ENDING GAS FLARING IN THE NIGERIAN OIL AND GAS INDUSTRY: THE NEED FOR STRICT REGULATORY ENFORCEMENT

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ABSTRACT

Environmental pollution arising from gas flaring constitutes a major concern among the international community, particularly as a result of the negative impact it brings to society, environment, and economy. In the last 60 years, multinational oil companies operating in Nigeria have consistently flared associated natural gas. This paper critically examines the extant legal frameworks for regulating gas flaring within the Nigerian oil and gas industry, as well as other efforts made by the federal government towards ending gas flaring in the country. The effects of gas flaring on the inhabitants of the Niger-Delta region of Nigeria (human and environment) are discussed, then an overview of the challenges militating against ending the menace of gas flaring is provided. The paper contends that unless there is strict enforcement of anti-gas flaring regulations by the regulating agencies of government with stiff punishments and fines for erring oil companies, gas flaring will not abate. Recommendations are, therefore, proffered for combating gas flaring in the country.

Keywords: Gas flaring; Regulations; Effects; Punishment; Challenges; Enforcement

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1. INTRODUCTION

Started by early 20th century, oil and gas production has been the major means of economic advancement for many oil producing countries of the world, including Nigeria. The Nigerian state is currently counted amongst the top 10 countries rich in natural gas globally. Nigeria has massive natural gas reserves close to 159 trillion cubic feet², out of which about 2.5 billion cubic feet is said to be vented by the multinational oil companies operating within the Nigerian oil fields.³

Oil exploration in any oil producing country has both positive and negative effects of such exploration. Gas flaring constitutes a major negative effect in the communities where oil and gas is produced and processed. In Nigeria, the Niger Delta region is the primary location where oil and gas operation take place at large volumes. The inhabitants of this region rely heavily on their natural environment for daily survival. Therefore, the local people of the region look up to their farmland and water for sustenance. As a result, the huge venting of gas during oil production by the international oil companies caused heavy pollution in the environment within the region, thus making life difficult for the inhabitants. Despite the fact that oil exploration has consistently been carried out in the Niger Delta area since 1956 after oil was discovered in Nigeria, the region has been left poor and undeveloped by the federal government of Nigeria and the operating oil companies.

Gas flaring refers to the act of burning off into the atmosphere the additional natural gas attached to crude oil at the point of drilling the oil out of the ground.⁸ Gas flaring is often carried out by the multinational oil companies for economic and other purposes. The multinational companies believe that processing of natural gas or embarking on re-injection plan is more expensive as compared to flaring such natural gas. The attraction to flare gas in Nigeria is attributed partly to the lack of adequate incentives for acquisition of gas infrastructural equipment, the absence of gas storage facilities⁹, and the persistent low market for natural gas in the country. Arguably, gas flaring remains a persistent environmental and health challenge in Nigeria owing to lack of well-developed gas policy and inadequate enforcement of extant legislations on the part of government agencies.

¹ Ibironke Odumosu, 'Transferring Alberta's Gas Flaring Reduction Regulatory Framework to Nigeria: Potentials and Limitations', (2007) 44 (4) Alberta Law Review 863.

Olujobi Joshua Olusola, 'The Appraisal of the Legal Framework Regulating Gas Flaring in Nigeria, Upstream Petroleum Sector: How Efficient? (2019) 10 (3) International Journal of Advanced Research in Engineering and Technology 235.

³ *Ibid*.

⁴ Ibironke, *supra*1, p. 864.

Eghosa Ekhator, 'Public Regulation of the Oil and Gas Industry in Nigeria: An Evaluation' (2016) XXI Annual Survey of International Comparative Law 77.

⁶ Ibid.

⁷ Ibid.

Factsheet: Global Flaring Reduction Partnership, https://www.worldbank.org/ggfr.site accessed 12 September 2022.

Olusola Joshua supra 2 p. 236.

These and other issues are examined in this paper. For effective elucidation of the topic under study, this paper is divided into 9 parts including the introduction. Part II discusses the historical perspective of gas flaring. This is to show that the practice has been on-going for quite a while. Part III examines the effect of gas flaring on man and the environment. A study of areas in Nigeria where gas is flared has revealed some adverse effect of gas flaring on man and the environment. Part IV and V present and discuss the international and regional regulations and frameworks on gas flaring. The essence is to help the readers understand the role of laws and to determine the adequacy of the laws and the gaps that will lead to the solutions in addressing the menace of gas flaring. Part VI presents a comparative analysis of the practice in Nigeria and Saudi Arabia. This analysis is key as Saudi Arabia is a leading producer of oil and gas in the world. It is expected that the study of Saudi Arabia practices will reveal lessons that Nigeria can learn from to improve on the existing practice at home in order to bring it up to global best practices. Part VII discusses the challenges in curbing or combating gas flaring in Nigeria. Part VIII presents the recommendations based on the findings of this paper, while Part IX concludes the paper.

2. HISTORICAL PERSPECTIVE OF GAS FLARING IN THE NIGERIAN OIL AND GAS INDUSTRY

The venting of gas started in Nigeria as soon as oil was discovered in commercial volumes in early 1956 in Oloibiri, Balyasa State, in the Niger Delta region of Nigeria. The first discovery of crude oil in Nigeria was made by Shell British Petroleum (which was known as Royal Dutch Shell). After the discovery was made by Shell BP, other multinational oil companies such as Total, Chevron, EXXonMobil (formerly Mobil Oil Producing Unlimited), have joined in exploring for oil in Nigeria. Gas as a natural energy resource was found in Nigeria in the process of crude oil exploration.

However, it was in 1963 when Nigeria started to develop its gas industry along with marketing natural gas to factories located within gas fields in Ughelli in Delta State and Abia State¹³. Thus, the excess gas produced in the industry was vented or flared.¹⁴ From that time onwards, multinational oil companies carrying out oil exploration in the country have not stopped flaring gas within the oil producing areas in Nigeria. Subsequently, an oil and gas processing plant was built in 1975 in Okpau-Kwale by Agip Oil Company, and later in 1987, it inaugurated the gas recovery and utilization scheme in line with the Nigerian government's Gas Re-injection Act.¹⁵

ERA, Gas Flaring in Nigeria, 'A Human Rights, Environmental and Economic monstrosity' (2005) Environmental Rights Action (Friends of the Earth) 1-5.

