

Mitigation of Greenhouse Gas Emissions from Gas Flaring in Nigeria: Perspectives on Law and Regulation

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ABSTRACT

This thesis explores the practicability of adopting legislative reforms as a solution to the problem of gas flaring in Nigeria. While the thesis does not anticipate solving the problem of gas flaring in Nigeria through legislative reforms in isolation, it argues that legislative reform is an important step that must be undertaken by the Nigerian government as the current statute governing gas flaring is inadequate, ineffective, and unconstitutional. While examining the practicability of legislative reform, this thesis considers whether Nigeria's foreign investment laws, investment treaties and/or private contractual obligations would impede the enactment of new gas flaring legislation and if such legislation would impact on international oil and gas corporations (IOCs) engaged in oil production activities in Nigeria. In ascertaining the practicability of legislative reforms, it considers whether legislative reform would be considered expropriation of an IOC's investment, or whether stabilization clauses in oil and gas contracts would impact the practicability of legislative reforms. The practicability of legislative reform is also considered from the perspective of whether the Nigerian government is currently demonstrating sufficient political commitment to taking steps to reduce gas flaring.

This thesis envisages legislative reforms which are twofold. First, it considers the need to enact new gas flaring legislation in Nigeria in order to address the shortcomings of the current gas flaring legislation. Second, the thesis considers the importance of incorporating some of the relevant international environmental standards on GHG emissions to which Nigeria is a party into domestic laws given the potential impact of gas flaring on climate change. The domestication of these standards will make some of Nigeria's binding commitments in the standards that impact gas flaring enforceable in Nigeria. The new gas flaring legislation will also make reference to those international environmental standards on GHG emissions. In order to achieve these purposes, this thesis presents some of the insights proposed by Institutional Legislative Theory and Methodology (ILTAM) as a possible tool for designing the legislative reforms. The ILTAM offers a guide to lawmakers in structuring evidence-based legislation hinged on factual evidence and public reasoning with capacity for effective implementation.

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CHAPTER 1: BACKGROUND AND INTRODUCTION

1.1 Introduction and Context of Research Problem

Natural gas flaring has become a major source of greenhouse gas (GHG) emissions that has proven intractable to curtail around the world.¹ Gas flaring, which in the context of this thesis, is the burning of natural gas associated with oil and gas production, is one of the most damaging practices in the Nigerian petroleum industry and this has continued to give rise to unimaginable complex consequences in the Niger Delta region of Nigeria, with regard to human health and natural environment.² Nigeria's volume of gas flaring is among the highest in the world and only few countries are ahead in terms of billion cubic meters (bcm) of gas flared yearly.³

This thesis explores the practicability of adopting legislative reforms in Nigeria's oil and gas sector as a solution to the problem of gas flaring in Nigeria. While the thesis does not anticipate solving the problem of gas flaring in Nigeria through legislative reforms in isolation, it argues that legislative reform is a necessary step that must be undertaken by the Nigerian government as the current statute governing gas flaring is inadequate, ineffective, and unconstitutional. While examining the practicability of legislative reform, this thesis considers whether Nigeria's foreign investment laws, investment treaties and/or private contractual obligations would preclude the enactment or enforcement of new gas flaring legislation and if such legislation would impact on international oil companies (IOCs) engaged in oil production activities in Nigeria. In ascertaining the practicability of legislative reforms, it considers whether legislative reform would be considered expropriation of an IOC's investment, or whether stabilization clauses in oil and gas contracts would impact the practicability of legislative reforms. The practicability of legislative reform is also considered from the perspective of whether the Nigerian government is currently demonstrating sufficient political commitment to taking steps to reduce gas flaring. The adoption of the

¹ Bruno Gervet, "Gas Flaring Emission Contributes to Global Warming" (2007) Renewable Energy Research Group Division of Architecture and Infrastructure Luleå University of Technology SE-97187, online: <https://www.ltu.se/cms_fs/1.5035!/gas%20flaring%20report%20-%20final.pdf> at1- 14.

² Anselm Ajugwo, "Negative Effects of Gas Flaring: The Nigerian Experience" (2013) 1:1 Journal of Environment Pollution and Human Health 6 – 8 [Ajugwo].

³ Nick Snow, "World Bank: Worldwide Gas Flaring increased in 2015" online: <http://www.ogj.com/articles/2016/12/world-bank-worldwide-gas-flaring-increased-in-2015.html> [Snow].

National Gas Policy in 2017 and Nigeria's Nationally Determined Contributions (NDC) under the Paris Agreement, as well as other current legislative and stakeholder consultations help, in part, to demonstrate whether legislative reform is a feasible option at this point in time.

The legislative reforms envisaged in this thesis are twofold. First, it considers the need to enact new gas flaring legislation in Nigeria in order to address the shortcomings of the current gas flaring legislation. Second, the thesis considers the importance of incorporating some of the relevant international environmental standards on GHG emissions to which Nigeria is a party into domestic laws given the potential impact of gas flaring on climate change. The domestication of these standards will make some of Nigeria's binding commitments in the standards that impact gas flaring enforceable in Nigeria. The new gas flaring legislation will also make reference to those international environmental standards on GHG emissions. In order to achieve these purposes, this thesis presents some of the insights proposed by Institutional Legislative Theory and Methodology (ILTAM) as a possible tool for designing the legislative reforms. The ILTAM offers a guide to lawmakers in structuring evidence-based legislation hinged on factual evidence and public reasoning with capacity for effective implementation.

Several reasons have been identified within the literature for the continuous flaring of gas in Nigeria. First, gas flaring in Nigeria has been attributed, at least in part, to the nature and ineffectiveness of the principal legislation on gas flaring.⁴ For instance, the *Associated Gas Re-injection Act* (AGRA),⁵ which is the major legislation regulating gas flaring in Nigeria, has been largely of no consequence partly because of its outdated nature since gas flaring was not envisioned to become an issue of serious climatic concern as it has now become.⁶ Similarly, the penalty for gas flaring under the AGRA provides justification for complacency on the part of IOCs and encourages the continuous flaring of gas in Nigeria. In addition, the meager fees paid by the IOCs as penalty for gas flaring are considered as allowable deductions for purposes of payment of petroleum profit tax by IOCs. Also, the provisions of

⁴ Olubisi Oluduro, "The Legal Implications of Gas Flaring on Climate Change in Nigeria" (2014) 29 *Journal of Law, Policy and Globalization* at 171 [Oluduro].

⁵ *Associated Gas Re-injection Act* Cap. A25, Vol. 1, Laws of the Federation of Nigeria, 2004 [AGRA].

⁶ Oluduro, *supra* note 4.

the AGRA are not based on broader environmental principles such as sustainable development and polluter pays principle. The next chapter will extensively discuss these inadequacies of the AGRA that, in part, make legislative reform imperative.

Second, Nigeria has not demonstrated sufficient resolve to implement its own legal frameworks on gas flaring, and other problems emanating from its oil exploration activities, in disregard of the wellbeing of the inhabitants of the vast areas where oil production activities are carried out.⁷ This thesis contends that there are palpable areas of institutional overlap and duplication of the responsibilities of regulatory agencies such as the Department of Petroleum Resources (DPR), National Oil Spill Detection and Response Agency (NOSDREA), and the National Environmental Standards and Regulations Enforcement Agency (NESREA). This intersection in functions and responsibilities results in conflicting roles for monitoring and implementing of the limited gas flaring law. Also, the involvement of the Nigerian National Petroleum Corporation (NNPC) in joint ventures (JVs) with IOCs undermines the regulatory capacity and effectiveness of Nigeria's regulators. However, this thesis does not intend to address the issue of implementation. This stems partly from the fact that the new National Gas Policy and the Petroleum Industry Governance Bill (PIGB) already make robust proposals for the effectiveness of the regulatory agencies in Nigeria's oil and gas sector. In particular, the PIGB and the National Gas Policy provide for the consolidation of the existing regulatory agencies in Nigeria's oil and gas sector. This consolidation aims at addressing the intersection in functions and responsibilities of these regulatory agencies, and ensuring the effectiveness of the regulatory agency. Nonetheless, the monitoring and evaluation mechanism contained in the legislation proposed in this thesis could assist in ensuring effective implementation of the law. It does not usurp the powers of the implementing agency.

Third, the incessant flaring of natural gas in Nigeria is a reflection of an imbalance in the conflicting foreign investment and environmental protection goals in Nigeria. Without doubt, the issue of environmental protection is gradually becoming the subject of some bilateral investment treaties (BITs) signed by Nigeria.⁸ Nevertheless, the country is yet to adequately

⁷ *Ibid.*

⁸ See *Morocco-Nigeria Bilateral Investment Treaty*, 6 December 2016 art 13(4). This treaty is yet to be ratified by the parties.

address the incidence of gas flaring partly because of its emphasis on investment liberalization and investment protection without similar attention to environmental protection. This undue emphasis on investment liberalization and investment protection has resulted in a situation of unevenness between Nigeria's right to regulate its environment and the right of the international oil companies (IOCs) to guaranteed protection under Nigeria's investment laws,⁹ various BITs and customary international law.

Fourth, gas flaring persists as a result of insufficient market and infrastructure for natural gas utilization in Nigeria.¹⁰ Indeed, there is an economic advantage for the proper utilization of natural gas as it could serve as a veritable source of foreign exchange. Associated gas could be conserved and utilized for the purpose of power generation within and outside Nigeria.¹¹ Nonetheless, the World Bank posits that Nigeria flares a substantial amount of gas annually while majority of its citizens lack access to electricity.¹² This thesis does not focus on the problem of insufficient market and infrastructure because it is an issue that could be effectively addressed in policy. The Nigerian government recognizes this and has put in place policy frameworks to respond to the problem. Specifically, Nigeria has endorsed the World Bank's 2030 Zero Routine Flaring Initiative¹³ in addition to designing a National Gas Policy. The National Gas Policy is aimed at achieving gas flare-out in Nigeria through gas utilization. It enunciates the vision of the Nigerian Government, sets out agenda, methodologies and an enforcement blueprint for the institution of a suitable legal and

⁹ See the *Nigerian Investment Promotion Commission Act* CAP N117, Laws of the Federation of Nigeria 2004.

¹⁰ See Ikechukwu Diugwu et al, "The Effect of Gas Production, Utilization, and Flaring on the Economic Growth of Nigeria" (2013) 4:4 *Natural Resources* 343; It is important to note that the problem of insufficient market and infrastructure does not fall within the purview of the arguments intended by this thesis. Moreso, Nigeria has recently demonstrated sufficient resolve to encourage gas utilization by adopting the National Gas Policy 2017 which is aimed at achieving gas flare-out through gas utilization.

¹¹ R. Hill, J. Moore, D. Boone and C. Randall, "Associated Gas Utilisation with Liquid Recovery," cited in Ikechukwu Diugwu et al, "The Effect of Gas Production, Utilization, and Flaring on the Economic Growth of Nigeria" (2013) 4:4 *Natural Resources* 343.

¹² The World Bank, "Time to End Routine Gas Flaring" online: <<http://www.worldbank.org/en/news/feature/2014/07/15/gas-flaring-reduction-takes-center-stage-at-global-event>>.

¹³ The World Bank, "Nigeria Endorses 2030 Flaring Initiative; Raises Own Goal to 2020" online: <<http://www.worldbank.org/en/programs/zero-routine-flaring-by-2030/brief/nigeria-endorses-zero-flaring-initiative>>.

regulatory structure for the Nigerian gas sector.¹⁴ In achieving its vision of gas-based industrialization of Nigeria, the National Gas Policy seeks to grow the domestic gas market by *inter alia*, providing alternative markets and uses for gas.¹⁵ Through the policy, the Nigerian government seeks to raise the gas flaring penalty to a suitable level, enough to de-incentivize the practice of gas flaring, and at the same time presenting other strategies that will support efficient gas utilization.¹⁶ The policy will adopt remedial measures such as the creation of gas infrastructure and expansions for the Trans-Saharan Gas Pipeline to ensure sustained gas supply into the West African region. The National Gas Policy is a laudable policy measure with the potential to effectively address the problem of gas utilization in Nigeria.

While this thesis acknowledges that other aspects of gas flaring reduction such as creating gas utilization projects and developing vital gas infrastructure and markets are essential, it focuses on legislative reforms. It focuses on legislative reforms for several reasons. First, the *Associated Gas Re-injection Act* (AGRA)¹⁷ which is the major legislation regulating gas flaring in Nigeria has been largely inadequate. In fact, in demonstrating the inadequacy of the AGRA, the court held that some aspects of the AGRA and its Regulations under which continued flaring of gas in Nigeria may be permitted are inconsistent with the rights to life and/or dignity of human persons enshrined in the constitution.¹⁸ The inadequacies of the AGRA partly inform the need for the enactment of new legislation in Nigeria. Second, the thesis emphasizes legislative reforms considering that gas flaring impacts the climate, and Nigeria's commitments under international environmental standards on GHG emissions can only be enforced in Nigeria if those standards are incorporated into domestic laws.

¹⁴ Federal Republic of Nigeria, Ministry of Petroleum Resources, "National Gas Policy" online: <<http://www.petroleumindustrybill.com/wp-content/uploads/2017/06/National-Gas-Policy-Approved-By-FEC-in-June-2017.pdf>> at 13 [National Gas Policy].

¹⁵ *Ibid* at 68.

¹⁶ *Ibid* at 64.

¹⁷ AGRA, *supra* note 5.

