



AMERICAN JOURNAL OF SOCIETY AND LAW (AJSL)

VOLUME 1 ISSUE 1 (2022)



Indexed in



PUBLISHED BY: E-PALLI, DELAWARE, USA

An Examination of the Legislative Framework on Gas Flaring in Nigeria

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Article Information

Received: September 23, 2022

Accepted: November 10, 2022

Published: November 22, 2022

Keywords

Legislative Framework, Gas Flaring, AGRA

ABSTRACT

The rapid development of the global oil and gas industry has led to an increase in atmospheric emissions which is detrimental to the wider atmosphere. The flaring of gas during oil exploration and production activities alarmingly contributes to the emission of greenhouse gases which contribute to climate change. The enactment of legislation with adequate provisions for reducing and eliminating gas flaring from oil and gas activities cannot be over emphasized. Few countries of the world have successfully eliminated the problem of gas flaring through conservation and the enactment of adequate legislation which prescribes stringent sanctions for defaulters. However, Nigeria is an example of a country with inadequate gas flaring laws. The doctrinal methodology was adopted here in this research. Hence, Both primary and secondary sources of materials were used. This paper examined the effectiveness of the legal frame work and regulatory regimes on gas flaring in Nigeria with a view to determining if the phase-out of the problem can be achieved. This paper found out that the provisions of the Associated Gas RE-Injection Act (AGRA) 1979 and its Regulations of 1984, among other laws, are inadequate for regulating and/or eliminating gas flaring. This paper finally recommended developing more effective laws on gas flaring and methods by which the gas being flared can be conserved to ensure a clean and healthy environment in Nigeria, particularly the Niger-Delta.

INTRODUCTION

Throughout the ages, human societies have altered local ecosystems and modified the climate of the areas they inhabited by their various activities. Relentless population pressure in all the continents of the world has made this impact global in nature. This has resulted in global, agricultural and industrial human activities, leading to high emissions of polyatomic molecules into the atmosphere. Consequently, these emissions have an adverse effect on the earth's climate and have become an issue of international concern in the past few decades. Atmospheric emissions take place at all stages of oil and gas industry activities. (A Y Tayo, 2020). However the continuous flaring of gas to eliminate oil-associated gas is a common practice worldwide. The reasons why this gas is flared include: limited access to international gas markets as well as weak local markets to commercialize the gas; lack of funding to put in place the necessary infrastructure to use the associated gas; and an undeveloped regulatory framework for using that gas. (GGFR report, 2020).

Ownership and Disposition of Oil and Gas Rights in Nigeria

Regarding ownership of oil and gas rights, Nigeria has no private ownership of natural resources. (I T Odumosu, 2006-2007) All oil and gas rights vests in the state that is the Federal government. The Petroleum Act,⁹ the governing statute on petroleum exploration and development in Nigeria, vests the ownership and control of all 'petroleum' in, under or upon any lands in the State.¹⁰

The word 'petroleum' is defined in section 15 of the Act to include: "mineral oil (or any related hydrocarbon) or

natural gas as it exists in its natural state in strata."¹¹ In addition, the Federal Government disposes of oil and gas resources through concessions and several types of contracts and agreements. (Y Omorogbe, 1997). These include the Joint venture (JV) contracts and production-sharing contracts (PSCs). Each type of oil production contract has the capacity to affect the volume of flared gas through the provisions relating to the rights and obligations of operators and Governments in relation to associated gas. (G Franz *et al* 2004).

Under the Petroleum Act, the Government grants concessions to operators in the form of Oil Mining Leases (herein after referred to as OMLs). The procedure for obtaining the OML involves the granting of several levels of licenses in the following order Oil Exploration License (OEL), Oil Prospecting License (OPL), and the OML. It should be noted that the OML is the largest oil and gas right that oil companies can acquire in Nigeria. The Federal Government, through the Nigerian National Petroleum Corporation (NNPC), typically acquires a 60 percent participation interest in companies' OMLs through the JV, which is the most common form of oil and gas agreement in Nigeria. (S A Khan, 1994).

Companies incorporated in Nigeria which already hold an Oil Prospecting License are entitled to the grant by the Minister of a renewable 20 (twenty) year Oil Mining Lease upon discovery of oil in commercial quantities and compliance with all conditions imposed on the lessee is made pursuant to the Petroleum Act. (A Gbite, 2000). Such conditions include the right of the Government to take associated gas produced by the lessee free of cost at the flare or at an agreed cost without the payment of royalty and to pay royalties, rents and taxes due and

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payable in respect of the lease and on the gas produced within the concession.