¹¹ Uwem Udok and Enobong Akpan, 'Gas flaring in Nigeria: Problems and Prospects' (2017) 5 (1) Global Journal of Politics and Research 2.

¹² *Ibid*.

¹³ *Ibid*.

¹⁴ *Ibid*.

¹⁵ *Ibid* p. 3.

It must be stated that the Nigerian gas industry having only a recent origin does not enjoy the same level of patronage and development as the Nigerian oil industry. The oil industry being in operation for well over 60 years has served as the mainstay of the Nigerian economy and infrastructural development.¹⁶

The leadership of General Yakubu Gowon in 1969 took steps to end gas flaring with a policy compelling multinational oil companies to secure relevant equipment that will aid the storage and utilization of gas products. The above directive was to be carried out within the period of 5 years by the oil companies. This directive was never carried out by the oil operators because the time given was short to acquire such expensive equipment for gas storage. When that failed in 1983, however, a new date was given to end the scourge of gas flaring this time with stiff sanctions for non-adherence. The date was similarly changed in 1984 by the government, and later moved to 1 January 2008 as the new date to ending gas flaring in the country with an assurance to close any oil producing company that violates this order of the government.

To deter oil companies from flaring gas, the Government of Nigeria have over the years imposed and, subsequently, increased the fees paid by the multinational oil companies having violated the law.¹⁹ The fees were as follows:

- 1. 2 kobo²⁰ per million standard cubic feet (mscf) prescribed by the Associated Gas Re-injection Amendment Decree 7 of 1985 on companies that flared gas without obtaining Ministerial approval. This very fee was later increased to 50 kobo in 1990.
- 2. N10 (\$0.0224) per million standard cubic feet in 1998 prescribed by the 1998 Budget.
- 3. \$3.50 per million standard cubic feet (mscf) in 2011 prescribed by the Ministerial Directive of 2011.²¹

In 2018, the Nigerian President in his capacity as the Minster of Petroleum Resources issued "Regulation 2018"²² as part of the means to protecting the environment against the effects of gas flaring and further preventing the waste of natural gas and creating some economic benefits to Nigeria from gas flaring.²³ Prohibiting gas flaring, the regulation imposes much higher charges as follows:

a) \$2.00 USD per 28.317 standard cubic meters (1000 standard cubic feet) of gas flared shall be charged as payment to the federal government for gas flaring by a producer from any oil mining lease

Lawrence Atsegbua, 'Oil and Gas Law in Nigeria, Theory and Practice' 4th Edition, (Benin Four Pillars Publishers 2021) 307.

¹⁷ *Ibid*.

¹⁸ *Ibid*.

Oludamola Adewumi, "Gas Charges in Nigeria" (Mondaq Nigeria, 20 November 2018), https://mondaq.com/Nigeria/oil-gas-electricity/756460/gas-flaring-charges-in-nigeria accessed 18 October 2022.

The Nigerian currency is denominated in naira and kobo just as the United States currency is denominated in Dollards and cents.

²¹ Ibid

²² The Flare Gas (Prevention of Waste and Pollution) Regulation 2018.

²³ Ibid

- area or marginal field that produces 10,000 barrels or more of oil per
- b) \$0.05 cent per 28. 317 standard cubic meters (1000 standard cubic feet) of gas flared shall be charged as payment to the federal government for gas flared by the producer of any oil mining lease area or marginal field that produces less than 10,000 barrels of oil per day.²⁴

Despite the charges imposed on oil producers by the government to deter them from flaring gas, gas flaring has continued unabated in the country. Until the government gets serious with the enforcement of antiflaring regulations, it is believed that gas flaring will not come to an end. This is because the oil operators find it convenient to pay charges and flare gas than embark on gas storage and re-injection projects, which in the long run serves more benefits to the country and help protect human lives and the environment.

This paper argues that gas flaring or venting has remained a recurring decimal in the Niger Delta region of the country owing to the inability of government to import the necessary technology and equipment that can help the country to make use of the excess gas rather than flaring it. This becomes important because of the negative impact that gas flaring has on economic fortune of the country, human lives and the natural environment. However, it looks like the "economic fortune" from oil and gas production is rated high above the environmental hazards and other health challenges that the after effect of such oil exploration brings to the oil host communities in the Niger Delta region of Nigeria.²⁵

3. THE EFFECTS OF GAS FLARING ON SOCIETY AND ENVIRONMENT

Gas flaring does not only constitute a huge loss of valuable resources, which could otherwise be used for national development; it is also the cause of environmental degradation as well as other serious health challenges to the inhabitants of oil host communities.²⁶ When gas is flared, different kinds of toxins and greenhouse gases are released into the atmospheric environment, thus, leading to climate change. Climate change is considered a major challenge confronting most the third world nations today, including the African countries; This is because the countries find it difficult to survive and cope effectively with some of the effects of climate change including shortage of good drinking water and food. Other challenges include quick spread of diseases and flooding.27

Agricultural farmlands of oil producing host communities are equally affected by the impact of gas flaring. The rich nutrients of the soil within the Niger Delta region have been heavily reduced as a result of the acidic chemical compositions from gas flaring, therefore, resulting to the failure of

²⁴ Section 13 of the Regulations 2018.

²⁶ Lawrence Atsegbua, supra16, p. 309.