¹⁸ *Johnah Gbemre v Shell Petroleum Development Company of Nigeria Limited* Suit No: FHC/CS/B/153/05, reported in (2005) AHRLR 151 (NgHC 2005) [Gbemre v SPDC].

Currently, Nigeria has signed the Paris Agreement¹⁹ but it is yet to domesticate the Agreement. The domestication of the Agreement will ensure that Nigeria's obligations under its Nationally Determined Contributions (NDCs) are enforceable in Nigeria. The new legislation which this thesis proposes as part of the legislative reforms will make reference to those domesticated standards. It will also take cognizance of international environmental law principles such as sustainable development in ensuring that the legislation is in line with Nigeria's foreign investment and economic plans. As noted earlier, the AGRA does not take environmental principles into account partly because gas flaring was not envisioned to become an issue of serious climatic concern as it has now become.

This thesis does not focus on other aspects of gas flaring reduction such as creating gas utilization projects and developing vital gas infrastructure and markets for two reasons. First, the Nigerian government has recently adopted the National Gas Policy which addresses the problem of gas utilization and absence of vital gas infrastructure and markets. As earlier indicated, the National Gas Policy is aimed at achieving gas flare-out in Nigeria through gas utilization. It proposes to build gas markets in Nigeria through the identification and encouragement of local gas market development projects as well as the development and exploitation of regional African gas markets. The ability of the Nigerian government to meet the targets set in the National Gas Policy could also be dependent on the enactment of new legislation. Given that one of the objectives of the National Gas Policy is to encourage gas utilization, enacting a piece of legislation that provides for stricter penalty regime for gas flaring could dissuade IOCs from flaring gas, thereby inducing them to focus on gas utilization. Second, this thesis does not focus on developing vital gas infrastructure considering that the recently adopted Economic Recovery and Growth Plans (ERGP) aim at substantial infrastructure investment that could boost gas utilization in Nigeria.²⁰ The plan to invest massively in infrastructure is partly as a result of ERGP's anticipated increase in the production of crude oil and gas in Nigeria.²¹ The government's plan to increase infrastructure investment as indicated in the ERGP could stimulate gas utilization, reduce

¹⁹ United Nations Framework Convention on Climate Change, "The Paris Agreement" online: <http://unfccc.int/paris_agreement/items/9485.php> [Paris Agreement].

²⁰ See Budgit, "Nigeria's Economic and Growth Plans" online: < <http://yourbudgit.com/wp-content/uploads/2017/03/Economic-Recovery-Growth-Plan-2017-2020.pdf>> at 16 [ERGP].

²¹ *Ibid* at 15.

gas flaring and strengthen the achievement of Nigeria's NDCs under the Paris Agreement.²² Although the ERGP envisages increased oil and gas production in Nigeria, the ERGP is consistent with Nigeria's NDC given that part of the Nigerian government's key strategies for improving governance of the oil and gas sector under the ERGP include reducing gas flaring, implementing gas commercial framework, and increasing gas utilization.²³

Several legislative measures have been adopted by the Nigerian government towards addressing the problems confronting Nigeria's oil and gas sector. Following agitations by Nigerians for the passage of the Petroleum Industry Bill which seeks to reform the industry and to *inter alia* put an end to gas flaring, the Nigerian Senate and House of Representatives only recently passed the harmonized Petroleum Industry Governance Bill (PIGB).²⁴ The PIGB is the first in a number of much-anticipated petroleum industry bills expected to restructure the Nigerian petroleum industry.²⁵ The PIGB will administer policies affecting parts of petroleum operations which are allocated to it under the Act.²⁶ However, the PIGB does not address gas flaring.

The foremost oil and gas legislation in Nigeria was the *Petroleum Ordinance* of 1889 which preceded the *Mineral Regulation (Oil) Ordinance* of 1907.²⁷ At the moment, pending the full enactment of the PIGB, the *Petroleum Act* 1969 and the regulations made thereunder²⁸ are the

²² The ERGP is consistent with Nigeria's NDC under the Paris Agreement given that it makes explicit provision on gas flaring reduction. It also emphasizes infrastructure development in light of an anticipated increase in oil and gas production in Nigeria. Infrastructure development would entail developing infrastructure for gas utilization in Nigeria.

²³ ERGP, *supra* note 20 at 69.

²⁴ As at September 12, 2018, this Bill was not in force. The Bill has been sent back to the National Assembly for corrections.

²⁵ The Senate Federal Republic of Nigeria, "Report of the Senate Joint Committee on the Petroleum Industry Governance Bill 2017" online: <<http://www.petroleumindustrybill.com/wp-content/uploads/2017/05/FINAL-COPY-OF-PETROLEUM-INDUSTRY-GOVERNANCE-BILL-2017-May-15.pdf>> at 2 [PIGB].

²⁶ *Ibid* at 1-91.

²⁷ Ibrionke Tinuola Odumosu, "Reforming Gas Flaring Laws in Nigeria: The Transferability of the Alberta Regulatory Framework", online: (2005) ProQuest Dissertations & Theses Global MR06123 at 126 <<<https://search-proquest-com.cyber.usask.ca/docview/305029958/abstract/87FA926FA050476APQ/1?accountid=14739>> [Odumosu 2005].

²⁸ *Petroleum (Drilling and Production) Regulations* L.N. 69 1969 Laws of Federation of Nigeria Cap P 10 2004 [Petroleum (Drilling and Production) Regulations].

most comprehensive laws regulating oil and gas production and exploration in Nigeria. Through the *Petroleum Act* 1969, the Nigerian government made its first attempt to stop gas flaring when it brought matters relating to the pollution of the waters and the atmosphere under the control of the Minister overseeing Petroleum issues, and mandated a licensee to submit to the Minister, within a period of five years, a proposal for gas utilization (whether associated or not), discovered within the area.²⁹ The *Petroleum Act* of 1969 and its regulations' initial attempts to curtail the incidence of gas flaring in Nigeria proved futile as gas flaring continued. Presently, the principal legislation devoted to gas flaring reduction in Nigeria is the *Associated Gas Re-injection Act* (AGRA).³⁰ Accordingly, in analyzing the inadequacies of the existing legislation for gas flaring reduction in Nigeria, this thesis will focus on the AGRA.

In light of the failure of earlier legislative responses to gas flaring, the question arises regarding the feasibility of legislative reform. This thesis contends that legislative reforms proposed in this thesis could work at this time considering that the Nigerian government is beginning to demonstrate willingness to address gas flaring including through legislative measures.³¹ Nigeria has also recently adopted a National Gas Policy and has endorsed the World Bank's 2030 Zero Routine Flaring Initiative. As will be discussed in the next chapter, the initiative sets clear gas flaring reduction goals for the future. It differs from the earlier World Bank's Global Gas Flaring Reduction Partnership (GGFR) as GGFR's objective is not to set such goals, but to aid flaring mitigation activities in order to meet the 2030 goal.³²

²⁹ *Petroleum Act*, Cap P10 Laws of the Federation of Nigeria 2004 at section 9.

³⁰ AGRA, *supra* note 5.

³¹ There is an indication that the Nigerian government is willing to adopt a legislative response to gas flaring. Just as this thesis was being finalized, the Federal Government of Nigeria issued the new Flare Gas (Prevention of Waste and Pollution) Regulations 2018 in an attempt to make gas more available for local use and get Nigeria closer to ending gas flaring. The contents of this Regulation have not been made public. Only reports by the public on the regulation are available. The reports show that the Regulation focuses on commercialization of gas which appears to be an aspect of what Nigeria needs. The reports state that the Regulation seeks to create a framework for the National Gas Flare Commercialization Programme (NGFCP), increase rates for flare gas payments, and provide strict metering and reporting obligations. It is important to note that increasing gas flare penalties is also one of the arguments canvassed in this thesis. One cannot rely so much on the provisions of the Regulation since the Regulation has not been made public as yet. The Regulation is also not a comprehensive response to gas flaring in the way that this thesis envisions. See Advisory Legal Consultants, "3 Things to Note About the New Flare Gas Regulations 2018" online: <<https://mailchi.mp/c400741bbbb7/client-alert-new-flare-gas-regulations-1213541>> [New Flare Gas Regulations 2018].

³² The World Bank, "Zero Routine Flaring by 2030" online: <<http://www.worldbank.org/en/programs/zero-routine-flaring-by-2030#7>> [World Bank Zero Routine Flaring by 2030].

Nigeria's endorsement of the GGFR and the Zero Routine Flaring Initiative show a clear commitment towards addressing gas flaring.³³ Also, the inclusion of gas flaring reduction as a key element of Nigeria's Nationally Determined Contribution (NDC) under the Paris Agreement shows a strong commitment to reduce gas flaring. Similarly, the adoption of the National Gas Policy in 2017 partly shows Nigeria's commitment to follow through on its NDC. As a further demonstration of willingness to act at this time, the PIGB and the National Gas Policy provide for the consolidation of the current regulatory agencies in Nigeria's oil and gas sector in order to ease implementation of laws in Nigeria's oil and gas sector. Indeed, one of the major problems associated with the regulatory mechanisms for gas flaring reduction in Nigeria is the prevailing regulatory overlaps and duplication of functions by regulatory agencies. The proposed consolidation of these regulatory agencies is therefore a step in the right direction. Be that as it may, the effectiveness and sustainability of the new regulatory body will entail developing strong corporate values within the new agency, an issue which does not fall within the scope of this thesis. The Nigerian Government has also recently adopted the National Gas Flare Commercialization Program in order to meet the gas needs of Nigeria, and reduce gas flaring. Basically, although the Nigerian government seems to be willing to reduce gas flaring at this time, it cannot rely on its existing laws and ignore legislative reforms. The inadequacies of the current law on gas flaring as well as the non-domestication of international environmental standards on GHG emissions make legislative reforms imperative.

In view of the fact that gas flaring is an issue of serious climatic concern, this thesis explores the potential for effectively addressing gas flaring by the domestication of international standards on GHG emissions such as the Paris Agreement, to which Nigeria is a party. Gas flaring has become a major contributor to climate change as over 16,000 gas flares around the globe lead to the release of about 350 million tons of carbon dioxide into the atmosphere.³⁴ The threats posed by climate change in different parts of the world are so intense that they

³³ The GGFR preceded the World Bank's 2030 Zero Routine Flaring Initiative. The continued gas flaring in Nigeria in spite of the GGFR could arguably be attributed to the absence of willingness to adequately address gas flaring at the time. However, with the endorsement of the World Bank's 2030 Zero Routine Flaring Initiative in 2015, the Nigerian government has also put in place certain policy measures as a demonstration of willingness to meet its commitments under the initiative, and deal with gas flaring. These measures include the adoption of the National Gas Policy in 2017 and the establishment of the National Gas Flare Commercialization Program (NGFCP) in 2016.

³⁴ Kieran Cooke, "Waste Gas Flared by Oil Industry Rising, Warns World Bank" (29 October 2016), online: <<http://www.climatechangenews.com/2016/12/29/waste-gas-flared-by-oil-industry-rising-warns-world-bank/>>.

call for the immediate response of all everywhere.³⁵ It is in recognition of this fact that parties to the United Nations Framework Convention on Climate Change (UNFCCC) reached a landmark agreement at the 2015 United Nations Climate Change Conference in Paris to eliminate climate change and intensify the actions needed for a sustainable low carbon future.³⁶ Although Nigeria has ratified the Paris Agreement on Climate Change, it is yet to domesticate the Agreement. In the meantime, through the Nigeria Climate Change Policy Response and Strategy (NCCPRS), the Federal Government has adopted a climate change policy framework which seeks to create an efficient national response to the multi-dimensional effects of climate change.³⁷ Despite the enactment of this policy, gas flaring continues to pose serious challenges partly because the policy is only a course of action which is not enforceable. As a result, this thesis envisages the domestication of international environmental standards on GHG emissions to which Nigeria is a party as a component of the legislative reforms it proposes. The domestication of such standards makes the standards enforceable in Nigeria.

1.2 Literature Review

Given the abundance of contemporary knowledge including substantive conclusions, and theoretical and methodological contributions to the problem of gas flaring in Nigeria, it is imperative to analyze scholarly contributions regarding the causes of gas flaring in Nigeria, its impacts and potential solutions.

Several practices³⁸ in the Nigerian oil and gas industry have been identified within scholarly literature as contributing to the emission of GHGs.³⁹ Gas flaring, specifically, has become a

³⁵ Oluduro, *supra* note 4 at 168.

³⁶ United Nations Framework Convention on Climate Change, “The Paris Agreement” online: <http://unfccc.int/paris_agreement/items/9485.php>.

³⁷ United Nations Climate Change, “Nigeria’s Intended Nationally Determined Contribution” online: <http://www4.unfccc.int/submissions/INDC/Published%20Documents/Nigeria/1/Approved%20Nigeria's%20INDC_271115.pdf> at iv [Nigeria’s NDC].

³⁸ These practices include the flaring of gas and venting of gas. This research focuses on gas flaring.