However, it would appear that concessions are not exclusively granted for natural gas production but are granted to MNCs for exploration and production of crude oil. Given the abundance of Nigeria's natural gas reserves and the scandalous levels of associated gas flared, it is unlikely that any lease would be granted in the medium term for non - associated gas assets. On the other hand, it appears that the nature of the Nigerian Government's agreements with MNCs has a major impact on its regulatory effectiveness.

Indeed, it has been argued that due to the NNPC's JV participation, any regulation would be a regulation of the NNPC, which is an agency of the Nigerian Government.²⁴ Thus, this raises questions of institutional bias and lack of independence on the regulatory effectiveness of the Nigerian government with respect to the oil and gas production.

In addition, it further raises a probable argument that NNPC's participation in each JV implies that it bears the responsibility for flaring about 60 percent of all gas flared in fields covered by JVs in the country. However, the JV agreements designate the companies, and not the NNPC, as operators, so it would appear that the companies are responsible for gas flaring in Nigeria. It is suggested that Odumosu's argument is correct as it appears that the problem of gas flaring would be addressed more expediently if the parties that is the operators and companies (MNCs) who are complicit in carrying out the gas flaring in Nigeria via OMLs should be made to face stringent sanctions and penalties.

Thus, a key component of the Nigerian government's strategy for reducing Nigeria's massive associated gas flaring level is through the enactment of legislation to encourage such oil producing companies to develop programs for the utilization of associated and non-associated gas. (T A Yusuf, 2020). Examinations of the existing gas flaring legislation and the effectiveness or otherwise of the accompanying sanctions are carried out below.

Legislation On Gas Flaring In Nigeria

The Nigerian Government has been fashioning out ways of bringing an end to gas flaring so as to harness the Country's abundant gas reserve. Consequently, the Federal Government is implementing policies that would reduce gas flaring by stimulating domestic gas utilization. In a similar vein, legislation is also put together to address this all important issue. Some of the legislation would be discussed below:

The Petroleum Act (PA) 2004 and the Petroleum (Drilling and Production) Regulations 1969

The Petroleum Act and the Petroleum (Drilling and Production) Regulations (PDPR) 1969 are the two main statutes generally regulating the Nigerian petroleum exploration and production (E &P) sector. Section 9

(1) (b) (iii) of the Act empowers the Minister to make regulations providing for matters relating to licenses, including pollution of the atmosphere. Indeed, gas flaring could be implied into the words "pollution of the atmosphere" as it is a source of atmospheric pollution. Nevertheless, no other specific provisions on gas utilization exist anywhere under the Petroleum Act. However, Regulation 42 of the PDPR requires licensees or lessees (i.e. oil producing companies) to:

" Not later than five years after the commencement of Production submit to the Minister, any feasibility study, Programme or proposal...for the utilization of any natural gas, whether associated with oil or not, which has been discovered in any relevant area."

This was the first major move by the Nigerian State at that time to halt gas flaring in the country by the then military head of State, General Yakubu Gowon. (B Nnimm, 2008) However, this legislation was inherently flawed as it made no provision for sanctions (I M Garba, 2008) on the licensees or lessees in the event of non-compliance. The absence of sanctions rendered the legislation ineffective in every sense, an example of a pattern which the majority of Nigerian oil and gas legislation follows. In view of the fact that the licensees/lessees had paid little or no attention to the 5year deadline and had nothing on ground to utilize the natural gas, (Nigerian Gas Flaring Fact Sheet, 2020). the government was forced to shift the deadline to 1979. That same year, the Associated Gas Re-Injection Act No. 99 of 1979 was promulgated.

Associated Gas Re-injection (Continued Flaring of Gas) Regulations 1984

The major statute addressing gas flaring reduction in Nigeria is the Associated Gas Re-injection Act (AGRA) 1979. This Act was promulgated ostensibly to fill the vacuum left by the Petroleum Act and its Regulations.(I M Garba, 2008). Essentially, the Act is aimed at compelling every oil and gas producing company in Nigeria to submit preliminary programmes and implementation plans for gas re-injection. The AGRA applies to all associated gas in lands as defined in section 1 of the Petroleum Act and the Exclusive Economic Zone of Nigeria. Section 1 of the AGRA States that notwithstanding the provisions of Regulation 42 of the PDPR made under the Petroleum Act, all oil and gas producing companies in Nigeria shall submit a preliminary program to the Minister providing schemes for the viable utilization of all associated gas and projects to re-inject all non-associated gas not later than 1 April 1980.