Nii Nelson, 'National Energy Policy and Gas Flaring in Nigeria', (2015) 5 (14) Journal of Environmental and Earth Science 59.

crops or low crop production. The consequence of this on the oil-bearing host communities includes scarcity of food and intense hunger.²⁸

Gas flaring negatively impacts the health of the inhabitants of Niger Delta region of Nigeria. The carbon monoxide released in the atmosphere causes a serious health problem to human lives, impacting on the reproductive ability in man. It is said to be the leading cause of reproductive toxicity.²⁹ The emission of carbon monoxide into the atmosphere during gas flaring is proven to be dangerous to the human reproductive organs³⁰; for the women, it can lead to complicated menstrual challenges, like dysmenorrhea and menorrhagia, meaning painful and heavy periods. It could also lead to prolonged pregnancy. Whereas the usual period of pregnancy for women is nine months, but the negative impact of carbon monoxide can lead a pregnant woman into premature labour and delivery. Invariably, women go into labour between six to eight months of pregnancy.³¹

For most women living within oil producing communities there is evidence of alteration in menopause. This stage sets in for women between 40 to 50 years, respectively. But consistent exposure to carbon monoxide from gas flaring can call in this stage in a woman earlier than the time stipulated by nature. Women also suffer unexpected miscarriage where they are exposed to intense carbon monoxide.³²

The male reproductive system is equally affected; they often suffer fertility challenges such as low sperm count, chest pain and connected heart diseases, cancer and skin diseases.³³ Other effects include noise pollution and reduction in life expectancy for inhabitants of the Niger Delta of Nigeria as compared to persons living in other parts of the country.³⁴ Gas flaring does not only constitute wastage of useful economic resources, but it further results to serious health and environmental problems. Several million tons of carbon dioxide released into the air from year to year in Nigeria from gas flaring without doubt cause unbearable hardship and disaster to human life, plant, and animal life, especially in the oil producing regions of Nigeria.³⁵

Arguably, the attitude of the Nigerian government to gas flaring in the country has not helped in fighting against the menace. The government focuses its attention more on the economic benefits from oil and gas production rather than developing the willpower to end gas flaring in Nigeria. Thus, over the years the government has been unable to sanction the multinational oil companies for their failure to comply with directives meant to end gas flaring.³⁶ The exemption of certain oil wells from compliance with the provisions of the law, together with the imposition of

²⁸ *Ibid*.

Kwame Sekyi, 'The Impact of Gas Flaring on Man and His Environment', (2017) 2 (3) International Journal of Engineering and Management Science 87.

³⁰ *Ibid*.

³¹ Ibid.

³² Ibid.

³³ Ibid.

Hakeem Ijaiya, Mutiat Abdulsalam, and Maryam Jimoh, 'Institutional and legal Control of Gas Flaring in the Niger Delta Region of Nigeria', (2018) 5 (1) Brawijaya Law Journal 32.

³⁵ Ibid.

Eghosa Ekhator, *supra* 5, p. 80.

low fines as penalties, plus the consistent shifting of the dates and deadlines to end gas flaring cannot really be explained.³⁷

Despite the high level of environmental pollution in the oil producing regions, the Nigerian Courts, to comply with anti-flaring legislations in the country, have refused to give orders compelling multinational oil companies whose activities are responsible for such environmental degradation.³⁸ The quest to increase financial revenue and to retain the multinational companies seems to override the need to adequately protect human lives and the environment.³⁹ According to Ekhator, this kind of dependent relationship existing between the Nigerian government and the oil operators is traceable to the inability of the Nigerian government to control oil and gas industry.⁴⁰

The reluctant attitude of the Nigerian courts toward granting redressal for environmental degradation is clearly demonstrated in the cases of *Shell v. Ambah*⁴¹ and *Ogiale v. Shell.*⁴² In both the cases, the applicants brought an action for compensation arising from the oil exploration activities of the multinational companies within their community, their claims were to compensate the loss of their incomes from their farmland and crops, contamination of drinking water, and injury caused to their health as a result of pollution from oil exploration. The court declined issuing the necessary orders towards the compensation for the damages caused to the health of inhabitants and their environment.

4. REGULATING GAS FLARING IN NIGERIA

This section of the paper focuses on the various international and national legislations as part of the efforts made by both the international community and the Nigerian government over the years to combat the scourge of gas flaring.

4.1 International Legal Frameworks on Gas Flaring

The United Nations Declaration on Human Environment (The Stockholm Conference, June 16, 1972)

The conference was aimed at addressing the problem of degradation of the ecosystem by anthropogenic activities. It urged States to carefully ensure that operations within its national boundaries do not cause harm to the environments of surrounding States. It further provides that States have the right to use their natural resources in such a way as to protect the environment and the lives of the inhabitants.⁴³ States are also required to pay compensation for harms caused by associated flaring and other

Ekhator *supra* 5 p. 5.

³⁷ *Ibid*.

Ebeku, K., 'Judicial Attitudes to Redress for Oil Related Environmental Damages in Nigeria', (2003) 12 (2) RCIEL 208.

³⁹ *Ibid*.

⁴¹ Shell v. Ambah (1999) 3 NWLR (Pt. 593) 1.

⁴² B.E.O. Ogiale and Ors v Shell Petroleum Development Company Nigeria Limited (1996) 1 NWLR (Pt. 480) 148.

⁴³ Olusola Joshua, *supra* 2 p. 238.

environmental injuries caused by their conduct within their states.⁴⁴ This type of declaration within the field of International Law is regarded as soft law, which is considered not mandatory, but basically declarative in nature; in other words, they are international norms that are deliberately not binding yet they have legal relevance.⁴⁵ In recent times, the declarations have been made to apply to domestic laws as well.⁴⁶ It is important to note, however, that the 'no harm' rule has been applied by the International Court of Justice in the Corfu Channels Case⁴⁷.

The Vienna Convention on the Protection of the Ozone Layer⁴⁸

The Convention urged States to cultivate ways of protecting the health of citizens as well as its environment from harmful activities in the ozone layer. Thus, a responsibility was placed on States to protect the ozone layer to protect human lives and by extension protect the environment from other harmful consequences capable of affecting the operations of man.⁴⁹ In addition to the Vienna Convention, the Montreal Protocol was made⁵⁰ to specifically state the substances that are capable of destroying the ozone layer. The protocol urges State parties to put measures in place to desist or reduce the level of substances which diminish the ozone layer in order to protect human lives and the environment.

The United Nations Framework on Climate Change⁵¹

This framework is foisting towards the proper management or reduction of gas flaring into the atmosphere, and as well to ensure a healthy and clean habitual environment. The Kyoto protocol is said not to have enjoyed effective compliance within the international community because at the time it was adopted, it did not encompass the world's largest economies, and it excluded most developing countries including the People's Republic of China and Africa from binding effects. Again, the United States of America failed to sign up.52 Thus, the protocol lacked an effective enforcement mechanism and support from several countries.⁵³

The African Charter on Human and Peoples' Rights 54

Article 24 of the Charter provides for the right to a healthy environment, and, therefore, places responsibility on members of the African

⁴⁴ *Ibid*.