³⁹ Saheed Ismail & Ezaina Umukoro, “Global Impact of gas Flaring” (2012) 4 Energy and Power Engineering at 291 [Ismail and Umukoro].

major contributor to climate change through the release of millions of tons of carbon dioxide into the atmosphere.⁴⁰ Nigeria's volume of gas flaring is among the highest in the world and only a few countries are ahead in terms of billion cubic meters (bcm) of gas flared on a yearly basis.⁴¹ Ejiogu asserts that until recently, Nigeria had the highest gas flaring rate among the members of the Organization of Petroleum Exporting Countries (OPEC).⁴² Scholars including Nwankwo and Ogagarue posit that Nigeria flared over 70 percent of the gas it produced⁴³ and was the second highest flaring country in the world, behind Russia.⁴⁴ Although the quantity of gas flared in Nigeria has reduced significantly in recent years, the National Gas Policy reveals that Nigeria still flares a substantial amount of its gross natural gas production.⁴⁵ According to the World Bank, Nigeria flares almost 8 billion cubic meters of gas annually, and is currently the seventh-largest gas flaring country in the world.⁴⁶ Over ten years ago, Odumosu noted that some flares in the Niger Delta region had burned continuously for 40 years.⁴⁷

Scholars such as Farina argue that gas flaring is among the most challenging and critical environmental and climatic issues the world has had to grapple with in recent times.⁴⁸ In spite of this, there has been some degree of uncertainty regarding the precise amount of gas flared worldwide. This may be attributable to the absence of monitoring facilities and restricted oversight,⁴⁹ in addition to the failure on the part of many countries to openly report

⁴⁰ Ajugwo, *supra* note 2 at 7.

⁴¹ Snow, *supra* note 3.

⁴² Amanze Ejiogu, "Gas Flaring in Nigeria: Costs and Policy" (2013) 24:6 Energy & Environment at 984 [Ejiogu].

⁴³ Cyril Nwankwo & Difference Ogagarue, "Effects of gas flaring on surface and ground waters in Delta state Nigeria" (2011) 3: 5 Journal of Geology and Mining Research at 131–136 [Nwankwo & Ogagarue].

⁴⁴ Ejiogu, *supra* note 42 at 984.

⁴⁵ National Gas Policy, *supra* note 14 at 61.

⁴⁶ The World Bank, "Nigeria's Flaring Reduction Target: 2020" (March 10, 2017), online: <<http://www.worldbank.org/en/news/feature/2017/03/10/nigerias-flaring-reduction-target-2020>>.

⁴⁷ Odumosu 2005, *supra* note 27 at 2.

⁴⁸ Michael Farina. "Flare Gas Reduction: Recent Global Trends and Policy Considerations" (2010), online: <http://www.ge-spark.com/spark/resources/whitepapers/Flare_Gas_Reduction.pdf> at 14 [Farina].

⁴⁹ *Ibid* at 17.

volumes of gas flared.⁵⁰ Nonetheless, the World Bank estimates that about 140 bcms of natural gas is flared globally every year.⁵¹ Gas flaring occurs due to several reasons. Elvidge et al state that gas flaring persists because of the absence of infrastructure necessary for the commoditization of the gas.⁵² With respect to Nigeria, several reasons have been given for the continuous flaring of gas. Omiyi suggests that the continuous flaring of gas may be attributable to the restricted amount of reservoirs appropriate for gas injection/storage, the cost involved in constructing main and inter-connecting gas pipelines linkages, poor technological and industrial base for energy use in Nigeria, restricted local and international gas market, and insufficient fiscal and gas pricing policies aimed at stimulating investments.⁵³ For Farina, several big oil-producing countries have made significant advancements in assembling and utilizing their associated gas streams.⁵⁴ Knetche opines that gas flaring may be curtailed by way of market incentives geared towards minimizing cost and stimulating innovations.⁵⁵

The environmental implications of gas flaring are both local and global. At the local level for instance, gas flaring releases a substantial amount of toxins which are the main source of acid rain in the Niger Delta. Akobundu writes that the effect of acid rain in the Niger Delta is demonstrated by the rusting and caving-in of corrugated iron sheets, destruction of the environment, and death of animals.⁵⁶ The GHGs released by gas flaring also negatively

⁵⁰ United States Government Accountability Office, “Natural Gas Flaring and Venting: Opportunities to Improve Data and Reduce Emissions” (July 2004), online: <<https://www.gao.gov/new.items/d04809.pdf>>.

⁵¹ The World Bank, “Natural Gas and Global gas Flaring Reduction” online: <<http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:21032487~pagePK:64257043~piPK:437376~theSitePK:4607,00.html>>.

⁵² Christopher Elvidge et al, “A Fifteen Year Record of Global Natural Gas Flaring Derived from Satellite Data” (2009) 2 *Energies* at 592.

⁵³ Basil Omiyi, “Shell Nigeria Corporate Strategy for Ending Gas Flaring,”(2001) Seminar on Gas Flaring and Poverty Alleviation cited in Ikechukwu Diugwu et al, “The Effect of Gas Production, Utilization, and Flaring on the Economic Growth of Nigeria” (2013) 4:4 *Natural Resources* at 347.

⁵⁴ Farina, *supra* note 48 at 15.

⁵⁵ See Jack Knetsch, “Environmental Economics, Environmental Law: An Intensive Short Course for Practitioners.” (1992) cited in Roger Cotton & Cara Clairman, “The Effect of Environmental Regulation in Technological Innovation in Canada” (1995) 21 *Canada- U.S. L.J.* at 23. It is important to note that the recently adopted National Gas Policy seeks to address *inter alia*, the problem of gas utilization in Nigeria.

⁵⁶ Amadi Akobundu. “Impact of Gas Flaring on the Quality of Rain water, Groundwater, and Surface Water in Parts of Eastern Niger Delta Nigeria” (2014) 2:3 *Journal of Geosciences and Geomatics* at 114 – 119 [Akobundu].

impacts the health of individuals and have been identified as causes of asthma, chronic bronchitis, cancer, and blood disorders.⁵⁷ Ismail and Umukoro argue that globally gas flaring releases carbon dioxide which contributes to climate change.⁵⁸ According to Ana et al, gas flaring emits GHG, precursor gases, volatile organic compounds, polycyclic aromatic hydrocarbon, and particulate matter which takes the form of soot.⁵⁹ These gases do not only have grave unfavourable consequences on vegetation, humans and animals but have been acknowledged to cause climate change.⁶⁰ The soot released from the flaring of natural gas is essentially black carbon, which plays a significant role in the nature of the earth's climate due to its ability to suck up radiation from the sun and as a result, cause a vertical gradient of warming.⁶¹ Nordell also lends credence to the assertion that emissions from gas flaring contribute to the heating of the earth surface.⁶²

In recent times, GHG emission which includes carbon dioxide released by gas flares has been the subject of research by environmentalists and policymakers and this could be attributed to its overwhelming impact on climate change. Scholars such as Ghorbani et al argue that GHG emission has contributed to the surge in temperature being experienced all over the world.⁶³ It has also led to the melting of ice and the increase in global sea levels, thereby exacerbating events such as flooding and tsunamis.⁶⁴ As indicated by Conway et al, proof that the atmospheric carbon dioxide concentration has risen during the past decade is

⁵⁷ Nwankwo & Ogagarue, *supra* note 43 at 131–136.

⁵⁸ Ismail and Umukoro, *supra* note 39.

⁵⁹ Godson Ana, Mynepalli Sridhar & Godwin Emerole, “Polycyclic Aromatic Hydrocarbon Burden in Ambient Air in selected Niger Delta communities in Nigeria” (2012) 62:1 J. Air Waste Management Association at 18–25.

⁶⁰ Elisha Dung, Leonard Bombom & Tano Agusomu, “The Effects of Gas Flaring on Crops in the Niger Delta, Nigeria.” (2008) 73: 4 GeoJournal at 297–305.

⁶¹ James McEwen & Matthew Johnson, “Black Carbon Particulate Matter Emission Factors for Buoyancy Driven Associated Gas Flares” (2012) 63:3 Journal of Air Waste Management Association at 307–321.

⁶² Bo Nordell, “Thermal Pollution causes Global Warming” (2003) 38 Journal of Global and Planetary Change at 305–312.

⁶³ Mohammed Ghorbani, Alizera Koocheki & Marzieh Motallebi, “Estimating the Greenhouse Gases Emission and the most important factors in dairy farms (case study of Iran)” (2008) 8 Journal of Applied Sciences at 4468–4471.

⁶⁴ Ochuko Anomohanran, “Estimating the greenhouse gas emission from petroleum product combustion in Nigeria” (2011) 11: 7 Journal of Applied Sciences at 3209–3214.

indisputable.⁶⁵ The reality of climate change has therefore occasioned a variety of multi-level governance responses to mitigate emissions.⁶⁶ For instance, the Kyoto Protocol brought about measures such as emissions trading, joint implementation and the Clean Development Mechanism (CDM) for global GHG mitigation. In Europe, the European Union has introduced mechanisms such as the Emissions Trading Scheme (ETS).⁶⁷ Although responses to climate change mitigation have been restricted in the United States, Farber Daniel and Peeters Marjan⁶⁸ point out that California has introduced the ‘cap-and-trade system’ under its *Global Warming Solutions Act* 2006. In addition to the numerous mitigation efforts, parties to the United Nations Framework Convention on Climate Change (UNFCCC) reached a ground-breaking agreement – the Paris Agreement to eradicate climate change and increase the actions necessary for a workable low carbon future.⁶⁹ Stua writes that the Paris Agreement was entered into in order to put an end to a period of laxity in international climate policy. He further posits that the approach of the Agreement towards GHG emission reductions was from a bottom-up perspective enabling all countries to come up with mitigation targets through their Nationally Determined Contributions (NDC).⁷⁰

Although Nigeria has demonstrated its commitment towards climate change mitigation by signing the Paris Agreement, Nigeria is yet to enact any law on climate change that could also impact the flaring of natural gas. Scholars such as Oluduro argue that while section 20 of the constitution of the Federal Republic of Nigeria, 1999, includes a provision which requires the state to safeguard and improve the environment, and protect the land, water, air,

⁶⁵ Thomas Conway et al, “Evidence for Interannual Variability of the Carbon cycle from the National Oceanic and Atmospheric Administration/Climate Monitoring and Diagnostics Laboratory GlobalAir sampling network” (1994) 99 *Journal of Geophysical Research* at 22831–22855.

⁶⁶ Terry Townshend et al, “How National Legislation can Help to Solve Climate Change” (2013) 3 *Nature Climate Change* at 430.

⁶⁷ Jonathan Kintzele, “Easy Come, Easy Go: A Guide to California Cap and Trade Spending” (2017) 90 *S. Cal. L. Rev.* at 719.

⁶⁸ Farber Daniel & Peeters Marjan, *Climate Change Law* (Cheltenham: Edward Elgar Publishing Ltd, 2016) at 58 [Daniel & Marjan].

⁶⁹United Nations Economic Commission for Europe, “Summary of the Paris Agreement” online: <https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/2016/mtg/Session_1_Bigger_picture_of_COP_21.pdf>.

⁷⁰ Michele Stua, *From the Paris Agreement to a Low-Carbon Bretton Woods: Rationale for the Establishment of a Mitigation Alliance* (Cham: Springer, 2017) at 2.

forest and wildlife of Nigeria, the provision is made under the Fundamental Objectives and Directive Principles of State Policy in Chapter II of the Constitution which is not enforceable.⁷¹ He further argues that the extant environmental laws as well as the constitutional provisions on environmental protection, relating to climate change in Nigeria are inadequate, especially in comparison with countries such as Ecuador, Dominican Republic and Bolivia which have justiciable constitutional provisions on climate change.⁷² Although there is currently no climate change law that impacts gas flaring in Nigeria, the Nigerian government enacted laws specifically regulating gas flaring, and the oil and gas sector as a whole. Omoregbe writes that the *Petroleum Ordinance* of 1889 and the *Mineral Regulation (Oil) Ordinance* of 1907 established the essential legal structure for the development of petroleum resources in Nigeria.⁷³ According to Odumosu, the *Petroleum Act* 1969 is the most elaborate piece of legislation on oil and gas exploration and production in Nigeria.⁷⁴ Odumosu further writes that the major legislation regulating gas flaring reduction in Nigeria is the AGRA⁷⁵ which applies to Exclusive Economic Zones and all land as defined under the *Petroleum Act*.⁷⁶ In examining the feasibility of transferring the Alberta regulatory framework for gas flaring reduction to Nigeria, Odumosu makes recommendations for developing an effective gas flaring reduction regulatory regime which will be appropriate for Nigeria, and outlines transferable concepts in Alberta's gas flaring reduction regime that could be adopted in Nigeria.⁷⁷

This thesis contends that the AGRA is inconsistent and ineffective because on the one hand, it sets January 1, 1984 as the prohibition date for gas flaring⁷⁸ and on the other hand, it empowers the Minister of Petroleum to use his discretion to permit continued gas flaring in

⁷¹ Oluduro, *supra* note 4 at 170.

⁷² *Ibid.*

⁷³ Yinka Omorogbe, *Oil and Gas Law in Nigeria* (Lagos: Malthouse, 2003) at 16.

⁷⁴ Odumosu 2005, *supra* note 27 at 127.

⁷⁵ AGRA, *supra* note 5.

⁷⁶ Odumosu 2005, *supra* note 27 at 128.

⁷⁷ *Ibid* at 1 – 174.

