121 This is the Provision of the Long title to the Act.

122 Section 9 of The Harmful Waste (Special Criminal Provision Etc) Act; CAP H1 LFN 2004

123 H Ijaiya and OT Joseph, 'Rethinking Environmental Law Enforcement in Nigeria', *Beijing Law Review*, (2014) (5) 319.

124 CC Nwufo, 'Legal Framework for the Regulation of Waste in Nigeria', *African Research Review*, (April 2010) 10(2) 498.

125 Section 15 of the Harmful Waste (Special Criminal Provision Etc) Act; CAP H1 LFN 2004

126 Oil in Navigable Waters Act (ONWA) CAP O6 LFN 2004

127 C. C. Nwufo, *(n. 124)* 499

128 Section 1 Oil in Navigable Waters Act, CAP O6 LFN 2004

owner or master of a vessel, or a place on land or apparatus from which oil or any mixture containing oil is discharged into the sea within the territorial waters of Nigeria, is guilty of an offence.[129] Quite surprisingly, the Act creates two sets of defences to the offences under Sections 1 and 3. While the first set of defences avails an owner or master of a ship or vessel, the second set of defences under the act can be found in Section 3 and inures in favour of the occupier of land or person in charge of any apparatus used in transferring oil and from which oil or a mixture containing oil is alleged to have escaped. Where defences are successfully raised, the oil spiller, according to the Act, will escape liability. Edemadide contends that the defences are too widely drafted and appear to encourage the pollution of Nigeria's marine environment.[130] He contends that to permit the discharge of oil from vessels or ships into the sea area in the manner done by ONWA smacks of gross insensitivity to the environment, health, and safety of the people who bear the brunt of oil pollution whenever it occurs.[131] The reason is not farfetched: section 4 of the Act provides that where a person is charged with an offence under section 1 of this Act, or is charged with an offence under section 3 of this Act as the owner or master of a vessel, it shall be a defence to prove that the oil or mixture in question was discharged for the purpose of securing the safety of any vessel, or of preventing damage to any vessel or cargo or of saving life. This writer agrees that the defence is too wide and is one which many ship owners will resort to once there is any dispute arising from the spillage of oil into the water. It is recommended that ONWA should be amended to reflect the seriousness and gravity of oil spillage, especially in a marine environment. Another weakness of this Act lies in the fact that the penalty for the offences stated under the Act is inadequate.[132] Therefore, there is a need to review this law to address existing gaps and loopholes exploited by individuals, industries, companies, and firms.

The Water Resources Act (WRA)[133] gives the Nigerian Federal Government the responsibility of regulating, advancing, and issuing licenses to all water providers in Nigeria.[134] Planning, developing, and using Nigeria's water resources, as well as protecting and managing them, as well as guaranteeing their quality, quantity, distribution, use, and management, are all included in this.[135] The WRA provides that the Minister has the authority to specify locations from which water may be taken or used, the amount of water that may be taken by each individual, and to temporarily or permanently outlaw the use of water that poses a risk to human health.[136] The minister may withdraw the right to use water where it conflicts with the public interest.

According to the WRA, the Minister has the authority to control activities that may have an impact on the quantity and quality of the water resource while carrying out his

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129 *Ibid*. Section 3.

130 BE Edemadide, 'Quantum of Environmental Pollution in the Oil and Gas Industry in Nigeria', *African Journal of Legal and Human Rights* (AJLHR), (2018) (2) 148.

131 *Ibid*.

132 Section 6 Oil in Navigable Waters Act, CAP O6 LFN 2004- The Act prescribes a fine of two thousand naira as punishment for committing any of the offences created under the Act. This is ridiculous and cannot reasonably be expected to deter the fouling of the country's water bodies through reckless acts. Stiffer monetary penalties, in addition to imprisonment and revocation of operating licences/permits, are recommended.

133 Water Resources Act (WRA) CAP W2 LFN 2004

134 Section 1 WRA

135 *Ibid*.

136 Sec 4(c) of WRA.

duties.[137] The Minister also has the authority to reject an application for a license if it is anticipated that the activity may negatively impact the quality of the water resource.[138] As part of his responsibilities, the Minister must ensure that there is an adequate supply of water that is acceptable for livestock, irrigation, domestic and non-domestic usage, safe sewage disposal,[139] and pollution control.[140] General regulations for the effective administration of the WRA may be made by the Minister.