Arif Ahmed and Jahid Mustofa, 'The Role of Soft Law in Environmental Protection: An Overview', (2016) 4 (2) Global Journal of Politics and Law Research 2.

⁴⁷ International Court of Justice, Corfu Channel (United Kingdom of Grat Britain and Northern Ireland v. Albania, https://www.icj-cij.org/en/case/1 accessed December 18, 2022.

⁴⁸ This Convention entered into force in 1988.

⁴⁹ Hakeem, Mutiat and Jimoh *supra* 33 p. 37.

⁵⁰ It came into force in January 1989.

⁵¹ Also known as the Kyoto Protocol, it came into force in February 2005.

⁵² Edith Forsyth & Kimberly Winston, 'Kyoto Protocol Overview, Pros & Cons', https://study.com/learn/lesson/kyoto-protocol-overview-pros-cons.html accessed 20 October 2022.

Ibid.

⁵⁴ This Charter was adopted in 1981 by the Organization of African Unity, now known as the African Union (AU).

Union to ensure the provision of a healthy and clean environment. It is important to note that Nigeria has adopted this provision of the Charter through the act of domestication.⁵⁵ The Charter is now part of Nigerian Law, this is by virtue of the African Charter on Human and Peoples' Rights (Ratification and Enforcement Procedure) Act Cap A9 LFN 2004.

Article 24 states that 'All peoples shall have the right to general satisfactory environment favourable to their development'. With the adoption and domestication of the law, African Charter fully becomes an integral part of the Nigerian law.⁵⁶ Thus, the inconsistency requirement in Section 6 (6) (c) of the Constitution have not been violated.⁵⁷ Section 20 of the 1999 Constitution provides that 'the State shall protect and improve the environment and safeguard the water, air and land, forest and wildlife. Although the right to environmental protection is guaranteed in the constitution, sadly, the above provision is not enforceable before the Nigerian courts. This is because section 20 of the constitution falls under Chapter II referred to as "Fundamental Objectives and Directives Principles of State Policy". All matters in this chapter of the constitution are not justiciable. Meaning that aggrieved citizens of the country whose fundamental rights have been violated upon cannot seek redressal at the court of law.

According to *Emejuru*, since the African Charter on Human and Peoples has been domesticated and now is the part of domestic law, the Nigerian Courts certainly assume jurisdiction to apply provisions of the Charter.⁵⁸ Thus, a citizen who feels his/her rights under the provisions been breached should be able to get redressal in the Nigerian courts.⁵⁹ For the citizens of the country to fully enjoy the environmental rights provided in Section 20 of the Constitution, this section on the environment should be removed from Chapter II of the Constitution through an amendment in order to protect, improve and safeguard the citizens' right to clean environment.

Arguably, these international instruments on environmental protection have not significantly helped in combating environmental challenges within the international community as a result of the lack of enforcement at national level. The absences of a known monitoring body to ensure compliance together with no judicial institution on environment have made it difficult to enforce compliance of the international conventions on the environment. The authors argue that for there to be a quick end to gas flaring and other environmental challenges, the international community need to go beyond the adoption of international conventions and protocols on environment, to taking more proactive steps. In this regard, the following suggestions are proffered:

⁵⁵ Referred to as the African Charter on Human and Peoples' Rights Ratification Act, Cap. A9, Laws of the Federation of Nigeria 2004.

Emejuru Emenike, Ebikaka Nwanyanwu & Chukwuma Ajie, 'Right to a Healthy Environment in Nigeria and Other Jurisdictions: A Legal Assessment' (2020) 8 (3), Global Journal of Politics and Law Research 9.

⁵⁷ *Ibid*.

⁵⁸ *Ibid*.

⁵⁹ *Ibid*.

- The creation of a powerful international monitoring body on environment to ensure full compliance with the conventions as adopted.
- ii) The establishing of an International Judicial Institution (Court) on Environment for quick trial and prosecution of offending States, multinational oil companies. The Court could also serve as inter-states environmental disputes resolution mechanism. This can be achieved by incorporating environmental crimes into already existing judicial institutions both at the international and regional levels.

4.2 National Legislations for Arresting the Scourge of Gas Flaring in Nigeria

Acknowledging the negative effects of gas flaring on human lives and the environment, the Nigerian government had at different times made efforts to combat gas flaring. The first regulation in this regard was the promulgation by the government of the Associated Gas Re-injection Act 1979.

Associated Gas Re-injection Act 1979

Thus, in 1984, the Associated Gas Re-injection (Continued Flaring of Gas) Regulation was subsequently promulgated. The purpose of this piece of legislation was to compel the multinational oil companies to conserve the huge gas reserves of Nigeria, develop and process natural gas for domestic and industrial usage.⁶⁰ Section 1 of the Act ensures that oil companies can only flare gas from specific oil fields on satisfying the under listed requirements:

- i) In the event that above 75 percent of the gas produced has been conserved.
- ii) Where in the process of utilization or conservation equipment in use failed, provided that such equipment failure does not occur frequently.
- iii) Where oil is produced from an oil well which does not meet the requirement stated in the guiding laws.⁶¹

The implication of this therefore, is that the Minister of Petroleum Resources can legitimately under the present legal regime authorize the flaring of gas into the atmosphere where the oil companies have met the above stipulated conditions.⁶² Arguably, this is done undermining the health and environmental impacts of the inhabitants of the Niger Delta region of Nigeria.⁶³ However, the Associated Gas Re-injection (Continued Flaring of Gas) Regulations failed to realize its purpose of ending gas flaring, because

⁶⁰ Lawrence Atsegbua supra 16 p. 307.

⁶¹ Eghosa Ekhator, *supra* 5 p. 5.

⁶² Ibid.

⁶³ Section 3(2) (a) of the Associated Gas Re Injection Act (Amendment) 2004. This section of the Act allows the oil companies to flare gas with the permission of the Minister of Petroleum. The Act directs the Multinational Companies to provide plans for the utilization of gas. The author argues that the minimal sanctions provided by the AGRA has not in any way deterred the oil companies from ending the menace of gas flaring.

the multinational oil companies considered it attractive and cheaper to vent gas than to embark on gas re-injection scheme that they saw as very expensive in terms of acquiring the needed storage equipment.⁶⁴ Sadly, the oil companies have refused to comply with government deadlines and directives to end gas flaring and this could be attributed to the fact that the government lacks the will power to enforce compliance and adequately sanction the multinational companies.