⁷⁸ AGRA, *supra* note 5 at section 3(1).

instances where the target date of January 1, 1984 is not practicable.⁷⁹ Also, the Act empowers the Minister of Petroleum Resources to fix the amount to be paid for every 28.317 standard cubic metre (SCM) of gas flared.⁸⁰ Under the Act, the present penalty for gas flaring in Nigeria formally stands at a meager \$0.03 per 1000 standard cubic feet,⁸¹ which makes it even more attractive for IOCs not to invest in gas utilization projects. Furthermore, as earlier stated, some sections of AGRA have been declared unconstitutional on the grounds that they infringe on citizens' constitutional right to life, as well as healthy and clean environment.⁸² Oluduro advances the argument that eliminating gas flaring requires numerous determined efforts by national governments and industry players, including local communities and financial institutions.⁸³ It is pertinent to note that other legislation applicable to gas flaring reduction was enacted by the government, but they have all been unable to adequately nip the issue of gas flaring in the bud. Oluduro writes that some of these laws include the *National Environmental Standards and Regulations Enforcement Agency Act 2007* (NESRA Act)⁸⁴ and the *Environmental Impact Assessment Act* (EIA Act).⁸⁵ The NESRA Act establishes the National Environmental Standards and Regulations Enforcement Agency (NESREA) and empowers the Agency with the duty *inter alia* to protect the environment, ensure biodiversity conservation, and enforce environmental laws.⁸⁶ Also, the EIA Act deals with environmental effects with respect to public and private projects in Nigeria. According to Nwoko, the main aim of the EIA is to make sure that possible environmental risks are anticipated at the right stage of a project and eliminated in advance.⁸⁷ On a related note, the PIGB which provides a new power and institutional

⁷⁹ *Ibid* at 3 (2) a.

⁸⁰ *Ibid* at 3(2) b.

⁸¹ National Gas Policy, *supra* note 15 at 63. There are indications that the penalty will be increased through the new Gas Flaring Regulation. However, the contents of the Regulation have not been made public. Also see New Flare Gas Regulations 2018, *supra* note 32.

⁸² See *Gbemre v SPDC*, *supra* note 18.

⁸³ Oluduro, *supra* note 4 at 169.

⁸⁴ *National Environmental Standards and Regulations Enforcement Agency Act, 2007*, Act No. 25 [NESRA Act].

⁸⁵ *Environmental Impact Assessment Act* No. 86 of 1992, Cap E12 LFN 2004 [EIAA].

⁸⁶ NESRA Act, *supra* note 84 at section 1 (1) & (2).

⁸⁷ Chris Nwoko, "An Evaluation of Environmental Impact Assessment System in Nigeria" (2013) 2: 1Greener Journal of Environmental Management and Public Safety at 22 [Nwoko].

structure for the Nigerian petroleum industry has just been passed by the Nigerian Parliament,⁸⁸ but this Bill does not address the issue of gas flaring in Nigeria.

This thesis contends that the collection of laws on gas flaring in Nigeria has been ineffective. One reason for the ineffectiveness of the laws is that gas flaring was not anticipated to become an issue of serious climatic distress as at the time the laws were enacted. It is in this regard that Oluduro argues that the laws have been unable to meet the fundamental requirement which requires a good law to anticipate unforeseen circumstances.⁸⁹ Oluduro explains that the issue of gas flaring in Nigeria may be attributable to the ineffective legal framework in place, as well as the unwillingness of the government to enforce its own laws. According to Ajugwo, the Nigerian government has failed to effectively implement its environmental rules as a result of the intersecting and conflicting jurisdictions of various government agencies governing the oil and gas sector.⁹⁰ He further writes that the non-transparent governance strategies adopted by some of these agencies have also stifled the effective implementation of laws.⁹¹

Apart from the ineffectiveness of the laws on gas flaring in Nigeria, and the lack of implementation of the law, another challenge confronting the Nigerian government in its effort to reduce the incidence of gas flaring and mitigate GHG emission, is the seeming inability to balance the competing foreign investment and environmental protection goals in Nigeria.⁹² Gas flaring in Nigeria can be attributed in part to the oil exploration activities of IOCs⁹³ and the inadequate environmental protection measures adopted by the country. As noted by Nwanya, gas flaring persists in Nigeria as a result of the absence of social responsibility on the part of IOCs towards gas conservation and the inability of the Nigerian

⁸⁸ PIGB, *supra* note 25.

⁸⁹ Oluduro, *supra* note 4.

⁹⁰ Ajugwo, *supra* note 2 at 6.

⁹¹ *Ibid.*

⁹² See Ibironke Odumosu-Ayanu, "Multi-actor Contracts, Competing Goals and Regulation of Foreign Investment" (2014) 65 UNBLJ at 270-311 [Odumosu-Ayanu 2014].

⁹³ E.C Ubani & I.M Onyejekwe, "Environmental Impact Analyses of Gas Flaring in the Niger Delta Region of Nigeria" (2013) 4(2) Am. J. Sci. Ind. Res., at 246-252.

government to strictly enforce its gas flaring rules.⁹⁴ According to Hermann, while developing countries like Nigeria often rely on foreign investors with the expectation of improving their local economies, foreign investors on their part are attracted by the opportunity to lessen their cost of production through lenient environmental standards in such countries.⁹⁵ Kareem et al write that the Nigerian oil and gas sector is essentially made up of IOCs working in joint venture arrangements with the NNPC.⁹⁶ These IOCs and their subsidiaries include Shell Petroleum Development Company (SPDC), Chevron, Nigeria Agip Oil Company, ExxonMobil, Elf, Total, amongst others.

Miles argues that the benefits of foreign investment could be enjoyed when there is an environmentally responsible framework in place.⁹⁷ She expresses the view that the international investment law system is characterized by excessive emphasis on investment protection, an absence of responsibility to curtail the impact of investors' actions on the environment, and the use of the environment in host states to the detriment of the host states.⁹⁸ She adds that BITs often aim at improving foreign participation and making sure investments are protected.⁹⁹ She expresses the view that the problem that is often intrinsic in these BITs is the absence of balancing mechanisms such as sustainable development, environmental protection and the advancement of public policy.¹⁰⁰ In investigating the practicability of legislative reforms, this research will also explore and consider the applicability of some of these balancing mechanisms to the Nigerian oil and gas sector.

⁹⁴ Stephen Nwanya, "Climate Change and energy Implications of Gas Flaring in Nigeria" (2011) 6 International Journal of low-carbon Technologies at 199.

⁹⁵ Douglas Morrin, "People before Profits: Pursuing Corporate Accountability for Labour Rights Violations Abroad Through the Alien Torts Claims Act" (2000) 20:2 Boston College Third World Law Journal at 427 – 428.

⁹⁶ Salami Kareem et al "Foreign direct investment into oil sector and economic growth in Nigeria" (2012) 6:4 International Journal of Applied Economics and Finance at 127-135.

⁹⁷ Kate Miles, *The Origins of International Investment Law Empire, Environment and the Safeguarding of Capital* (New York: Cambridge University Press, 2013) at 132 [Miles].

⁹⁸ *Ibid* at 3.

⁹⁹ *Ibid* at 131.

¹⁰⁰ *Ibid*.

On a related note, seeing as protection from expropriation is a key protection afforded investors in Nigeria, the question that often arises is whether this protection is given in disregard of environmental regulation. A look at some of the BITs signed by Nigeria reveals that they all have expropriation provisions but do not define expropriation.¹⁰¹ A necessary inference to be drawn from Salacuse's argument is that this lacuna allows the expropriation provisions in these BITs to unjustly cover gas flaring regulation since it has bearing on foreign investments in Nigeria.¹⁰² However, it is arguable whether gas flaring regulation amounts to expropriation under Nigerian domestic laws.¹⁰³ Scholars such as Market opine that the incorporation of environmental protection in the preamble of BITs could serve as a veritable way to create a balance between investment protection and environmental protection.¹⁰⁴ Nonetheless, the preamble is generally accepted only as an aid to treaty interpretation.¹⁰⁵ It is in this regard that Bungenberg, Joern & Hindelang state that since the preamble is only a useful aid to interpretation and by no means binding, some arbitral tribunals may be inclined to attach little or no weight to it.¹⁰⁶

In addition to incorporating environmental protection in BITS, industry-self regulation could complement extant laws in imposing supplementary regulation governing the activities of corporations especially as it relates to gas flaring and environmental protection. Nevertheless, Gamper-Rabindran & Finger have argued that while corporations may agree to such self-regulatory measures, they often fail to tackle the underlying environmental issues.¹⁰⁷

¹⁰¹ *Nigeria- United Kingdom Bilateral Investment Treaty*, 11 December 1990 art 5 (entered into force 11 December 1990); *Netherlands – Nigeria Bilateral Investment Treaty*, 2 November 1992 art 6 (entered into force 1 February 1994); *Italy – Nigeria Bilateral Investment Treaty*, 27 September 2000 art 5 (entered in force 22 August 2005).

¹⁰² See Jeswald Salacuse, *The Law of Investment Treaties* (Oxford: Oxford University Press, 2010) at 293.

¹⁰³ In chapter three, this thesis will discuss the impact (if any) of expropriation provisions in domestic laws on gas flaring regulation in Nigeria.

¹⁰⁴ Lars Markert, "The Crucial Question of Future Investment Treaties: Balancing Investor's Rights and Regulatory Interests of Host States" (2011) cited in Marc Bungenberg, Griebel, Joern, & Steffen Hindelang, eds *International Investment Law and EU Law* (London: Springer, 2011) at 96.

¹⁰⁵ See *Vienna Convention on the Law of Treaties*, 23 May 1969, art 31 (1) (2) (entered into force 27 January 1980).

¹⁰⁶ Marc Bungenberg, Griebel, Joern, & Steffen Hindelang, eds *International Investment Law and EU Law* (London: Springer, 2011) at 160 [Bungenberg].

¹⁰⁷ See Shanti Gamper-Rabindran & Stephen Finger, "Does Industry Self Regulation Reduce Pollution? Responsible Care in the Chemical Industry" (2013) 43 *J Regul Econ* at 4 [Gamper-Rabindran and Finger].

Relatedly, Odumosu-Ayanu proposes the adoption of a multi-actor approach by means of a multi-actor (investment) agreement in order to address the competing environmental and foreign investment goals amongst local communities and international oil companies.¹⁰⁸ She expresses the view that a well brokered multi-actor agreement in Nigeria's oil and gas sector will ensure that affected communities in the Niger Delta have recourse under a contract that truly acknowledges their rights, and balances competing gas flaring and foreign investment goals.¹⁰⁹ However, one issue which is often raised is that multi-actor contracts are often entered into to protect the interest of the immediate communities likely to be affected by the impact of an activity, as opposed to the interest of the general public.¹¹⁰ This research therefore argues that in view of the fact that the climatic impact of gas flaring transcends the communities' interests and affects the general public as a whole, statutory environmental regulation could continue to operate along with multi-actor contracts. Ultimately, in canvassing the central argument of this thesis, which lies in the practicability of adopting legislative reforms, this thesis posits that the literature does not seem to adequately address the imbalance in the competing foreign investment and environmental protection goals within the context of gas flaring regulations in Nigeria. Accordingly, this research will appraise the interaction between gas flaring regulation and protection of IOCs within Nigeria's oil and gas sector in addressing this imbalance. It will consider whether Nigeria's foreign investment laws, investments treaties and/or private contractual obligations would prevent the enactment or implementation of new gas flaring legislation and if such legislation would impact on IOCs.

In view of the fact that this thesis envisages the domestication of international environmental standards on GHG emissions as a component of any reformation of the legal framework for gas flaring reduction, the thesis explores the importance of mitigating GHG emissions from gas flaring in Nigeria through the domestication of international environmental standards on GHG emissions to which Nigeria is a party. Nigeria's treaties have the force of law only when passed into law by the Nigerian legislature.¹¹¹ Scholars such as Oyeboade take the view

¹⁰⁸ Odumosu-Ayanu 2014, *supra* note 92.

¹⁰⁹ *Ibid* at 310.

¹¹⁰ *Ibid* at 308.

¹¹¹ *Constitution of the Federal Republic of Nigeria, 1999 (as amended)* at Section 12(1) [Nigerian Constitution 1999].

that a treaty can be transformed into domestic law by either re-enactment or reference.¹¹² Although Nigeria is a signatory to the Paris Agreement and the Kyoto Protocol, Nigeria currently has no law on climate change that impacts gas flaring and none of its international environmental commitments have been domesticated.

This research draws from the earlier argument that gas flaring persists partly as a result of the nature and ineffectiveness of the current gas flaring law, and proposes the enactment of new gas flaring legislation. In fact, Oshionebo argues that the extant legislation on gas flaring in Nigeria makes it more economically judicious for IOCs to flare gas into the atmosphere.¹¹³ The penalty for gas flaring also provides justification for complacency on the part of IOCs.¹¹⁴ In this regard, this thesis demonstrates the importance of adopting a pattern for enacting laws, hinged on public reasoning and factual evidence with potential for effective implementation.¹¹⁵ In the concluding chapter, this thesis puts forward some of the insights proposed by ILTAM as a possible tool for designing the legislative reforms.

1.3 Methodology

The methodology adopted in this research involves an analysis of the international legal standards as well as the various laws in Nigeria on gas flaring and foreign investment. By analyzing existing legislation and legal frameworks for gas flaring reduction in Nigeria, this research identifies legal issues that fetter effective implementation of laws in Nigeria. The analysis of existing legislation in Nigeria also aims at ascertaining the extent to which existing legislation deals with gas flaring in Nigeria. Considering that the purpose of the research is to ascertain the practicability of legislative reforms that aims at gas flaring reduction in light of the restrictions placed by international investment law, this thesis also

¹¹² Akin Oyebo, “Treaty Making and Treaty Implementation in Nigeria: An Appraisal” Cited in Flora Onomrerhinor, “A Re-examination of the Requirement of Domestication of Treaties in Nigeria (2016) 17 NAUJILJ at 21 [Oyebo].