Anyone found guilty of violating the WRA is subject to a fine of no more than 2,000 naira, or a term of imprisonment of no more than six months, or both penalties and, in the case of a continuing offense, an additional fine of no more than 100 naira for each consecutive day the offense continues.[141] Any activity that affects the quantity or quality of water,[142] as well as the failure or refusal to use a license issued under the WRA, is considered a violation of the WRA.[143]

The WRA imposes an inadequate and ineffective liability and compensation provision for any pollution caused to water resources.[144] Sections 18 and 24 of the WRA outline the responsibility that polluters are subject to under the WRA. Any action that has the potential to affect the amount or quality of water, including pollution, is illegal under these regulations. The maximum punishment is a fine of 2,000 naira or six months in jail. The WRA's culpability clauses are not robust enough to address Nigeria's water pollution problems. The main purpose of the WRA's provisions was to control water use, not because of any real desire to lessen water contamination. Thus, it is necessary to strengthen the regulatory framework to ensure and promote water pollution control in Nigeria. It is recommended that the government at all levels should formulate and enforce regulations for water conservation, particularly in areas prone to water pollution. The provisions of the law should include recognition of the impact of water pollution on the reproductive health of citizens and how to protect them.

The Nigerian Minerals and Mining Act (NMMA), enacted in 2007, serves as the legal framework governing mining activities in Nigeria. The Act is intended to promote sustainable development in the sector, foster a safe and healthy environment, and regulate mining operations. It covers licensing, rights and obligations of mining leaseholders, and environmental responsibilities. Key provisions include: (1) Licensing and Lease Allocation: The Act allows for the granting of various types of licenses and leases, such as exploration, mining, and quarrying leases.[145] (2) Environmental Protection Provisions: Mining operators are required to adhere to certain environmental standards and ensure that the environment is

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137 Sec 8(d) of WRA
138 Sec 11(a) of WRA.

139 Sec 5(b) of WRA
140 Sec 20 of WRA defines water pollution to be any direct or indirect alteration of the physical, thermal, chemical, biological, or radioactive properties of any water or groundwater to render such water or groundwater less fit for any beneficial purpose for which it is, or may reasonably be used, or to cause a condition which is hazardous or potentially hazardous to public health, safety, welfare to animals, birds, wildlife, fish or aquatic life, or to plants.
141 Sec 18 of WRA.
142 Sec 11(a) of WRA.

143 Sec 11(c) of WRA
144 Sec 18 and 24 of WRA
145 Section 9 Nigerian Minerals and Mining Act 2007

not polluted during operations,[146] including conducting environmental impact assessments (EIAs)[147] and submitting environmental protection and rehabilitation plans before commencing operations.[148] (3) Community and Health Safety Regulations: Operators must provide safety measures[149] and safeguard the health and welfare of nearby communities.

With respect to water pollution, the Act prohibits the pollution of water courses[150] and where such pollution occurs, the operator must ensure that the water is purified.[151] The Act also provides that a licensee or lessee shall pay compensation to the owner or occupier who suffers damages as a result of pollution of any source of water, used for domestic and other purposes, as a consequence of the exploration or operations in any work connected with the property, for any such damage not otherwise made good.[152]

Despite these provisions, mining activities have had considerable impacts on Nigeria's water resources, contributing to widespread water pollution. Mining activities, especially for minerals such as gold, lead, and tin, often lead to contamination of water bodies due to unregulated waste disposal,[153] use of hazardous chemicals,[154] and illegal mining operations.[155] There is a need to amend the NMMA to enforce stricter water quality standards by increasing penalties for non-compliance. The regulatory bodies will have to undertake regular inspections and monitoring exercises to ensure compliance. Regulating artisanal mining by integrating small-scale mining into the legal framework with clear environmental guidelines and support could help reduce unregulated pollution.

Nigeria has some policies and laws relating to reproductive health and rights. The first policy worthy of mention is the 1988 National Health Policy and Strategy, whose goal was to enable Nigerians to achieve productive lives, socially and economically.[156] There is also the National Reproductive Health Policy and Strategy 2001 and the revised National Health Policy 2004. These shall be analysed hereunder.