Sections 33 (1) and 34 (1) 1999 Constitution as Amended

This represents another major legislative effort in fighting against gas flaring in Nigeria. These provisions of the Constitution guarantee the right to life, and dignity to humans. The enjoyments of the above listed rights, therefore, are predicated on the availability of clean and healthy environment. However, under the present constitutional arrangement, these rights are not justiciable as earlier observed, because Chapter 2 of the 1999 Constitution, particularly Section 20, makes it unenforceable against the government in the event of its failure to protect the environment from harmful effects.⁶⁵ Thus, the 1999 Constitution does not offer individuals or groups any form of redressal or remedy for breach of their environmental rights.⁶⁶

The Flare Gas (Prevention of Waste and Pollution) Regulations 2018

This was also enacted to stop gas emissions that is, the venting of natural gas in the country. The essence of this regulation was basically to implement the polluters pay principle, wherein the oil companies were to pay with carbon tax. The Regulation also seeks to increase the fine payable by the defaulting companies. Under the Regulation, oil companies were directed to disclose the exact figure of gas flared, they were similarly mandated to grant undeniable access to specific sites of the flare.⁶⁷ Failure to comply with the above directives could mean either suspension or termination of license of such erring multinational oil company. It could be argued that the regulation has also not been able to combat gas flaring in Nigeria for lack of effective monitoring and enforcement by the appropriate government agencies saddled with the responsibility of such enforcement.

Harmful Waste (Special Criminal Provisions) Act

Similarly, the Harmful Waste (Special Criminal Provisions) Act⁶⁸ was enacted to make it unlawful to dump all forms of harmful waste on any piece of land, air or body of waters in Nigeria without obtaining the required permission.⁶⁹ The Act provides against the acquisition, deposit or storage of toxic waste.⁷⁰ The Act prescribes life imprisonment as penalty for violating its provisions.

⁶⁴ Lawrence Atsegbua supra 16 p. 308.

⁶⁵ Olusola Joshua *supra* 2 p. 239.

⁶⁶ *Ibid*.

⁵⁷ Ibid.

⁶⁸ Harmful Waste (Special Criminal Provisions) Act 2004, Cap. HI, LFN.

⁶⁹ Eghosa Ekhator, *supra* 5 p. 83.

⁷⁰ Section 6 of the Act.

The National Environmental Standard Regulation (Establishment) Agency (NESREA) Act 2007⁷¹

The Agency was established to monitor and enforce all laws on the environment. Section 7(c) of the Act mandates it to enforce and ensure compliance with relevant international agreements on environmental preservation in line with the national policy on the environment.⁷² The Act outlaws the unlawful discharge of harmful substances into the environment without the requisite permission.⁷³ The Agency also has the responsibility to monitor compliance with stipulated standards and subsequently prosecute offenders in line with the Act.⁷⁴ The Act gives the Agency the power to set up mobile courts for the quick trial of offenders and violators of environmental laws.⁷⁵ The Act gives the Agency the power to set up departments and offices as it so desires to enable it carry out its functions seamlessly.⁷⁶

Arguably, some major flaws are identified in the NESREA Act. The Act no doubt makes elaborate provisions on environmental protection for the benefit of human beings and the environment at large; however, the Act does not give the Agency authority over matters bordering on crude oil and natural gas.⁷⁷ Thus none of the provisions of the Act directly or expressly prohibits the flaring of natural gas. Again, one wonders why the powers of the agency do not extend to hazardous wastes like gas flaring.

Other kinds of environmental pollution carried out by the multinational oil companies are similarly excluded from the operation and capacity of the agency.⁷⁸ Oil companies operating in Nigeria must be adequately and timely punished for acts of environmental pollution committed by them. These exclusions, however, are considered a serious *lacuna* in the Act, which needs an urgent amendment if the fight against gas flaring in the country will be nipped in the bud any time soon.⁷⁹

Thus, for the Agency to be able to carry out its international obligations in respect to international agreements on environment, such compliance must be subject to act of domestication in line with the practice of the National Assembly.⁸⁰

The Petroleum Industry Act 202181

The signing of the Petroleum Industry Act (PIA) expectedly ends several years of efforts by stakeholders to reform the Nigerian oil and gas industry, with the purpose of creating an industry considering more

The agency was established on the 31July 2007, published in the FRN Official Gazette, No.92, Vol.94.

National policy on Environment 1989.

⁷³ Section 8 (d) of the Act.

⁷⁴ Section 8 (e) of the Act.

⁷⁵ Section 8 (f) of the Act.

⁷⁶ Section 10 (5) and (6)

Hakeem, Mutiat and Jimoh, *supra* 33 p. 40.

⁷⁸ Section 8 (g) of the Act.

⁷⁹ Olusola Joshua, supra 2, p. 241.

⁸⁰ Section 12 (1) of the 1999 Constitution as amended.

Signed into law on 16 August 2021 to repeal the extant Petroleum Act 2004.

proactive and purposeful for improving the sector and addressing the agitations of the oil producing host communities. The PIA makes provision for two regulatory agencies, the Nigerian Upstream Petroleum Regulatory Commission and the Midstream and Downstream Petroleum Regulatory Authority, which will be fully responsible for the technical and commercial regulation of petroleum operations and shall also have the power to acquire, hold and dispose of property as well as sue and be sued in their own name.