However, the Act further required that not later than 1st October, 1980, every oil and gas producing company in Nigeria should submit to the Minister, detailed programmes and plans for either the implementation of programmes relating to the re-injection of all produced associated gas or schemes for viable utilization of all produced associated gas. The wordings of the above provisions appeared to compulsorily mandate oil and gas producing companies to submit such programs, plans

and schemes between April and October 1980. Thus, it is surprising that the same Act empowers the Minister to issue a certificate of exemption to oil and gas producing companies exempting them from the provisions of AGRA where gas re-injection is inappropriate or not feasible, subject to any conditions that he may impose at his discretion. Such certificate of exemption could also permit such company to continue flaring gas if the company pays a particular sum prescribed at the discretion of the Minister for every 28.317 standard cubic metre (SCM) of gas flared. One would have expected the Nigerian Government to stipulate exactly how much such company would be liable to pay if it is permitted to continue flaring gas, to buttress the seriousness of the consequences of gas flaring. This is one example of a loophole contained in the AGRA.

Interestingly, Section 3(1) of the Act prohibited flaring of gas by oil and gas producing companies after 1 January 1984 without the written permission of the Minister for Petroleum Resources. Continued flaring of gas after 1 January 1984 constituted an offence. The penalty for such offence was forfeiture of the concessions granted to licensee/lessee in the particular field (s) in which the offence was committed or repair or restoration of any reservoir in the field in accordance with good oil-field practice. Arguably, the AGRA does have a permanent plan to stop the flaring of Gas in Nigeria given the conditions set out in section 1 of the Associated Gas Re-Injection (Continued Flaring of Gas) Regulations 1984 but contains no provisions on payable fines for continuous gas flaring. (B E Umukoro, 2020).

The Associated Gas Re-Injection (Continued Flaring of Gas) Regulations (“AGRA Regulations) of 1984 was made pursuant to the AGRA and amends the AGRA. The conditions set out in section 1 of the AGRA Regulations are to the effect that the Minister is empowered to issue a certificate for the continuation of flaring of gas in particular field (s), if one or more of the following conditions are satisfied:

- (a) Where more than 75 percent of the produced gas is effectively utilized or conserved;
- b) Where the produced gas contains more than fifteen percent impurities,
 - such as N₂, H₂S, CO₂, etc., this renders the gas unsuitable for industrial purposes;
- (c) Where an on-going utilization programme is interrupted by equipment failure, etc.

The implication of this is that the Minister shall continue to permit the flaring of gas in Nigeria as long as a desiring oil and gas producing company satisfies one or more of the above conditions. This by extension reveals the unwillingness of the government to stop gas flaring.

However, the limited exemptions for flaring set out in section 1 of the AGRA Regulations was further strengthened in 1985 with another amendment which fixed a fine of 2 Kobo (equivalent to US\$.0009) against the oil companies for each 1000 standard cubic feet (SCF) of gas flared. This amount was regarded as being

too meager, even at a time when the Nigerian Naira still possessed great value, and thus the fine didn’t provide any incentive to induce the companies to reduce flaring.

These fines were later raised in January 1998 to 10 Naira (US\$11) for every 1000 SCF of gas flared. This ridiculously low fine for flaring gas by oil producing companies did little or nothing to them as it was cheaper for the oil companies to pay the penalty than build a facility to collect and transport the gas flared for alternative use as a fuel or for electricity generation. (T A Yusuf, 2020).

From the above, we see a trend in the deadlines which the Nigerian Government has set to stop gas flaring. The first deadline was set in 1969 and the next deadline was next set by the Government in 1984(that is 15 years after the first deadline of 1969 was fixed!). These deadlines were never respected by oil and gas producing companies and the Government has resorted to shifting them according to the pleasure of the MNCs through executive orders embedded in speeches and remarks and without any backing by law. (S Akanimo, 2020)

Thus, in response to international and local pressure, the Federal Government of Nigeria pledged to halt gas flares in Nigeria and set January 1, 2008 as its “flare-out” deadline. This deadline was not to be actualized as President Umaru Yar’Adua shifted the deadline for gas flaring from January 1, 2008 to December 31, 2008 at the International Gas Stakeholders Forum, Abuja, Nigeria in November 2007 despite the clamour of Nigerians and citizens of the world that gas flaring should be stopped at the close of 2007.