¹¹³ Evaristus Oshionebo, *Regulating Transnational Corporations in Domestic and International Regimes* (Toronto: University of Toronto Press, 2009) at 54 [Oshionebo].

¹¹⁴ This thesis will discuss the inadequacies of the current gas flaring law in chapter two.

¹¹⁵ Ann Seidman, Robert Seidman & Nalin Abeysekere, *Legislative Drafting for Democratic Social Change: A Manual for Drafters* cited in Ann Seidman & Robert Seidman, “Instrumentalism 2.0: Legislative Drafting for Democratic Social Change”(2011) 5: 1 *Legisprudence* 95 at 142 [Seidman 2011].

analyzes the framework for international investment law in Nigeria in order to ascertain the practicability of legislative reforms. In particular, the thesis analyzes expropriation provisions in domestic and international investment laws as well as the stabilization requirements in contracts in ascertaining the feasibility of legislative reforms.

The legal provisions analyzed are obtained from international conventions, statutes, journals and online materials. Essentially, this research was accomplished by means of information obtained from published materials such as scholarly materials, policy documents, articles, newspapers and NGO reports in libraries and the internet.

1.5 Significance of the Research

Given the seriousness of the issue of climate change and its impact, the need to respond effectively to the GHG emissions associated with gas flaring in Nigeria cannot be over-emphasized. This research will contribute a legal perspective and provide scholarly insight into the growing search for effective ways to respond to the challenge posed by GHG emissions from gas flaring. This thesis is of practical importance because it could serve as a focal point for the Nigerian government in restructuring its legal framework for gas flaring reduction in a manner that creates new gas flaring reduction legislation and domesticates some of the relevant international environmental standards on GHG emissions to which Nigeria is a party while taking foreign investment goals into account. This thesis also contributes to the emerging body of literature that considers legal and regulatory reforms as part of the mitigation strategies for GHG emissions from gas flaring in Nigeria.¹¹⁶

This thesis is divided into four chapters. This first chapter, which is the introductory chapter, discusses the scope and relevance of the thesis. Chapter two examines the incidence of gas flaring in Nigeria and investigates the effectiveness of the current legal framework for gas flaring reduction in Nigeria. The chapter recognizes the need for the enactment of effective and implementable gas flaring reduction legislation that addresses the shortcomings of the current legislation. It also reflects on the need for legislative reforms and its implications for the nature and effectiveness of gas flaring reduction efforts in Nigeria. Having identified

¹¹⁶ See Omoniyi Adewale & Ubale Mustapha, "The Impact of Gas Flaring in Nigeria" (2015) 3:2 International Journal of Science, Technology and Society at 40-50.

some of the issues associated with the effectiveness of gas flaring regulation in Nigeria in chapter two, chapter three investigates the problem of gas flaring regulation in Nigeria from the perspective of the imbalance in Nigeria's foreign direct investment and environmental protection goals. Ultimately, it considers whether Nigeria's foreign investment laws, investment treaties and/or private contractual obligations would restrict the enactment of new gas flaring legislation and if such legislation would impact on IOCs engaged in oil production activities in Nigeria. Chapter four analyzes the way forward for effective gas flaring regulation in Nigeria by arguing for the domestication of international environmental standards on GHG emissions to which Nigeria is a party. The chapter proceeds to consider the enactment of a new gas flaring law in Nigeria that also recognizes international environmental standards and principles and takes foreign investment and economic goals into account. In order to achieve these reforms, this thesis presents some of the insights proposed by ILTAM as a possible tool for structuring the legislative reforms.

CHAPTER 2: THE LAW, REGULATION AND INCIDENCE OF GAS FLARING IN NIGERIA

2.1 Introduction

This chapter analyzes the legal and regulatory framework for gas flaring reduction in Nigeria. It appraises existing legislation as well as regulatory mechanisms for gas flaring reduction in Nigeria in order to ascertain the reasons for the continuous flaring of gas in the face of existing law.

Two substantive sections comprise this chapter. The first substantive section examines the incidence and regulation of gas flaring in Nigeria. The section also discusses the effects of gas flaring in Nigeria and analyzes the inadequacy and ineffectiveness of the legal and regulatory efforts made by the Nigerian government towards curtailing gas flaring. The section highlights the intrinsic deficiencies of the legal and regulatory framework for gas flaring reduction. Having discussed the adequacy and effectiveness of gas flaring regulation in Nigeria, the second section explores the importance of legislative reforms and reflects on its implications for the nature and effectiveness of gas flaring regulation in Nigeria. Fundamentally, the section seeks to ascertain whether legislative reforms that focus on enacting effective gas flaring reduction legislation and domesticating international environmental standards could be justified.

2.2 Incidence of Gas Flaring in Nigeria

2.2.1 Gas Flaring and its Implications in Nigeria

Over the years, Nigeria's industrial and economic development has been largely reliant on oil.¹¹⁷ Sadly, little attention is paid to the climatic, environmental, health and social problems created by the exploration of oil and gas in the Niger Delta region where most of the oil and gas exploration activities are carried out.¹¹⁸ Gas flaring, which is the burning of natural gas associated with oil and gas production, is one of the most destructive practices in the Nigerian petroleum industry that demands urgent attention. According to satellite data, Nigeria flares a substantial amount of gas annually, in spite of the fact that about 75 million Nigerians are deprived of electricity.¹¹⁹ Gas flaring has continued in Nigeria since the 1950s and notwithstanding the legislative efforts and serious energy deficiency faced by Nigerians especially as it relates to power generation, it still causes a lot of human and environmental challenges in the Niger Delta.¹²⁰ With about 123 flaring sites in the Niger Delta, Nigeria is considered as one of the highest emitters of greenhouse gases in Africa.¹²¹

The continuous flaring of gas in Nigeria may be attributed in part to the absence of a viable policy by the Federal Government that sets goals and enunciates plans for the introduction of an appropriate framework for the Nigerian gas sector. In addressing this challenge, the National Gas Policy 2017 was enacted to “define the policy of the Federal Government in respect of Nigeria’s natural gas endowment, establish its medium to long-term targets for gas reserves growth and utilization and record strategies to be pursued to ensure the successful implementation of the policy in accordance with Nigeria’s national socio-economic

¹¹⁷ Ajugwo, *supra* note 2 at 6.

¹¹⁸ *Ibid.*

¹¹⁹ *Ibid.*

¹²⁰ Federal Ministry of Environment, “Gas Flare Tracker” online: <<http://gasflaretracker.ng/about.html> > [FME “Gas Flare Tracker”].

¹²¹ Onyekachirondi, “Effects of Gas Flaring on the Environment of Host Communities in Niger Delta Region of Nigeria” online: <<https://onyekachirondi.wordpress.com/2016/05/16/effects-of-gas-flaring-on-the-environment-of-host-communities-in-niger-Delta-region-of-nigeria/>>.

development priorities”.¹²² It aims at achieving gas flare out through gas utilization projects.¹²³ By means of the policy, the Nigerian government intends to raise the gas flaring penalty to a suitable level, enough to de-incentivize the practice of gas flaring, and at the same time offering other strategies that will support efficient gas utilization.¹²⁴ As indicated in the preceding chapter, the National Gas Policy articulates the goal of the Nigerian Government and sets out an implementation plan for the institution of a suitable legal and regulatory structure for the Nigerian gas sector.¹²⁵ It focuses on exploring and developing additional gas supply sources, creating portfolio management framework for cheaper gas development, and ascertaining and developing vital gas infrastructure.¹²⁶ In achieving its objective of gas-based industrialization of Nigeria, the National Gas Policy seeks to grow the domestic gas market by *inter alia*, providing alternative markets and uses for gas.¹²⁷ It seeks to build gas market in Nigeria through the identification and encouragement of local gas market development projects as well as the development and exploitation of regional African gas markets.¹²⁸ Also, one of the objectives of the National Gas Policy is to take measures to ensure that flare capture and utilization projects are created in order to increase flared gas utilization.¹²⁹

In the meantime, the Nigerian government has commenced a gas flare commercialization program in order to effectively curtail the country’s gas flares and increase gas supply in order to meet the gas needs of the country. This program is called the National Gas Flare Commercialization Program (NGFCP).¹³⁰ The Nigerian government approved the NGFCP in recognition of the fact that flared gas could be exploited to strengthen economic growth, propel investments and provide employment opportunities for Nigerians through the

¹²² National Gas Policy, *supra* note 14 at 2.

¹²³ *Ibid* at 15.

¹²⁴ *Ibid* at 64.

¹²⁵ National Gas Policy, *supra* note 14.

¹²⁶ *Ibid* at 15.

¹²⁷ *Ibid* at 68.

¹²⁸ *Ibid* at 15.

¹²⁹ *Ibid* at 60.

¹³⁰ Nigerian Gas Flare Commercialization Programme, “Nigerian Gas Flare Commercialization Programme” online: <<http://www.ngfcp.gov.ng/about-us/welcome-by-the-steering-committee-chairman/>>.

utilization of widely accessible technologies.¹³¹ The aim of the NGFCP is to put an end to gas flaring by means of “technically and commercially viable gas utilization projects” created by capable third party investors who will be requested to take part in a competitive and open bid process.¹³² The NGFCP plans to attract investment in economically feasible gas flare capture projects.¹³³ Through the program, the Nigerian government will offer flare gas for sale through an open bidding process.¹³⁴

Earlier gas commercialization policies in Nigeria led to the commencement of projects such as the West African Gas Pipeline Project (WAGP), Gas Pipeline Network Expansion, the Liquefied Natural Gas (LNG) project, and the Escravos Gas Pipeline Projects.¹³⁵ In particular, the WAGP is a regional transmission system constructed to export gas from Nigeria to West African countries such as Ghana, Benin and Togo.¹³⁶ It is the foremost regional pipeline to be constructed in sub-Saharan Africa.¹³⁷ However, this export pipeline project is fraught with numerous challenges such as highly expensive infrastructure, lack of supply from Nigeria, non-payment by some WAGP consumers, and pipeline vandalism in Nigeria.¹³⁸ In recognition of the shortcomings of the WAGP, the newly adopted National Gas Policy provides that the government will take necessary remedial measures to ensure improved gas supply into the West African region. As a means to achieve this, the Nigerian government intends to ease the business and regulatory environment for the development of

¹³¹ Nigerian Gas Flare Commercialization Programme, “Nigerian Gas Flare Commercialization Programme” online: < <http://www.ngfcp.gov.ng/>>.

¹³² *Ibid.*

¹³³ *Ibid.*

¹³⁴ *Ibid.* According to reports which cannot be verified at the moment, the new Regulation provide, in part, a framework for the NGFCP.

¹³⁵ Charles Odumugbo, “Natural Gas Utilization in Nigeria: Challenges and Opportunities” (2010) 2:6 Journal of Natural Gas Science & Engineering at 310 – 316.

¹³⁶ Oil and Gas Advancement, “West African Gas Pipeline (WAGP), Nigeria” online: <<http://www.oilandgasadvancement.com/projects/west-african-gas-pipeline-wagp-nigeria/>>.

¹³⁷ *Ibid.*

¹³⁸ See National Gas Policy, *supra* note 15 at 70. Some have argued that the WAGP has mostly used non-associated gas instead of associated gas.

gas infrastructure and enlargement of the Trans-Saharan Gas Pipeline.¹³⁹ These laudable and promising initiatives of the Nigerian government are aimed at effective gas utilization.

As indicated in the preceding chapter, the National Gas Policy addresses insufficient markets and infrastructure for natural gas utilization. As a result, this thesis focuses on legislation and not on insufficient market and infrastructure. The next section discusses the environmental, health, economic and social implications of gas flaring which has persisted in Nigeria despite the development of a policy framework.

2.2.1.1 Environmental Implications

Gas flaring contributes to climate change with its attendant effects on the environment. The flaring of associated gas emits carbon dioxide and a number of compounds such as methane, propane, as well as benzene, naphthalene, styrene, acetylene, fluoranthene, anthracene, pyrene, xylene and ethylene.¹⁴⁰ According to a report by Justice in Nigeria Now, people reside within close proximity to the roaring, low-lying flares that spring as high as a skyscraper, emitting dark clouds of harmful smoke in the middle of their communities.¹⁴¹ In the Northern Hemisphere, gas flaring is a source of a substantial amount of nitrogen dioxide and black carbon in the Arctic.¹⁴² Nitrogen oxides produce the tropospheric greenhouse gas ‘ozone’ through photochemical reactions in the atmosphere.¹⁴³ In the Niger Delta, as in other flaring sites, gas flaring releases a substantial amount of toxins which are the main source of acid rain. The effect of acid rain in the Niger Delta is demonstrated by the rusting of iron sheets and destruction of the ecosystem.¹⁴⁴ Acid rain also dissolves and washes away soil nutrients leading to a decrease in the nutritional value of crops within the affected area.¹⁴⁵

¹³⁹ *Ibid.*

¹⁴⁰ Michiko Ishisone, “Gas Flaring in the Niger Delta: The Potential Benefits of its Reduction on the Local Economy and Environment” online: <<https://nature.berkeley.edu/classes/es196/projects/2004final/Ishone.pdf> > at 14.