The PIA creates provisions and innovations that will impact the private, public sectors and all the stakeholders in the Nigerian oil and gas industry. The Chapter 5 of the Act has as its main objectives as follows:

- To create effective management institutions for the petroleum industry.
- ii) To promote transparency, good governance and accountability in the administration of the petroleum industry in Nigeria.
- iii) To ensure compliance with the applicable laws and regulations governing the upstream petroleum operations.
- iv) To foster sustainable peace and prosperity within host communities and provide direct social and economic benefits from petroleum operations to host communities. etc. 82

The Petroleum Industry Act 202183 prohibits gas flaring and other kinds of environmental pollution. An oil and gas operator shall not flare or vent natural gas expect:

- a) In the case of an emergency;
- b) In line with permission granted by the commissioner;
- c) As an acceptable safety practice under established rules.84

A licensee or lessee intending to produce natural gas is expected to, within a period of 12 months of the effective date, submit natural gas elimination and monetization plan to the commission, which shall be prepared in line with the regulations made by the commission under the Act.85

Such an operator is expected before beginning petroleum production to install metering equipment conforming to the specified facility from which natural gas may be flared or vented as the commission or authority may prescribe in a regulation.86 Where a licensee, lessee, or an operator violates the provisions of the Act, such a violating operator shall pay a penalty prescribed pursuant to the Flare Gas (Prevention of Waste and Pollution) Regulations 2018.87 This regulation aims to reduce the environmental and social impact caused by the flaring of methane or natural gas, protect the environment, prevent waste of natural resources and create economic benefits from gas flare capture. Section 2 (1) of the regulation gives the federal government ownership over associated gas and the MNCs can flare gas free of cost and without payment of royalty. By the regulations, oil producers may only flare gas as permitted under the provisions of the

Lawrence Atsegbua supra 16, pp. 43-45.

Petroleum Industry Act, No.6, 2021.

Section 104 (a-c) Petroleum Industry Act 2021.

⁸⁵ Section 108 Petroleum Industry Act 2021.

⁸⁶ Section 106 Petroleum Industry Act 2021.

The Regulations effectively commenced operation on the 5 July 2018.

Associated Gas Re-injection Act, as permit holders are not allowed to engage in routine gas flaring.⁸⁸ The Regulation also requires producers to provide flare gas data within 30 days upon request by the relevant agency.⁸⁹ Such oil producer is liable to penalties or possible imprisonment where incorrect data is tendered.⁹⁰ One major flaw identifiable with the Regulation is that it permits operators to flare gas due to safety reasons. This could be another open cheque for the oil companies to stylishly continue with the act of gas flaring as it would be difficult on the part of government to determine and monitor.

The commission may however, give permission to a licensee or lessee to flare or vent natural gas for a specific period of time for the purpose of facility start-up or strategic operational reasons including testing. It is interesting to note that a major innovation of the Petroleum Industry Act is the transfer of gas flare penalties paid by operators to oil-producing communities to solving problems of gas flaring within the communities. Thus, money received from gas flaring penalties by the commission will be used for the purpose of environmental remediation and relief for the host communities. The authors argue that if this very provision of the Act is transparently implemented, then, the agitations of the Niger Delta oil producing communities would be reasonably reduced, thereby, giving them a relief.

The PIA that represents a new regulatory framework and governance in the Nigerian oil industry has repealed the Petroleum Act of 1969. It is, however, criticized on the basis of the following provisions of the Act:

i) Section 240 (2)93 reads as follows:

"Each settlor, where applicable through the operator, shall make an annual contribution to the applicable host community development trust fund of an amount equal 3% of its actual operating expenditure in the immediately preceding calendar year in respect of all petroleum operations affecting the host communities for which the applicable host community development trust was established."

The 3% contribution to be made annually by operators to the host communities to create social infrastructure and improve their environment have been criticized and rejected by the Niger Delta oil producing region of the country for being too minimal compared to the huge mineral resources, which is extracted from their soil. Therefore, they are calling for an amendment of this section towards an increased contribution by the operators. 3% contribution to host community cannot be considered sufficient to stop agitation from a region which has suffered environmental degradation and neglect for several decades. Considering the high level of

Flare Gas (Prevention of Waste and pollution) Regulations 2018, https://www.iea.org/policies/8675-flare-gas-prevention-of-waste-and-pollution-regulations-2018> accessed 20 October 2022.

⁸⁹ Section 4 (2) of the Regulation.

⁹⁰ Section 5 of the Regulation.

⁹¹ Section 107 Petroleum Industry Act 2021.

⁹² Section 104 (2) Petroleum Industry Act 2021.

⁹³ Section 240 (2) of the Petroleum Industry Act, 2021.

environmental degradation and its impact on human lives the call for upward review of the 3% contribution to the host communities is a request in the right direction.

ii) Section 53(1),94 provides thus:

The Minister shall within 6 months from the commencement of this Act cause to be incorporated under the Companies and Allied Matters Act, a limited liability company, which shall be called Nigerian National Petroleum Company Limited (NNPC Limited).

The import of this section is the legitimized privatization of the NNPC. The Act, therefore, commercializes the state-owned enterprise, thus converting NNPC to NNPC Limited, which is now a commercial entity. The ownership of shares shall be vested with the federal government and the Ministries of Finance and Petroleum shall hold the shares on behalf of the federal government. Arguably, conversion of NNPC into a limited liability company is considered a ploy by a few powerful individuals in the country to gather the nation's profit from the oil sector into private pockets. By this section of the Act, there has been a shift from an enterprise of public and social good to individual benefits. The authors believe that privatization of the cooperation will not be in the best interest of Nigerians, because this provision of the Act will help facilitate the robbing or stealing of the national wealth belonging to the people and legitimately hand it over to a few private individuals.

iii) Section 104 (1-2)⁹⁵ provides as follows:

"A licensee or lessee or operator shall not flare or vent natural gas except:

- i) In the case of an emergency;
- ii) Pursuant to an exemption granted by the Commission;
- iii) As an acceptable safety practice under established regulations."

By this provision of Section 104 (1) and (2), the PIA arguably has purposely opened the floodgate for the multinational oil companies to continue the act of gas flaring rather than enforcing compliance. By creating conditions under which oil companies can flare gas and pay penalties to the Midstream Gas Infrastructure Fund, the Act by this has already opened the window for the continuation of gas flaring in the country. The authors thereby advocate that this section should be expunged from the PIA. This is because it creates continuous room for gas flaring to the detriment of the Niger Delta oil producing communities.

iv) Section 257 (2)% reads thus:

"Where in a year, an act of vandalism, sabotage or other civil unrest occurs that causes damage to petroleum and designated facilities or disrupts production activities within the host community, the community shall forfeit its entitlement to the extent of the cost of repairs of the damage that resulted from the

95 Section 104 (1), (2) Petroleum Industry Act, 2021.

⁹⁴ Section 53 (1) Petroleum Industry Act, 2021.