This continuous shift in deadlines by the Federal Government of Nigeria shows the lackadaisical attitude of the Government towards phasing-out gas flaring completely from Nigeria. This is surprising in view of the harmful effects which gas flaring subjects the environment and health of Nigerian citizens. Bassey⁵⁴ aptly summarizes the situation when he describes the MNCs and the Nigerian government as “the players as well as the umpires in the game of gas flaring who can freely shift the goalposts as they please. (B Nnimmo, 2008).

The Federal Environmental Protection (FEPA) Act 1988

The Federal Environmental Protection Agency (FEPA) Act 1988 is arguably the most comprehensive framework legislation for environmental protection in Nigeria. The Act incorporated most of Nigeria’s national commitments under the UNFCCC and other multilateral environmental agreements (MEAs). (I M Garba, 2008). The Act also incorporated most of the government’s policy and commitments on environmental management enshrined in the National Policy of Environment (NPE) which was launched on 27th November 1989. One of the policy goals enshrined in the NPE is to secure for all Nigerians a quality of environment adequate for their health and well-being. (National Policy on the Environment, 2008). The Environmental Protection Agency (FEPA), duties

include, *inter alia*, rendering advice to the Federal Military Government on national environmental policies and priorities and scientific and technological activities affecting the environment. The FEPA Act was amended by an Amendment Act of 1992⁶¹ and by virtue of section 17 of that Act, which is headed “Air quality and Atmospheric protection” FEPA is empowered to:

Establish more criteria, guidelines, specifications and standards to protect and enhance the quality of Nigeria’s air resources and to promote the public health or welfare and the normal development and productive capacity of the nation’s human, animal or plant life.

This provision includes establishing minimum essential air quality standards for human, animal or plant health, the control of concentration of substances in the air which may result in damages or deterioration of property of human, animal or plant health, prevent and combat various forms of atmospheric pollution,⁶⁵ and the employment of all appropriate means to reduce emissions to permissible levels.

The weakness inherent in this Act is that there is no specific reference made to air pollution arising from gas flaring. Considering that the FEPA Act was the principal framework legislation in Nigeria at the time, it is surprising that the military government at the time did not contemplate the problem of gas flaring and make specific provisions to that effect within the Act. It could be argued therefore that the FEPA Act merely contemplates such air pollution like emissions from automobiles, factories and power generating plants in its bid to ensure air quality. (B E Umukoro, 2020).

However, following a re-structuring programme by the Nigerian government in 1999, FEPA was upgraded to a full-fledged federal ministry called the Federal Ministry of Environment (FMENV). The FMENV was established as the apex authority on the Environment and assumed the responsibilities of the then FEPA. (FMENV, 1999). The instrument which set up the FMENV also transferred to it the Oil and Gas Pollution Control Unit of the Department of Petroleum Resources (DPR). In addition, the FMENV in response to current demands of Nigeria’s international obligations, and in accordance with NPE, drafted the National Environmental Management Act (NEM Act), which, *inter alia*, incorporated the current government policy on gas flaring elimination, and the utilization of Nigeria’s gas resources. The role of the DPR and its attempt to stop gas flaring is examined below.

Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN) 1991

The Petroleum Act, 1969 empowers the Minister of Petroleum Resources to make regulations for the prevention of pollution of water courses and the atmosphere. These regulations made include the Petroleum Regulations 1967, the Petroleum (Drilling and Production) Regulations 1969 and the Oil in Navigable Waters Act 1968. The regulations authorize the issue

of licenses/permits and establishment of guidelines, standards and procedures for environmental control. EGASPIN was made by the Department of Petroleum Resources pursuant to the provisions of these regulations. The DPR is responsible for administering and ensuring that Multi-National Companies (MNC) complies with the provisions of EGASPIN. One of the objectives of EGASPIN is to “establish Guidelines and Standards for the Environmental Quality Control of the Petroleum Industry taking into account existing local conditions and planned monitoring programmes.”