(a) National Reproductive Health Policy and Strategy

In 2001, the National Reproductive Health Policy and Strategy was developed by the Federal

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146 Section 111 Ibid.
147 Section 119 Ibid.
148 Section 120 Ibid.
149 Section 70(1)(d)
150 Section 123 Ibid.
151 Section 124 Ibid.
152 Section 125(1)(b) Ibid.
153 Many mining companies discharge tailings and waste, containing toxic substances like mercury and lead, directly into rivers and streams. The NMMA lacks stringent regulations or enforcement mechanisms to prevent this.
154 The absence of strict controls over the use of chemicals such as cyanide in mining processes contributes to the leaching of harmful substances into water systems, contaminating drinking and irrigation water.
155 The rise of unregulated, artisanal mining, which the NMMA does not adequately address, exacerbates pollution. These small-scale miners frequently lack the resources or knowledge to follow safe environmental practices.
156 Federal Ministry of Health, *National Policy and Strategy to achieve Health for all Nigerians*, 1998, Though this policy did not directly provide for reproductive health care, it stipulated primary health care as encompassing maternal and child health and also family planning services. MT Ladan, 'Review of Existing Reproductive Health Policies and Legislations in Nigeria', (A Paper Presented at a One-Day Stakeholders' Forum on Reproductive Health in Nigeria, Organized by the Independent Policy Group, Abuja, 20 April 2006, Tahir Guest Palace Hotel, Kano, Nigeria.)

Government. This policy was developed to address the following issues among others: the unacceptably high levels of maternal and neonatal morbidity and mortality; the increasing rate of infection with the Human Immuno-Deficiency virus (HIV) including MTCT and the prevalence of other STIs; Increasing high-risk behaviour of adolescents leading to premarital sexual encounters, early marriage, unintended pregnancies, unsafe abortions and the social consequences such as school dropout with subsequent negative intergenerational effects; the current fragmentation of reproductive health activities and the limited impact of existing programmes in reducing sexual and reproductive ill- health, and improving reproductive health and well-being; the low level of male involvement in reproductive health; the low level of awareness and utilization of contraceptive and natural family planning services; Inadequate services for infertility and the associated misery; to further the implementation of the programme of action of the International Conference on Population and Development (ICPD, 1994).[157] According to the Reproductive Health Policy of 2001, its overall goal shall be to create an enabling environment for appropriate action and provide the necessary impetus and guidance to national and local initiatives in all areas of Reproductive Health.[158]

The specific objectives of the Reproductive Health policy includes: To reduce maternal morbidity and mortality due to pregnancy, childbirth by 50%;[159] To reduce the incidence and prevalence of sexually transmitted infection including the transmission of HIV infection;[160] To reduce gender imbalance in availability of reproductive health services;[161] To reduce the Incidence and prevalence of reproductive cancers and other non-communicable diseases;[162] To reduce gender imbalance in all sexual and reproductive health matters;[163] To reduce the prevalence of infertility and provide adoption services for infertile couples;[164] To reduce the incidence and prevalence of infertility and sexual dysfunction in men and women;[165] To increase the involvement of men in reproductive health issues;[166] and to promote research on reproductive health issues.[167]

Despite the laudable provisions above, the policy fails to provide for comprehensive reproductive health concerns like safe abortion. Furthermore, while it provides for different aspects of reproductive health, it does not reflect the modern idea of reproductive health and so are inadequate to meet the needs of actualising reproductive rights as contemporarily understood.

(b) The Revised National Health Policy 2004

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157 Federal Ministry Of Health, Abuja, Nigeria (2001) National Reproductive Health Policy And Strategy To Achieve Quality Reproductive And Sexual Health For All Nigerians
158 Article 3.1 *Ibid*.
159 Article 3.2.1 *Ibid*.
160 Article 3.2.4 *Ibid*.
161 Article 3.2.6 *Ibid*.
162 Article 3.2.7 *Ibid*.
163 Article 3.2.9 *Ibid*.
164 Article 3.2.10 *Ibid*.
165 Article 3.2.11 *Ibid*.
166 Article 3.2.12 *Ibid*.
167 Article 3.2.13 *Ibid*.

The National Health Policy was revised in 2004, with the revised version[168] specifying 'national standards for reproductive health'.[169] The 2004 version of the policy makes provision for different aspects of reproductive health.[170] The policy states that the overall goal of the HIV/AIDS Policy is to: control the spread of HIV in Nigeria; provide equitable care and support for those infected by HIV; and mitigate its impact to the point where it is no longer of public health, social and economic concern, such that all Nigerians will be able to achieve socially and economically productive lives free of the disease and its effects.[171] The objectives of the HIV/AIDS policy include fostering behaviour change as the main means of controlling the epidemic;[172] improving national understanding and acceptance of the principle that all persons must accept responsibility for prevention of HIV transmission and the provision of care and support for those infected and affected;[173] and providing access to cost-effective care and support for those infected, including anti-retroviral drugs.[174] One of the strategies for achieving this goal is the review of existing legislation and enacting appropriate new laws for the protection of the rights of those living with HIV and those susceptible and vulnerable to the disease.[175] It is sad to note that no new law has been made for the protection of the rights of those living with HIV/AIDS.