⁹⁶ Section 257 (2) of the Petroleum Industry Act, 2021.

activity with respect to the provisions of this Act within the financial year."

This provision of the PIA strictly imposes the responsibility to protect and secure oil and gas facilities on host communities. The provision suggests that the host communities are either responsible for vandalizing oil and gas facility or facilitates such acts. The paper argues that the destruction of oil and gas installations located within the domain of oil producing communities has always been the activities of dangerous criminals that have even subjected some of the host communities to untold terror over the years. This provision also needs to be expunged from the PIA as it is considered an easy way out to shy away from the responsibility of contributing towards the maintenance and development of the Niger Delta Region.⁹⁷

Atsegbua has argued that the laws on gas flaring have not been effective because the oil producing companies find it easy and cheap to flare gas rather than embark on a gas re-injection project, which is considered very expensive and highly technologically driven. Kachikwu, on the other hand, has advised that for the gas re-injection scheme to effectively yield benefits, the oil operators has to be supported with attractive fiscal incentives. This becomes important as the oil multinational companies have consistently argued that the biggest constraint in ending gas flaring was the shortage of financial resources to construct the needed gas re-injection plant within the spelt out period of time given by the government.

5. COMPARING THE NIGERIAN GAS MANAGEMENT AND VENTING SYSTEM WITH SAUDI ARABIA

Saudi Arabia is one of the biggest oil producers in the world, and at the same time, it is said to have the highest oil reserve. The country's oil production rate is put at 10 million barrels in a day with about 257 trillion cubic feet of gas reserves; 100 making it the fourth largest country with such volume of gas reserves in the world. 101 Aramco, which is the country's own national oil company, produces yearly an estimated natural gas of about 109 billion cubic meters. 102 Although the gas market awareness for the country is relatively a recent one with a very small consumption data base, yet its natural gas utilization level is considered very high. 103 The country's national oil company spends huge sums of money yearly for research and acquisition of relevant equipment for natural gas reinjection projects, which ultimately translates into meaningful utilization of their natural gas. 104

⁹⁷ The Vanguard, 22 November 2010, available at https://www.vanguardngr.com/2010/11/militants-plant-explosives-to-bomb-more-pipelines/amp/ accessed 21 October 2022.

⁹⁸ Lawrence Atsegbua, *supra* 16 p. 308.

⁹⁹ Ibe Kachikwu, 'Legal Issues in Oil and Gas Industry' (1989) 2 (34) Gravitas 39.

Olubisi Oluduro, 'The Legal Implication of Gas Flaring on Climate Change in Nigeria', (2014) 29 Journal of Law, Policy and Globalization 172.

¹⁰¹ *Ibid*.

¹⁰² *Ibid*.

¹⁰³ *Ibid*.

¹⁰⁴ *Ibid*.

While Saudi Arabia operates the monarchical mode of government, the country's oil and gas wealth is vested in the government. Nigeria, on the other hand, runs a federal system of government in which the ownership of oil and gas is vested in the federal government by constitutional and statutory provisions. Naudi Arabia's Ministry of Energy, Industry and Mineral Resources are saddled with the responsibility of developing and implementing policies relating to oil as well as the country's master gas system.

The gas project for Nigeria is implemented by the Nigeria Gas Company under the supervision of the NNPC. According to *Olusola*, the major setback for the Nigerian Gas Company has been lack of competence and corruption of its officials. The National Oil Company of Saudi Arabia strictly carries out enforcement checks to ensure oil companies operating in the country install the needed facilities capable of preventing gas flaring. With this facility in place, it is able to discover incidences of flared gas by the oil companies. While the daily crude oil production of Saudi Arabia is in excess of 10 million barrels, the country has continued to record very low rate of gas flaring when compared to Nigeria which merely produces 2.5 million barrels of crude oil per day. 110

The success that Saudi Arabia has achieved in reducing the incidences of gas flaring in the country is attributed mainly to two factors; first is the fact that it has invested heavily on research, acquisition of relevant technology and effective monitoring of gas flaring preventing installations by the multinational oil companies. Secondly, Saudi Arabia has put in place a good gas policy together with sound legal frameworks for combating gas flaring. The Nigeria government can do well to follow after the steps of Saudi Arabia by formulating a workable gas policy and clear legal frameworks on gas flaring. The strict implementation of the extant legal frameworks by the relevant agencies in Nigeria is also a major key in ending gas venting in the country.

There is need for adequate enforcement of gas flaring laws as well as prompt prosecution of defaulter of such laws. Saudi Arabia through relevant legislations, made it compulsory for oil companies operating in the country to engage the use of gas for electricity production and other ancillary domestic usage. Also, it has through legislation given adequate incentives to the multinational oil companies for the utilization of gas.¹¹²

The Basic Law of Saudi Arabia (Royal Decree No. A/90 dated 27/8/1412 H of March 1st 1992, vests all of the kingdom of Saudi Arabia's oil and gas wealth in the Government

https://www.britannica.com.topic/Basic-Law-of-Government accessed 21 October 2022.
Section 44 (3) of the 1999 Constitution as Amended, and Section 1 (1) of the petroleum Act 1969, "Notwithstanding the foregoing provisions of this section, the entire property in and control of all minerals, mineral oils and natural gas in, under or upon any land in Nigeria or in, under or upon the territorial waters and the Exclusive Economic Zone of Nigeria shall vest in the Government of the Federation and shall be managed in such manner as may be prescribed by the National Assembly".

Olusola supra 2 p. 19.

¹⁰⁸ *Ibid*.

¹⁰⁹ *Ibid*.

¹¹⁰ Olubisi *supra* 99 p. 172.

¹¹¹ *Ibid*.

¹¹² Ibid p. 10.