Part III, Paragraph 3.8.8 of EGASPIN reiterates the AGRA provisions that gas flaring is prohibited. However, EGASPIN goes further to set some conditions should the licensee/operator “be constrained to flare gas” These conditions are to the effect that:

- a. An appropriate waiver and a permit to flare the gas must be issued by the DPR
- b. The flared gas should attract an appropriate fine for every SCF flared in accordance with existing laws;
- c. Pre-treated ‘clean’ gas shall be burnt and the flare shall be luminous and bright to show complete smokeless combustion at operating gas flow rate;
- d. The allowable heat radiation at ground level is 6.3 kw/m² during maximum flaring at a distance of 60m from the base of the flare;
- e. A maximum sterilized approach distance of 60 metres radius, measured from the base of the stack shall be maintained. No other equipment except that related to the flare itself shall be located within this area.
- f. The noise levels for unprotected ears at 60m radius from the flare stack shall be well within the threshold of pain (80-100dBA);
- g. Purging of the flare headers shall be designed to minimize emissions to air, by considering e.g. a closed loop hydrocarbon purge gas system or use of nitrogen gas as purge gas; and
- h. Relief valves, blow down valves and control valves to flare shall be closed during service and leakages minimized. Failure to comply with the conditions set out above constitutes an offence and a body corporate or MNC, its directors and/or relevant management staff shall be liable to fine, imprisonment and/or revocation of their license/permit.

These provisions of EGASPIN are indeed laudable as they refer specifically to gas flaring and take into account the health and safety aspects and sets environmental standards. However, the ineffectiveness of EGASPIN lies in the lack of capacity/manpower in enforcing these standards for gaseous emissions from E&P. Most MNCs situate the flare stacks right within metres of residential communities in the Niger Delta and there is insufficient manpower to compel them to desist from such.

Indeed, it is still quite common to see women drying ‘garni’ and fish at flare sites, bearing the searing heat of the gas flares, despite the fact that EGASPIN sets a ‘maximized sterilized approach distance of 60metres radius’ which should be maintained from the base of the stack.” This

practice of frying this garri is likely to be continued for a while until the Federal government addresses the issue of capacity within the DPR.

In accordance with the provisions of EGASPIN, the Guidelines were reviewed late in 1998, and again in 2002, 11 years after it was first established. In spite of this revision, no further additions were made to the issue of gas flaring within the Guidelines. It is hoped that further amendments to these Guidelines will herald more effective provisions empowering the DPR to impose penalties on MNCs who do not comply with standards set within the Guidelines.

Environmental Impact Assessment (EIA) Act 1992

The Environmental Impact Assessment Act (EIA Act) 1992, commenced on 10 December 1992. It is geared towards, *inter alia*, encouraging the development of procedures for information exchange, notification and consultation between organs and persons when proposed activities are likely to have significant environmental effects on boundary or trans-state or on the environment of bordering towns and villages.

The Act requires the public and private sector of the nation's economy to carry out environmental impact assessments (EIAs) 'where the extent, nature or location of a proposed activity is such that it is likely to significantly affect the environment.' Interestingly, an EIA is compulsory where a public or private institution or agency intends to develop oil and gas fields, construct oil refineries, pipelines and oil and gas separation, processing and storage facilities.

Accordingly, since the flaring of gas occurs during oil and gas fields development and oil and gas separation, it would appear that carrying out of EIAs are mandatory before gas can be flared anywhere in Nigeria. Additionally, the EIA Act requires that before an EIA is to be carried out, certain factors should be taken into consideration namely; the cumulative environmental effects of the project, the significance of the project, comments concerning those effects received from the public, and measures which are technically and economically feasible and that would mitigate any significant or serious adverse environmental effects of the project.

These provisions are laudable as the environmental and socio-economic effects of a project like gas flaring is taken into consideration under the Act, considering the fact that gas flaring has deleterious effects on the environment. FEPA is the competent authority responsible for the administration of the EIA Act and works in conjunction with the Ministry of Petroleum Resources (MPR). In fact, in 1994, FEPA published a document titled *EIA Guidelines for Exploration and Production Projects (E&P) Projects*.