¹⁴¹ Justice in Nigeria Now, “Gas Flaring” online: <<http://justiceinnigerianow.org/gas-flaring/>>.

¹⁴² National Aeronautics and Space Administration, “Scientists Scrutinize Arctic Gas Flaring Solutions” online: <<https://climate.nasa.gov/news/2437/scientists-scrutinize-arctic-gas-flaring-pollution/>>.

¹⁴³ GHG Online, “Other Indirect Greenhouse Gases-Nox” online: <<http://www.ghgonline.org/othernox.htm>>.

¹⁴⁴ Akobundu, *supra* note 56.

The acidification of soil in the affected areas affects capacity for sustainable agriculture, and is a major reason for loss of plant fertility.¹⁴⁶ This may lead to severe food crisis in Nigeria.

2.2.1.2 Health Implications

Gas flaring negatively impacts the health of living organisms. Flares contain toxins such as benzene which pollute the air and cause respiratory diseases such as asthma and bronchitis.¹⁴⁷ The harmful pollutants released during incomplete flaring are also linked to diseases such as cancer, and deformities in children.¹⁴⁸ Toxins released by hydrocarbons affect blood and blood-forming cells negatively and could easily lead to anemia (aplastic), pancytopenia and leukemia.¹⁴⁹ These health impacts occur due to both sour gas flaring and sweet gas flaring. Following assertions that the health implications arising from gas flaring are not supported by conclusive evidence, a project which seeks to build scientific, statistical and testimonial evidence relating to the health impacts of gas flaring in the Niger Delta has just commenced.¹⁵⁰

2.2.1.3 Economic Implications

Nigeria loses billions of dollars yearly to gas flaring. It has been estimated that the total volume of flared gas could fuel about 7000MW of efficient thermal electric power.¹⁵¹ In fact, the volume of gas flared on a yearly basis in Nigeria is sufficient to take care of the electricity requirements of sub-Saharan Africa. Nigeria suffers from insufficient electric power

¹⁴⁵ Ajugwo, *supra* note 2 at 6-8.

¹⁴⁶ Oluwagbenga Orimoogunje et al, "Perception on the Effect of Gas Flaring on the Environment" (2010) 2:4 Research Journal of Environmental and Earth Sciences at 188-193.

¹⁴⁷ Friends of the Earth, "Gas Flaring in Nigeria: A Human Rights, Environmental and Economic Monstrosity" online: < https://www.73.co.uk/sites/default/files/downloads/gas_flaring_nigeria.pdf >at 2 [FOE].

¹⁴⁸ Nwankwo & Ogagarue, *supra* note 43 at 131-136.

¹⁴⁹ The Bayside Desk, "Blood Disorders – Symptoms and Treatment" online: <<https://baysidejournal.com/blood-disorders-symptoms-and-treatments/>> [The Bayside Desk].

¹⁵⁰ See Impact Africa, "Investigating the Health Impacts of Gas Flaring on Communities in the Niger Delta" online: <<http://impactafrica.fund/projects/investigating-the-health-impacts-of-gas-flaring-on-communities-in-the-niger-delta>>.

¹⁵¹ Ajugwo, *supra* note 2 at 31.

generation despite significant natural gas resources available for power generation. The economic implications of the total amount of gas flared in Nigeria are stunning and these present investment opportunities in agro-processing facilities, textile plants, and fertilizer plants with potentials for job creation.¹⁵² In this regard, Ismail and Umukoro suggest that more gas-intensive modes of production should be employed in the oil and gas sector.¹⁵³

2.2.1.4 Social Implications

The social impact of gas flaring in the Niger Delta region is far-reaching and has affected the social and cultural lives of the communities in the region.¹⁵⁴ For instance, gas flaring has resulted in the extinction of medicinal plants and herbs that are of great significance to the traditional medicine and spirituality of the region, and some of these herbs are found in forests and swamps which have been rendered toxic by gas flares.¹⁵⁵ Under the *Petroleum (Drilling and Production) Regulation*, a licensee of an oil mining lease is precluded from exercising its mining lease where, amongst others, the land is a sacred forest.¹⁵⁶ However, this provision of the law is often breached by IOCs by operating and flaring gas in such designated areas.¹⁵⁷

Amongst the Niger Delta communities, the negative effects of oil and gas production have fostered individualism as opposed to the hitherto communal lifestyle.¹⁵⁸ In times of pollution, the elders of the communities think of themselves first and collaborate with the IOCs at the

¹⁵² *Ibid.*

¹⁵³ Ismail and Umukoro, *supra* note 39 at 293.

¹⁵⁴ Legborsi Pyagbara, “The Adverse Impacts of Oil Pollution on the Environment and Wellbeing of a Local Indigenous Community: The Experience of the Ogoni People of Nigeria” (Paper delivered at the United Nations International Expert Group Meeting on Indigenous Peoples and Protection of the Environment, 27-29 August 2007) at 11 online: <http://www.un.org/esa/socdev/unpfii/documents/workshop_IPPE_pyagbara.doc> [Legborsi].

¹⁵⁵ *Ibid.*

¹⁵⁶ Petroleum (Drilling and Production) Regulations, *supra* note 21 at paragraph 17.

¹⁵⁷ Legborsi, *supra* note 154.

¹⁵⁸ *Ibid.*

expense of their status in the community thereby breaking the social harmony that was formerly in place.¹⁵⁹

In view of the health, social, and environmental implications of gas flaring discussed above, this thesis contends that the adverse effects of gas flaring have now made it expedient for Nigeria to be more determined than ever to curtail the incidence of gas flaring. The next section assesses the adequacy of the efforts made by the Nigerian government at developing a legislative and regulatory framework for oil exploration and production and gas flaring reduction in Nigeria. The section analyzes the AGRA which is the current domestic gas flaring law in Nigeria, and appraises the various regulatory agencies such as the Department of Petroleum Resources (DPR), the National Environmental Standards and Regulations Enforcement Agency (NESREA), and the National Oil Spill Detection and Response Agency (NOSDRA).

2.2.2 The Law

2.2.2.1 *Associated Gas Re-injection Act (AGRA)*

Currently, the principal legislation regulating gas flaring reduction in Nigeria is the AGRA¹⁶⁰ and the regulations made pursuant to the Act.¹⁶¹ The application of the AGRA extends to all lands as defined under the *Petroleum Act* and the Exclusive Economic Zones (EEZ)¹⁶² but does not extend to non-associated gas within concession or contract zones.¹⁶³ Notably, the Act prohibits the flaring of associated gas after January 1 1984, without the written consent of the Minister.¹⁶⁴ However, it allows the Minister to use his discretion to permit continued gas flaring in instances where the target date of January 1, 1984 is not tenable.¹⁶⁵ The Regulations

¹⁵⁹ *Ibid* at 12.

¹⁶⁰ AGRA, *supra* note 5.

¹⁶¹ See the *Associated Gas Re-Injection (Continued Flaring of Gas) Regulations* made pursuant to section 3 and 5 of the AGRA [AGRA Regulations].

¹⁶² AGRA, *supra* note 5 at section 6.

¹⁶³ Odumosu 2005, *supra* note 27 at 129.

¹⁶⁴ AGRA, *supra* note 5 at section 3(1).

¹⁶⁵ AGRA, *supra* note 5 at section 3 (2) a.

made under the AGRA provide for conditions for the exercise of the Minister's power to issue a certificate pursuant to section 3(2) of the AGRA for the continued flaring of gas in a specific field(s).¹⁶⁶ These conditions include where over 75 percent of the produced gas was effectively utilized or conserved; where the produced gas contains 15 percent of certain impurities which makes the gas unsuitable for industrial purposes; where an on-going utilization program was disrupted by equipment failure provided that such failure is not deemed frequent by the Minister and the duration of any one disruption does not exceed three months; and where the ratio of the amount of gas produced per day to the distance of field from the closest gas line or possible utilization point is less than 50,000 standard cubic feet per kilometer as long as the gas-to-oil ratio of the field is less than 3,500 standard cubic feet per barrel, and that it is not technically appropriate to re-inject the gas in that field.¹⁶⁷ The Minister may also in appropriate cases, as he may deem fit, order the production of oil from a field that does not meet any of these conditions.¹⁶⁸

2.2.2.2 Inadequacies of the *Associated Gas Re-injection Act* (AGRA)

Notwithstanding the promising provisions of the AGRA and its regulations, the overall utility and effectiveness of the legislation and its regulations are limited by several factors. First, the Regulations confer enormous discretion on the Minister to modify any provision of the Regulations as he/she may deem fit.¹⁶⁹ The effect of this is that the Minister could amend, alter, or add to the provisions of the regulations in order to permit the flaring of gas by IOCs based on some lenient conditions. In fact, the Minister has often used his/her discretion to grant permits for the flaring of gas in a manner that favours the IOCs.¹⁷⁰

¹⁶⁶ AGRA Regulations, *supra* note 161 at regulation 1(a) – (e).

¹⁶⁷ *Ibid* at (a) – (d). Basically, the Minister's power to issue a certificate for the continued flaring of gas is exercised pursuant to regulation 1(a) – (e).

¹⁶⁸ *Ibid* at (e).

¹⁶⁹ *Ibid* at regulation 2.

¹⁷⁰ Oshionebo, *supra* note 113 at 53.

Second, the penalty regime under the AGRA provides justification for complacency on the part of IOCs and encourages the continuous flaring of gas in Nigeria.¹⁷¹ Under the AGRA, the Minister determines the amount to be paid for every 28.317 standard cubic metre (SCM) of gas flared,¹⁷² which is equivalent to 1000 standard cubic feet. At the moment, IOCs pay 10 naira (US \$ 0.03)¹⁷³ per thousand standard cubic feet (MCF) as penalty for flaring gas even though gas is sold at the international gas market for US \$ 2.73 per MCF.¹⁷⁴ The penalty is not significant enough to dissuade IOCs from flaring gas in Nigeria.

Third, the provisions of the AGRA are not based on broader environmental principles such as sustainable development and polluter pays principle. As indicated in the preceding chapter, the AGRA is outdated and was enacted at a time when gas flaring was not envisioned to impact the climate as it now does. It is also instructive to note that the paltry sum paid by the IOCs represents a misapplication of the polluter pays principle. The polluter pays principle addresses the compensatory cost of damage to the property rights of those affected by the environmental pollution caused by the polluter.¹⁷⁵ However, it is apparent that the meager sum paid by IOCs as penalties does not adequately compensate for the effects of gas flaring, and this significantly undermines the effectiveness of the law. Legislation informed by environmental considerations such as sustainable development and polluter pays principle may be better able to adopt measures to address gas flaring. Basically the AGRA lacks an environmental perspective to gas flaring reduction. It is partly for this reason that the Nigerian government cannot rely on the AGRA in its present form.

¹⁷¹ Ibrionke Odumosu, “Transferring Alberta’s Gas Flaring Reduction Regulatory Framework to Nigeria: Potentials and Limitations” (2007) 44:4 Alberta Law Review at 889 [Odumosu 2007].

¹⁷² AGRA, *supra* note 5 at section 3 (2) b.

¹⁷³ National Gas Policy, *supra* note 14 at 63. See also New Flare Gas Regulations 2018, *supra* note 31.

¹⁷⁴ Investmine, “1 Year Natural Gas Prices and Price Charts” (July 25, 2018), online: <<http://www.infomine.com/investment/metal-prices/natural-gas/1-year/>>.

¹⁷⁵ Roy Cordato, “Polluter Pays Principle: A proper Guide to Environmental Policy” online: <http://iret.org/pub/SCRE-6.PDF> at 4.

Fourth, the meager fees paid by the IOCs as penalty for flaring gas in Nigeria are considered as allowable deductions for purposes of payment of petroleum profit tax by IOCs.¹⁷⁶ This was the decision of the Tax Appeal Tribunal (TAT) in *Mobil Producing Nigeria Unlimited (MPNU) v Federal Inland Revenue Service*, where the Tribunal held in favour of MPNU and allowed the gas flare penalty paid by MPNU in the course of its petroleum operations as tax deductible.¹⁷⁷ Although it could be argued that this decision is a major boost for foreign investors in Nigeria,¹⁷⁸ it nonetheless, tacitly encourages the continuous flaring of gas by IOCs. The decision of the TAT is hinged on the fact that the AGRA treats the penalty for gas flaring as ‘royalties’, and subjects the same to a similar procedure as ‘royalties’ to the Federal Government by IOCs.¹⁷⁹ The problem lies in the fact the *Petroleum Profit Tax Act*,¹⁸⁰ which regulates the assessment and collection of petroleum profits in Nigeria, considers such royalties under the AGRA, as tax deductible.¹⁸¹ The legislative reforms that this thesis proposes will not treat penalties as ‘royalties’ for purposes of tax deduction.

Fifth, the ineffectiveness of the AGRA could possibly be attributed, in part, to the absence of a mechanism that monitors the efficacy of the Act and justifies its substance. The evidence-based ILTAM guide considered in this thesis, for instance, requires that in order to create an effective and enforceable gas flaring reduction law hinged on facts, the Nigerian lawmaker could accompany a gas flaring legislation with a research report that justifies the substance of the bill. The absence of this mechanism envisaged by ILTAM could possibly have undermined the effectiveness of the AGRA in inducing its specified behaviour and effectively addressing its targeted social problem. This deficiency partly provides the impetus for this thesis’ consideration of legislative reform that envisions the enactment of a new gas

¹⁷⁶See the decision of the Tax Appeal Tribunal in *Mobil Producing Nigeria Unlimited v Federal Inland Revenue Service* discussed in ACS Ascension, “Fees Incurred in Flaring Gas is Tax Deductible” online: <http://ascensioncsng.com/publications/Fees_Incurred_in_Flaring_Gas_is_Tax_Deductible.pdf>.