6. CHALLENGES IN COMBATING GAS FLARING IN NIGERIA

One of the major challenges in arresting the scourge of gas flaring in Nigeria has been the weakness of national legislations on gas flaring and ineffective enforcement of the laws. The enforcement of oil and gas laws in the country more often than not is based on some political or economic factors. Situations where multinational oil companies are allowed to flare gas with the permission of the Nigerian government is a pointer to the weakness of our extant legal frameworks. Thus, strict enforcement and adequate sanctions are required to end gas flaring in the country. The present penalties and fines payable by defaulting oil companies in Nigeria for breach of gas flaring laws and other environmental legislations are insignificant to serve as deterrence to the oil companies who would rather prefer to pay meager fines and then flare gas.¹¹³

Another challenge militating against ending gas flaring is the lack of acquisition of relevant technology. The agencies saddled with the responsibility of regulating the gas industry lack the availability of modern equipment to ascertain the volume of gas flared and the level of environmental damage caused by the oil companies. Often, gas is flared under the guise of unavailable and expensive equipment. In this regard, the government needs to wake up to its responsibility in terms of funding and research directed towards bringing gas flaring to a quick end.

The constitutional provision making environmental breaches non-justiciable before the Nigerian courts is also considered a major challenge. Individuals lack the *locus standi* to pursue environmental rights before the courts. The right of the individual to a healthy environment needs to be protected. Environmental pollution, and by extension gas flaring can to a large extent be curtailed when the multinational oil companies consider the huge financial damages payable to individual victims and other affected entities within the Nigerian State, by so doing, there would be the need to fully comply and respect the extant laws on gas flaring and other related environmental regulations in the country.

7. RECOMMENDATIONS

To end gas flaring in Nigeria, the following recommendations are hereby proffered:

1. The various regulatory agencies in the oil and gas industry need to develop the political will to strictly enforce the extant laws and regulations in operation within the oil and gas industry. This is very important, because thus far, there is no oil and gas regulatory agency in the country that has taken steps to bring legal action whether criminal or civil against the operating oil companies for the environmental degradations caused by them to man and the

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¹¹³ Olusola *supra* 2 p. 243.

¹¹⁴ Section 20 of the 1999 Constitution as amended.

- environment particularly in the Niger Delta region of Nigerian. The lack of prosecution of defaulting multinational oil companies can be seen as giving enough impetus to the operating companies to continue to vent gas in the country.
- 2. Interestingly, the Federal High Court in *Jonah Gbemre v. Shell*¹¹⁵ held that the constitutional rights guaranteed by Sections 33 and 34 of the 1999 Constitution and reinforced by Articles 4, 16 and 24 of the African Charter on Human and Peoples' Rights¹¹⁶ provides rights which inevitably include the rights to a clean, poison and pollution free environment. The court declared that the action of the respondents in allowing and continuing flaring of gas in the applicant's community is a violation of their fundamental rights to clean and healthy environment. The judge further ordered the Attorney General of the Federation to ensure immediate amendment of the Associated Gas Reinjection Act bring it up to speed with Nigeria' human rights obligations under the Constitution and the African Charter.
- 3. There is the need to amend extant environmental laws to adequately extend to environmental degradation such as gas flaring. Example of such laws would include but not limited to the National Environmental Standards and Regulations Enforcement Agency (NESREA). This is because the Agency presently does not have enforcement powers in respect to oil and gas issues. To a large extent, this has prevented the agency from carrying out enforcement actions for environmental pollution occurring within the oil and gas industry.
- 4. The Petroleum Industry Act 2021, which all stakeholders have over the years anticipated as a holistic piece of legislation to bring to the fore the needed reforms in the oil and gas industry in Nigeria, needs amendment for some provisions of the Act that have been criticized for not covering the interest of certain groups in the country. Some of the affected sections include 240 (2), 53(1), 104 (1-2), and 257 9(2) these sections need to be reviewed to accommodate the agitations of the Niger Delta oil producing region of the country.
- 5. The Federal Government of Nigeria need to invest in research and acquisition of modern technology of international standards to enable the relevant regulatory agencies to monitor the level of gas flaring and other forms of environmental problems in the country. Gas flare meters need to be acquired and installed to enable the government take records of the amount of gas flared by the oil companies.
- 6. Nigeria needs an improved gas market as well as local utilization of natural gas. Efforts should be made to improve electricity generation

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Jonah Gbemre v. Shell Suit FHC/B/CS/53/05, 14 November 2005, http://www.climatelaw.org/media/gas.flaring.suitnov2005/ni.shell.nov05.decision.pdf accessed October 11, 2022.

¹¹⁶ Ratified and domesticated by Nigeria, as Cap.A9, Laws of the Federation of Nigeria (2004).

- by engaging the use of natural gas; this may lead to power stabilization and increase in the financial fortunes of the country.
- 7. The provisions of our laws which gives permits to multinational oil companies to flare gas on certain conditions with the consent of the minister of petroleum is considered unacceptable, as it opens the floodgate for continued gas flaring in the country.
- 8. All the stakeholders within the oil and gas industry should always be consulted and carried along by the government in determining the dates and deadlines for ending gas flaring in the country. Government should be firm on dates fixed for ending gas venting.
- 9. Strict punishments and penalties should be enforced for noncompliance with anti-gas flaring laws, to further serve as sufficient deterrence for the oil companies. The fines payable are too minimal.

8. CONCLUSION

From the discussion thus far, gas flaring is a global environmental problem affecting most countries of the world including Nigeria. It has impacted negatively on the people of the Niger Delta area as well as their immediate environment. This paper analysed several steps taken by the Nigerian government and the international community at different times to address the scourge of gas flaring. Although there are a plethora of laws and regulations on gas flaring, the regulatory agencies in Nigeria completely lack the political will or legal backing to strictly enforce such extant laws in the oil and gas industry. This is clearly demonstrated by the fact that no relevant agency of the government has so far prosecuted any multinational oil company for violating any of laws relating to gas flaring in the country.

The authors contend that the reason for the lack of prosecution of the erring oil companies by the government is due to the fact that the government solely looks up to the oil companies to operate its oil and gas sector. Thus, The Federal Government of Nigeria must, therefore, build the requisite human capacity, invest in research and modern technology that can enable it independently control its own oil and gas industry without necessarily counting on the multinational oil companies for oil exploration.

Therefore, to end gas flaring in the country, the established regulatory authorities must be firm in enforcing anti flaring legislations without any recourse to political, economic or other considerations. Implementing total compliance with extant laws and regulations by all stakeholders is certainly the quickest way to winning the fight against gas flaring in Nigeria.

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|---|----------|----------|
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