It requires that mitigating measures to preserve air quality must specifically include the minimization of venting (of gas) during production. (Gas Flaring in Nigeria, report 2022). So, from the provisions of the EIA Act, it appears that the flaring of gas by MNCs can only be done subject to carrying out an EIA which is to be monitored by both

FEPA and the MPR. However, this dual role played by both agencies in enforcing the provisions of the Act has led to jurisdictional conflicts between both regulatory agencies and thus, resulted in an inadequate monitoring of EIA procedures. The officers of the regulatory agency lack the requisite expertise and equipment to determine the economic and environmental feasibility of a gas flaring project and there is the absence of requisite manpower to monitor the adequacy of the EIA procedures submitted by the MNCs. Thus, the EIA Act is instrumental to the elimination of gas flaring if properly enforced as the requirements of compulsory EIAs for gas flaring is one way in which the problem can be gradually phased-out.

Niger Delta Development Commission (NDDC) Act 2004

The Niger Delta Development Commission Act ("NDDC Act") was established by the Federal Government in 2000, in sensitivity to the plight of oil producing communities in the Niger Delta. The Act also establishes the Niger Delta Development Commission (the "Commission"). The Commission is empowered to, *inter alia*; tackle the "environmental problems that arise from the exploration of oil mineral in the Niger Delta area and the giving of advice to the Federal Government and the member States on the prevention and control of oil spillage, gas flaring and environmental pollution."

In view of the fact that the Niger Delta people of Nigeria are most affected by gas flaring, this Act and the establishment of a Commission to that effect was hailed as a welcome development. However, instead of alleviating the environmental and health problems of the people of that region as a result of gas flaring and other E&P activities, the Commission is blatantly nonchalant and has not even begun implementing the provisions of the NDDC Act in full in the Niger Delta over 15 years after its establishment! This is as a result of corruption within the Commission and a blatant disinterest by the government on activities relating to the environment.

Existing Gas Projects In The Country Aimed At Phasing Out Gas Flaring

With a view to phasing out gas flaring in Nigeria, the government has also invested in various gas utilization projects aimed at absorbing flared gas. Some of these projects will be examined below:

The Nigeria Liquefied Natural Gas (NLNG)

The Nigerian Liquefied Natural Gas (NLNG) Project is located in Bonny Island in the Southern part of the country and is the single largest natural gas utilization project in Nigeria. The project is jointly owned by Agip (10.4%), the NNPC (49%), Shell (25.6%) and Total FinaElf (15%). (J A Sonibare & F A Akeredolu, 2020). The objective of the project is to transport associated and non-associated gas by pipelines to a liquefaction plant on Bonny Island. (A Christiansen & T Haugland, 2020). At the plant, natural gas is processed to remove water and

carbon dioxide. The processed LNG, which is a blend of lighter hydrocarbons with methane as the primary component, is then shipped to markets in Europe and the US. This shipment to Europe and the US marked the beginning of Trains 1 and 2 of the \$3.8 billion project. Thus the project includes a three-train liquefaction plant, a 218km gas pipeline system, associated gas utilities, storage and loading facilities as well as other infrastructure investments. The project was set up to serve the Nigerian domestic market and it is estimated that the project serves to increase gas supplies to about 870 million SCF per day with associated gas as the primary supply.

In comparison, Shell Petroleum Development Company's ("Shell") flared gas amounted to 19, 925 million Sm³/d in 1999 while the total volume of gas being flared in 1998 in Nigeria was about 57 million Sm³/d or about twice the size of the NLNG Project. Thus, it appears that the NLNG project will utilize a huge amount of AG and when a third liquefaction train becomes fully operational or other additional production trains are established, the project will mop up about 45 percent of the AG currently being flared in Nigeria and decrease the amount being flared by 60 percent. Indeed, time will tell if this project is effective in the fight to phase-out gas flaring in Nigeria.

The Escravos Gas Project

This project is owned by joint venture between NNPC (60%) and Chevron-Texaco (40%). In September 1997, Chevron Nigeria Limited ("Chevron") started the processing of previously flared gas into natural gas liquids (NGL) and associated liquefied petroleum gases (LPG) and condensate at its Escravos Gas Plant. (H Torlief, 2020). The first phase of the Escravos Gas Project (EGP1) started in September 1997.