¹⁷⁷ *Ibid.*

¹⁷⁸ Omeje Emenike, “Fees Tax Deductibility of Payment for Gas Flaring and the Anti-Gas Flaring Regime in Nigeria: A Review of the Mobil v FIRS decision” online: <https://www.academia.edu/12954670/TAX_DEDUCTIBILITY_OF_PAYMENT_FOR_GAS_FLARING_AND_THE_ANTI-FLARING_REGIME_IN_NGERIA_A_REVIEW_OF_THE_MOBIL_V._FIRS_DECISION>.

¹⁷⁹ AGRA, *supra* note 5 at section 3(2) b.

¹⁸⁰ *Petroleum Profits tax Act*, CAP 13 Laws of the Federation of Nigeria 2004.

¹⁸¹ *Ibid* at section 10.

flaring legislation that is based on factual evidence and public reasoning with capacity for effective enforcement.

In further buttressing the inadequacy of the AGRA, it is important to note that the validity of the legislation was tested by the Court in *Jonah Gbemre v Shell Petroleum Development Company of Nigeria Limited*.¹⁸² In that case, the Federal High Court held that section 3(2) (a) (b) of the Act, and section 1 of its Regulations under which continued flaring of gas in Nigeria may be permitted are inconsistent with the rights to life and/or dignity of human persons enshrined in the constitution,¹⁸³ and the *African Charter on Human and Peoples Rights (Ratification and Enforcement) Act*,¹⁸⁴ and are therefore unconstitutional, and null and void. In spite of this judgment which further demonstrates the ineffectiveness of the legislation, the AGRA continues to serve as the substantive gas flaring law in Nigeria.¹⁸⁵

As a result of the inadequacy of the AGRA, subsequent attempts have been made towards amending the AGRA. In 2008, a Bill was brought before the National Assembly seeking to extend the deadline for gas flaring to December 31, 2008, and permitting gas flaring on the condition that the oil company pays the sum of 410.00 naira per MCF as penalty for flaring gas.¹⁸⁶ This Bill was eventually rejected by the National Assembly.¹⁸⁷ In the same vein, another Bill, the Gas Flaring (Prohibition and Punishment) Bill 2008 was also brought before the National Assembly in 2008, but was never signed into law.¹⁸⁸ This Bill sought to impose

¹⁸² *Gbemre v SPDC*, *supra* note 18.

¹⁸³ Nigerian Constitution 1999, *supra* note 111 at section 33(1) and 34(1).

¹⁸⁴ *African Charter on Human and Peoples Rights (Ratification and Enforcement) Act* Cap. A9, Vol. 1, Laws of the Federation of Nigeria, 2004 at articles 4, 16 & 24.

¹⁸⁵ Department of Petroleum Resources “Act and Regulations” Online: <<https://dpr.gov.ng/index/acts-and-regulations/>>. It is instructive to note that Shell Petroleum Development Company of Nigeria Limited filed an appeal against the Judgment of the Court. Also, the Nigerian government’s attitude towards the case was not particularly impressive at the time.

¹⁸⁶ *Associated Gas Re-Injection (Amendment) Bill* 2008 at section 2 & 3.

¹⁸⁷ This Bill was not passed at the time because of the debates in the Nigerian Parliament on whether the Petroleum Industry Bill (PIB) which was also being considered by the Parliament should incorporate the Bill or not. The PIGB eventually replaced the PIB. The PIGB has now been passed, but it does not address gas flaring.

¹⁸⁸ Federal Republic of Nigeria National Assembly, “A Bill for an Act to Prohibit the Flaring of Natural Gas in Nigeria and for Matters Connected therewith” online: <<https://www.nass.gov.ng/document/download/1039>> . Also see *Ibid*.

a penalty for gas flaring by introducing a punishment of fine not less than the cost of gas at the international gas market.¹⁸⁹ Under this Bill, the Minister could permit the flaring of gas only in cases of start-up, shut down or failure of equipment.¹⁹⁰ The Bill proposed the complete prohibition of gas flaring in Nigeria and extended the effective date to December 31, 2008.¹⁹¹ Despite the laudable provisions of this Bill, it was not passed into law at the time, and as it stands, the AGRA remains the extant law on gas flaring reduction in Nigeria. Other environmental laws such as the *Petroleum Act* of 1969 have been unable to address the problem of gas flaring. As discussed in the previous chapter also, the PIGB has recently been passed by both houses of the Nigerian National Assembly, but is yet to be signed into law. However, the PIGB does not make any specific provision regarding gas flaring.¹⁹² Nonetheless, the PIGB demonstrates a willingness on the part of the Nigerian government to address issues confronting Nigeria's oil and gas sector. The enactment of the PIGB as well as the adoption of the National Gas Policy and the NGPCP shows that the Nigerian government is willing, at this moment, to reform the oil and gas sector. In particular, the National Gas Policy and NGFCP aim at ending gas flaring and achieving gas flare out through gas utilization projects.

2.2.3 The Regulatory Mechanisms and their Limitations

Various institutions have been established to regulate oil and gas production in Nigeria. However, with respect to gas flaring, the function of gas flaring regulation has continued to teeter between the National Oil Spill Detection and Response Agency (NOSDRA), Nigerian Environmental Standards and Regulations Enforcement Agency (NESREA), and the Department of Petroleum Resources (DPR). In describing the roles of these regulatory agencies, this section will also identify the restrictions to the agencies' performance of their roles that impact effective gas flaring regulation in Nigeria.

¹⁸⁹ *Gas Flaring (Prohibition and Punishment) Bill* 2008 at section 3(ii).

¹⁹⁰ *Ibid* at section 3(i).

¹⁹¹ *Ibid* at section 1(2).

¹⁹² PIGB, *supra* note 25.

2.2.3.1 Department of Petroleum Resources (DPR)

Basically, the role of the DPR is to ensure compliance with petroleum laws and regulations in Nigeria's oil and gas sector.¹⁹³ The DPR also regulates the petroleum industry activities to ensure that they are in consonance with national goals and objectives including goals pertaining to flare down and domestic gas supply obligations.¹⁹⁴ It is the technical arm of the Ministry of Petroleum Resources.¹⁹⁵

The primary functions of the DPR include regulating all petroleum industry activities which are undertaken under licenses and leases in Nigeria so as to ensure compliance with the relevant laws and regulations. The DPR also implements safety and environmental rules and makes sure that petroleum activities meet national and international industry standards. It maintains records on petroleum industry activities, especially on issues pertaining to petroleum reserves, exploration and export of crude oil, gas and condensate, licenses and leases, and provides regular updates on the petroleum industry activities to the Government. In addition, the DPR advises the Government and relevant agencies on technical matters and policies which may have impact on the governance and control of petroleum, and processes all applications for licenses in order to ensure compliance with stipulated guidelines before making suggestions to the Minister of Petroleum Resources. The DPR also ensures timely and accurate payment of rents and royalties due to the Nigerian government.¹⁹⁶

The DPR derives its powers by delegation from the *Nigerian National Petroleum Corporation Act* which creates the Petroleum Inspectorate as an essential part of the NNPC.¹⁹⁷ Neither the AGRA nor the *Petroleum Act* grants an explicit regulatory mandate to

¹⁹³ Department of Petroleum Resources, "Functions" online: < <https://www.dpr.gov.ng/functions-of-dpr/> > [DPR Functions].

¹⁹⁴ Department of Petroleum Resources, "History" online: <<https://www.dpr.gov.ng/history-of-dpr/>> [DPR History].

¹⁹⁵ *Ibid.*

¹⁹⁶ DPR Functions, *supra* note 193.

¹⁹⁷ *Nigerian National Petroleum Corporation Act Cap N123, LFN 2004* [NNPC Act]. See the long title of the Act. The Act empowers the NNPC to implement all regulatory measures relating to the general control of the Petroleum sector through its Petroleum Inspectorate department. The DPR replaced the Petroleum Inspectorate Department. The DPR is no longer part of the NNPC.

the DPR.¹⁹⁸ Rather, the duty to enforce their provisions is vested in the Minister who carries out this function through the DPR.¹⁹⁹ Accordingly, the implementation structures and the responsibilities of DPR are imprecise and this undermines the effective implementation of gas flaring laws by the DPR.

2.2.3.2 National Environmental Standards and Regulations Enforcement Agency (NESREA)

NESREA was created with the mandate to ensure the safeguarding and development of the environment, biodiversity protection and improvement of Nigeria's natural resources and environmental technology.²⁰⁰ Its role includes partnering with relevant stakeholders on issues involving the implementation of environmental standards.²⁰¹ NESREA is currently the principal environmental regulatory body in Nigeria.²⁰² NESREA replaced the defunct Federal Environmental Protection Agency (FEPA) as a result of the shortcomings of the FEPA which include lack of implementation of existing environmental laws.²⁰³ Scholars assert that NESREA represents a new vista for environmental protection in Nigeria because in both its aims and content, it seeks to address the prevalence of old environmental regulations and implementation mechanisms which led to the increase in the non-compliance rate with environmental laws.²⁰⁴ The law creating NESREA empowers the Agency to *inter alia* ensure compliance with the provisions of international environmental standards on the environment.²⁰⁵ Since most of the international environmental standards to which Nigeria is

¹⁹⁸ Odumosu 2005, *supra* note 27 at 147.

¹⁹⁹ *Ibid* at 146.

²⁰⁰ National Environmental Standards and Regulations Enforcement Agency (NESREA), "Our Functions" online: <<http://www.nesrea.gov.ng/our-functions/>>.

²⁰¹ *Ibid*.

²⁰² NESREA Act, *supra* note 84.

²⁰³ Mohammed Ladan, "Review of NESREA Act 2007 and Regulations 2009-2011: A New Dawn in Environmental Compliance and Enforcement in Nigeria" online: <https://www.researchgate.net/publication/272290396_Review_of_NESREA_Act_2007_and_Regulations_2009-2011_A_New_Dawn_in_Environmental_Compliance_and_Enforcement_in_Nigeria> at 120 [Ladan].

²⁰⁴ *Ibid* at 121.

²⁰⁵ NESREA Act, *supra* note 84 at section 7 (c).

signatory have not been domesticated, it could be argued that the law creating the NESREA restricts the implementation power of NESREA only to the treaties which have been domesticated. However, many of the environmental law treaties that implicate gas flaring reduction are yet to be domesticated. It remains the contention of this thesis therefore that Nigeria has an obligation to domesticate its international treaties to ensure effective implementation of its environmental law standards including those restricting GHG emissions from gas flaring.

2.2.3.3 National Oil Spill Detection and Response Agency (NOSDRA)

The NOSDRA was created in 2006 with the mandate for readiness, identification and reaction to oil spillages in Nigeria.²⁰⁶ It is apparent that the objective of the law establishing the NOSDRA is to limit its responsibility to incidences of oil spillage. The guiding principles of the Agency are to fashion, foster and support a zero tolerance for oil spill incident in the Nigerian environment.²⁰⁷ There have however been calls for the expansion of the law establishing the Agency to include responsibilities for other types of environmental pollution. One may argue that this expansion of roles will be necessary in order to accommodate responsibilities for implementing and monitoring gas flaring laws. Nonetheless, it is doubtful if a proliferation of regulatory agencies will be helpful in reducing the incidence of gas flaring in Nigeria. In the meantime, NOSDRA still plays a key role in gas flaring regulation in Nigeria. The Agency has established a gas flaring tracking system which is aimed at aiding regulators in detecting the volume of gas flared by oil companies operating in Nigeria.²⁰⁸ The system is funded by the United Kingdom through its Department for International Development (DFID).²⁰⁹ As laudable as this innovation may seem, this thesis contends that there is a need to amend the law in order to provide a legal basis for the gas flaring tracking system, considering the fact that the Agency's objective as stated in its enabling law, is limited to oil spillage.

²⁰⁶ *National Oil Spill Detection and Response Agency (Establishment) Act* No.15 2006 at section 1(1).

²⁰⁷ NOSDRA, "National Oil Spill Detection and Response Agency" online: <<http://nosdra.gov.ng/>>.

²⁰⁸ Gas Flare Tracker, "Nigerian Gas Flare Tracker" online: <<http://gasflaretracker.ng/>>.

²⁰⁹ Petroleum Africa, "Nigeria Launches Gas Flare Tracking System" online: <<https://www.petroleumafrika.com/nigeria-launches-gas-flare-tracking-system/>>.