The revised policy also makes provision for a Reproductive Health Policy. The overall goal of the National Reproductive Health Policy is to create an enabling environment for appropriate action and provide the necessary impetus and guidance to national and local initiatives in all areas of reproductive health.[176] The specific objectives of the policy are the same as those of the National Health Policy 2001.[177]

While Nigeria is not lacking in policies, the problem is that these policies have not been fully implemented; therefore, the state of reproductive health rights in Nigeria remains abysmal.

1.6 The Deficiencies of Water Pollution Control Laws and Reproductive Health Policies in Nigeria

The inability of the government and its agencies to enforce the laws stands out as the most fundamental reason laws are unable to protect Nigeria.[178] According to Ibaba, the reason for this state of affairs is inadequate funding, corruption, the lack of operational facilities, the low involvement of professionals, the uncooperative attitude of the multinational corporations, and the centralisation of legislative powers in the central government, along with the

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168 The objectives of this revised version include reducing maternal mortality and morbidity, neo natal morbidity, promoting gender equity in reproductive and sexual health matters, etc. Federal Ministry of Health (Nigeria), *Revised National Health Policy,* 2004,

169 *Ibid*.

170 Chapter 6 of the National Health Policy 2004

171 Article 6.2 *ibid*.

172 Article 6.2(i)

173 Article 6.2(ii)

174 Article 6.2(iii)

175 *Ibid*.

176 Article 6.9 *Ibid*.

177 *Ibid*.

178 SI Ibaba, 'Environmental Protection Laws and Sustainable Development in Nigeria', *Africana Journal* (2010) 4(1) <http://africanajournal.org/PDF/vol4no1/vol4no12Ibaba%20S%20Ibaba.pdf>. Accessed 12 June 2024.

privatisation of the Nigerian state.[179] The law created gaps that have been exploited by various individuals and corporate entities, to the disadvantage of Nigeria, thus weakening enforcement.[180] Edo, notably, observes that the rates of non-compliance with environmental laws, regulations, and standards have continued to be high, coupled with the fact that most environmental laws are not only obsolete but in need of a revisit.[181] He opined that many reasons have been advanced for the lack of an effective environmental enforcement programme. One of the reasons often cited is the overarching corruption of public officials charged with enforcing these laws. He reiterates that corruption is a major problem in Nigeria and has pervaded almost all sectors of the economy.[182] He concludes that the problem is not so much that environmental enforcement has failed as it was never really on the agenda in the first place.[183]

In the case of reproductive health, there is the problem of a lack of awareness by citizens on reproductive health matters and their connection to water pollution. It is recommended that the various levels of government allocate funds for awareness campaigns, equipment procurement, and other necessities to support effective environmental management and enforcement of environmental and reproductive health laws. The laws analysed above have not recognised the impact of water pollution on the reproductive health of people living in the affected area; neither have they made provisions for punishment to be meted out to the person or corporate bodies responsible for harm to the reproductive health of the victims.

1.7 Conclusion

Water pollution has been the bane of many communities in Nigeria, causing harm to the health of the citizens living in affected areas. Each year, one community or the other is faced with a lack of usable water as a result of water pollution. The impact of water pollution on the reproductive health of Nigerians is rarely considered. Thus, there is a need to ensure that laws prohibiting water pollution recognise its impact on reproductive health and provide for adequate compensation for victims of reproductive health diseases caused by water pollution. The government has also enacted a plethora of laws for the protection of the environment and reproductive health, but these laws have failed. One major reason is the problem of implementation and enforcement. Government at all levels need to shift from being reactive to being proactive in responding to the menace of water pollution, especially as it concerns the reproductive health of the inhabitants of the polluted areas. There is also a need for the government at all levels and its agencies to fund and map out contingency plans and emergency preparedness plans to prevent the water pollution crisis in Nigeria.

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179 *Ibid*.
180 *Ibid*.
181 ZO Edo, 'The Challenges of Effective Environmental Enforcement and Compliance in the Niger Delta Region of Nigeria', *Journal of Sustainable Development in Africa*, (2012) 14(6) 262 <http://jsd-africa.com/Jsda/Vol14N6Fall2012B/PDF/The%20Challenges%20of%20Effective%20Environmental%20Enforcement.Zephy%20Obazee.pdf>. Accessed 12 June 2024.
182 *Ibid*. P. 269
183 *Ibid.* P. 273