It processes 165 million SCF/d of associated natural gas from offshore fields in the Western Niger Delta which is supplied to domestic market by pipeline. (I M Garba, 2008). EGP2, the project's second phase began operations in late 2000 and processes an additional 135 million SCF/d. This second phase aims to sell conditioned gas to regional markets via the West African Gas Pipeline Project (WAGPP), which is examined below. In addition, EGP3 was launched on September 8, 2000, serving as a feedstock for Chevron's Gas to Liquid (GTL) plant aimed at extracting NGL and preparing it for use in a GTL plant adjacent to the gas processing plant.

The 3rd phase was expected to have been completed (Chevron report, 2020). but due to community complaints over the unemployment of local residents to work at the facility, the new completion date was moved to 2009. (Fayzeh report, 2020). However, the three phases are expected to be completed in 2010 with estimated startup date of the entire project put at 2013 by Chevron. (chevron report, 2009).

With the completion of the 3 phases of these projects and the GTL projects the EGP will have the capacity to process more than 19 million Sm³/d of associated gas per year. Ultimately, this means that Chevron will not only have

developed plans to eliminate routine gas flaring from its operations, but also taken steps towards commercializing Nigeria's natural gas resources. (Gasandoil, 2020).

United Nations Environmental Programme (Ogoni Cleanup Exercise)

Covering around 1,000 km² in Rivers State, southern Nigeria, Ogoni land has been the major site of oil industry operations since the late 1950s. Ogoni land has a tragic history of pollution from oil spills and oil well fires, although no systematic scientific information has been available about the ensuing contamination. Studies by the United Nations Environment Programme (UNEP) reveals the nature and extent of oil contamination in Ogoni land. The Environmental Assessment of Ogoni land covers contaminated land, groundwater, surface water, sediment, vegetation, air pollution, public health, industry practices and institutional issues.

The UNEP project team (UNEP report, 2011) surveyed 122 km of pipeline rights of way and visited all oil spill sites, oil wells and other oil-related facilities in Ogoni land, including decommissioned and abandoned facilities, that were known and accessible to UNEP during the fieldwork period, based on information provided by the Government regulators, Shell Petroleum Development Company (Nigeria) Ltd (SPDC) and community members. Undoubtedly, the revenue derived from oil and gas industry in Nigeria has contributed immensely to its economy. However, the problem of gas flaring still exists despite plethora of legislation.

It has been identified that legislation on gas flaring should be further strengthened to tackle the problem. Hence, this research highlights the need for the Nigerian Government to enact and or amend existing legislation on gas flaring in Nigeria in order to effectively eradicate gas flaring in the country. In view of the existing gas flaring regulations in Nigeria and the various gas projects in the country, it appears that the complete phasing-out of gas flaring in Nigeria could become a reality in the very near future.

It is recommended therefore that the existing Nigerian legislation on gas flaring should be revised, with a view to inserting strict and realistic sanctions which could deter Multinational Corporations or Companies (MNCs) from further flaring of gas. It is recommended that the Gas Flaring (Prohibition and Punishment) Bill 2020 shall regulate gas production, transportation and distribution as well as stringent penalties and conditions on flaring.

In order to reduce the amount of gas being flared, the Government should actively mandate each Multi-National Companies (MNCs), operating in Nigeria to submit an Environmental Impact Assessments (EIAs) report before they can be allowed to flare gas. This can effectively be achieved by the engagement of DPR and NESREA professional and technical expertise of these agencies in conducting regular inspections of gas flaring sites to determine if flaring should continue there or not, and also to assess the validity of EIAs submitted by this

MNCs.

CONCLUSION

The Government can adopt the multi-stakeholder approach in solving the problem of gas flaring. Presently in Nigeria, various environmental non-governmental organizations (NGOs) like Friends of the Earth International (FOEI) have brought the issue of phasing-out gas flaring to the forefront of the Nigerian Government's tasks. These NGOs are constantly convening meetings with the Government on the issue in a representative capacity for the people of the oil-producing communities. Therefore, should the Government include public participation as one of its goals in resolving the problem, it will not only be seen as justice to the residents of the Niger Delta, it will also give the citizens the opportunity to contest and express their views on the effects of the activities of the Government and oil companies to their livelihood under the appropriate legal machinery. Thus, public participation forums on gas flaring should include NGOs, the Government, regulatory agencies concerned citizens of Nigeria, lawyers, residents who have been living proximate to the gas flares for the past 70 years and interpreters who can translate the proceedings into clear language for those residents who may not understand the language used in the proceedings.

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