2.2.3.4 World Bank Initiatives

Through initiatives such as the Zero Routine Flaring by 2030, the World Bank has been making efforts to stop the incidence of gas flaring as it contributes to climate change and impacts the environment through emission of hazardous pollutants. The Zero Routine Flaring by 2030 initiative was introduced by the World Bank to bring together governments, oil companies, and development institutions who recognize that gas flaring is unsustainable from a resource management and environmental perspective, and who agree to cooperate to eliminate routine flaring no later than 2030.²¹⁰ This initiative does not address gas flaring for safety reasons or non-routine flaring. The initiative seeks to encourage the proper environment of cooperation between all stakeholders in order to bring about economic solutions through appropriate regulation, application of technologies, and financial arrangements, and strengthens the notion that governments, oil companies, and institutions all need to work in consonance to eradicate routine flaring.²¹¹

The initiative is beneficial to both endorsing governments and endorsing oil companies. The endorsing governments are required to provide a legal, regulatory, investment and operating environment that is conducive to upstream investments and to the growth of viable markets for utilization of the gas and the infrastructure needed to provide gas to these markets.²¹² This will in turn give the endorsing companies confidence and incentivize them for investing in flare elimination ventures.²¹³ While the endorsing companies make a commitment to avoid routine flaring in new oil field developments, and make efforts to end ongoing routine flaring over time, the endorsing countries, in addition, make a commitment to provide an operating environment conducive for flaring reduction.²¹⁴ Currently, 22 governments (including Nigeria), 29 oil and gas companies and 13 development institutions have endorsed the

²¹⁰ World Bank Zero Routine Flaring by 2030, *supra* note 32.

²¹¹United Nations Environment, “Zero Routine Flaring by 2030” online: <http://climateinitiativesplatform.org/index.php/Zero_Routine_Flaring_by_2030>.

²¹² Petroleum Industry Review, “Implementing Zero Routine Flaring Initiative” online: <<http://www.petroleumreview.ro/magazine/2017/july-august/96-july-august-2017/1438-implementing-zero-routine-flaring-initiative>>.

²¹³ *Ibid.*

²¹⁴ World Bank Zero Routine Flaring by 2030, *supra* note 32.

initiative.²¹⁵ Commendably, the Nigerian government is determined to end gas flaring ahead of the Zero Routine Flaring initiative by achieving gas flare-out through gas utilization.²¹⁶ To this end, the Federal Government has designed a National Gas Policy and the NGFCP.²¹⁷ This is a commendable proactive policy measure which places Nigeria in a very good position to meet the World Bank's 2030 target. A restructuring of the legal framework for gas flaring reduction and domestication of international environmental standards proposed in this thesis also present viable options that support realization of the target.

The World Bank had earlier launched the Global Gas Flaring Reduction Partnership (GGFR), a public-private initiative made up of local and international oil companies, government, and international bodies. This initiative is aimed at increasing the consumption of natural gas associated with oil production by facilitating the removal of technical and regulatory hurdles to flaring reduction, conducting research, spreading best practices, and evolving country-specific gas flaring reduction programmes.²¹⁸ Countries such as Canada, via the Canadian International Development Agency (CIDA), have provided substantial backing to the World Bank with respect to this initiative.²¹⁹ The GGFR has continued to provide assistance to Nigeria in achieving its goal of ending routine gas flaring and unlocking Nigeria's substantial gas potential.²²⁰ Overall, the GGFR and Zero Routine Flaring initiative are part of the global initiatives put in place by the World Bank towards reducing gas flaring. Nigeria has also made efforts to give effect to GGFR through fiscal and economic incentives, international initiatives, as well as the National Gas Policy and the NGFCP, which refers specifically to the GGFR. As earlier indicated in the preceding chapter, the initiative sets clear gas flaring reduction goals for the future. It is different from the GGFR which is earlier in time, as the

²¹⁵ *Ibid.*

²¹⁶ Energy Mix Report, "Nigeria Achieves 26% Reduction in Gas Flaring, to Exit by 2020" online:<<http://energymixreport.com/nigeria-achieves-26-reduction-gas-flaring-exit-2020/>>.

²¹⁷ National Gas Policy, *supra* note 14.

²¹⁸ The World Bank, "Global Gas Flaring Reduction Partnership" online:<<http://www.worldbank.org/en/programs/gasflaringreduction>>.

²¹⁹ The World Bank, "World Bank Global Gas Flaring Reduction – Private Public Partnership Implementation Plan for Canadian Regulatory Authorities" online:<http://siteresources.worldbank.org/EXTGGFR/Resources/canada_cip.pdf> at 2.

²²⁰ The World Bank, International Gas Union (IGU) and Nigeria only recently organized a joint seminar with the objective of eliminating gas flaring.

GGFR's aim is not to set such goals, but to aid flaring mitigation activities in order to meet the 2030 goal. Nigeria's adoption of the GGFR and Zero Routine Flaring initiative further demonstrates the commitment of the government at this moment to taking steps in reducing gas flaring. There is an indication that Nigerian government is willing to adopt a legislative response to gas flaring at the moment.²²¹

2.3 The Need for Legislative Reforms and its Implications for the Nature and Effectiveness of Gas Flaring Reduction in Nigeria

The preceding sections have presented the inadequacies of the law as well as regulatory challenges as part of the factors inhibiting gas flaring reduction efforts in Nigeria. It is against this background that this thesis considers the importance of legislative reforms in curtailing the incidence of gas flaring in Nigeria. As earlier indicated in chapter one, the legislative reforms which this thesis envisages are twofold. It contemplates the adoption of new gas flaring reduction legislation and the domestication of international standards on GHG emissions.

In canvassing the argument for legislative reforms, this thesis contends that the current gas flaring legislation in Nigeria has been ineffective. As earlier indicated, one reason for the ineffectiveness of the legislation is that gas flaring was not envisioned to seriously impact the climate at the time the law was enacted. Basically, the Nigerian government was unable to know in advance, the capacity of gas flaring to cause serious climate concern as it presently is, and, was unable to effectively predict in advance how to respond adequately to the issue of gas flaring. The principal gas flaring law in Nigeria, the AGRA, has been unable to meet the fundamental requirement which requires a good law to anticipate unforeseen circumstances.²²² It is clear that the AGRA was enacted at a time when environmental principles such as sustainable development had not gained as much prominence as they now have. Similarly, as indicated earlier, the AGRA is deficient as it has been unable to induce its specified behaviour and properly address its targeted social problem. Also, the Minister of Petroleum still relies on the outdated and ineffective AGRA in its present form, despite its inability to properly address the climatic, environmental, health and social concerns arising

²²¹ See New Flare Gas Regulations 2018, *supra* note 31.

²²² Oluduro, *supra* note 4 at 171.

from the flaring of natural gas in Nigeria. Although Nigeria now has a gas flaring tracking mechanism that monitors the volume of gas flared,²²³ a lot remains to be done to properly tackle the incidence of gas flaring. The passage of the PIGB is a step in the right direction but as highlighted earlier, the PIGB does not address the problem of gas flaring. In order to curtail the incidence of gas flaring, introducing new legislation hinged on environmental considerations could prove an effective alternative to the current legislation.

Furthermore, legislative reforms are imperative in view of the fact that the ability of the Nigerian government to meet the targets set in its gas flaring reduction policies could be dependent on the enactment of new legislation. For instance, as earlier indicated, the National Gas Policy has been adopted by the Nigerian government to *inter alia* achieve gas flare-out in Nigeria through gas utilization. Gas utilization could be encouraged by disincentivizing gas flaring. This could dissuade IOCs from flaring gas, thereby inducing them to focus on gas utilization. The legislative reforms proposed in this thesis seek to give effect to the objective of the National Gas policy by *inter alia* disincentivizing gas flaring and encouraging gas utilization.

In addition, given that gas flaring contributes to climate change through the emission of carbon dioxide into the atmosphere, Nigeria's commitment towards ending gas flaring will be bolstered if it carries out legislative reform that domesticates international environmental standards on GHG emissions to which it is a party. As indicated earlier, despite ratifying the Paris Agreement on Climate Change, Nigeria is yet to domesticate the Agreement. The domestication of the Agreement will ensure that Nigeria's obligations under its NDCs are enforceable in Nigeria. It will also enable subsequent legislation to make reference to those domesticated standards.

2.4 Conclusion

Given that the broader inquiry in this thesis is to explore the practicability of adopting legislative reforms in Nigeria's oil and gas sector as a solution to the problem of gas flaring in Nigeria, the chapter has analyzed the incidence of gas flaring in Nigeria and discussed the ineffectiveness of the legal framework for gas flaring reduction in Nigeria. In making a case

²²³ FME "Gas Flare Tracker", *supra* note 120.

for legislative reforms, the chapter discussed the legal measures Nigeria has taken to reduce the climatic and environmental impact of gas flaring and argued that the current gas flaring reduction regime has been ineffective. The chapter provided the basis for contending that the domestication of international environmental standards on GHG emissions and incorporation of environmental principles in legislation could serve to ensure greater effectiveness of the gas flaring reduction efforts in Nigeria. It also identified the lack of effective implementation of laws as well as the duplication of functions among regulatory agencies as one of the factors hampering gas flaring reduction in Nigeria. This chapter has provided the premise for this thesis' consideration of legislative reforms as a viable option for curtailing the incidence of gas flaring in Nigeria.

CHAPTER 3: PRACTICABILITY OF LEGISLATIVE REFORMS: EXAMINING THE POTENTIAL IMPACT OF INTERNATIONAL INVESTMENT STANDARDS ON GAS FLARING REGULATION IN NIGERIA

3.1 Introduction

The preceding chapter has laid out the premise for this thesis' consideration of legislative reforms as a possible option for reducing gas flaring in Nigeria. This chapter will examine the practicability of legislative reforms and investigate whether Nigeria's foreign investment laws, investment treaties and contractual obligations would preclude the enactment of new gas flaring legislation. In investigating the practicability of legislative reforms, this chapter scrutinizes the regulatory framework for international investment law in Nigeria and its potential impacts on gas flaring in Nigeria. The chapter places specific environmental issues with respect to Nigeria's oil and gas industry within the context of the criticisms of international investment law and addresses the recurring incidence of gas flaring. This thesis recognizes the relevance of other treatment standards in BITs such as national treatment and fair and equitable treatment but will focus on expropriation.²²⁴ It argues that expropriation is most likely to impact domestic gas flaring regulation in Nigeria.

Four substantive sections comprise this chapter. The first substantive section of this chapter investigates foreign investment and global investment trends and discusses pertinent issues regarding foreign investment in Nigeria's oil and gas sector. The second section discusses liberalization and demonstrates that even though foreign investment has contributed immensely to the growth of Nigeria's oil and gas sector, the sector remains the major emitter of GHGs from gas flaring in Nigeria. The third section appraises Nigerian law on foreign investment protection, specifically focusing on the *Nigeria Investment Promotion Commission Act* (NIPCA)²²⁵ and Nigeria's BITs. The fourth section analyzes environmentally relevant clauses in oil and gas contracts and examines whether stabilization clauses in oil and gas contracts would preclude the enactment of new gas flaring legislation.

²²⁴ For a discussion on National Treatment and Fair and Equitable Treatment, see David Collins, *An Introduction to International Investment Law* (Cambridge: Cambridge University Press, 2017) at 95 – 153 [Collins].

²²⁵ *Nigerian Investment Promotion Commission Act* CAP N117, Laws of the Federation of Nigeria 2004 [NIPCA].

3.2 Foreign Investment And Global Investment Trends

The impact of foreign investment and global investment trends on the oil and gas sector cannot be overemphasized.²²⁶ Foreign investment has been a subject of global debate²²⁷ and has assisted in developing the economies of the global south in areas such as education, health, infrastructure, and oil and gas.²²⁸ Economic theory has shown that foreign direct investment (FDI) has a positive impact on the economies of countries in the global south.²²⁹ However, foreign investment is not without challenges. For example, Gallagher and Zarsky express the view that FDI usually gives rise to the displacement of local firms, thereby undermining market competition and resulting in inflated prices.²³⁰ Be that as it may, foreign investment in the oil and gas sector has contributed significantly to the gross domestic product of sub-Saharan countries, including Nigeria.²³¹ It is not only an indicator of globalization, but triggers its deepening. International investments play a key role in the economic and political aspects of globalization as investors and traders are recognized as active players in the globalization process. According to the United Nations Conference on Trade and Development (UNCTAD), global investment is experiencing a modest recovery as global investment flows increased to about \$USD1.8 trillion in 2017 and will continue to

²²⁶ Within the context of this thesis, foreign investment refers to “the transfer of tangible or intangible assets from one country into another for the purpose of their use in that country to generate wealth under the total or partial control of the owner of the assets”. It also refers to “a transfer of funds or materials from one country (called capital exporting country) to another country (called host country) in return for a direct or indirect participation in the earnings of that enterprise”. See Muthucumaswa Sornarajah, *The International Law on Foreign Investment*, 2nd ed (Cape Town: Cambridge University Press, 2005) at 7 [Sornarajah].

²²⁷ Third World Network, “The Debate on Foreign Investment in Financing Development” online: <<https://www.twn.my/title2/resurgence/2015/300/cover04.htm>>.

²²⁸ Food and Agriculture Organization of the United Nations, “Trends and Impacts of Foreign Investment in Developing Country Agriculture Evidence from Case Studies” (2013), online: <<http://www.fao.org/docrep/017/i3112e/i3112e.pdf>> at 153.

²²⁹ Organization for Economic Co-operation and Development, “Foreign Direct Investment for Development, Maximizing Benefits, Minimizing Costs” (2002), online: <<https://www.oecd.org/investment/investmentfordevelopment/1959815.pdf>> [OECD 2002].

²³⁰ Kevin Gallagher and Lyuba Zarsky, “Rethinking Foreign Direct Investment for Development” online: <<http://www.paecon.net/PAERReview/issue37/GallagherZarsky37.htm>>.

²³¹ Hogan Lovells, “Foreign Investments in Nigeria – Preliminary Legal Issues” online: <<https://webcache.googleusercontent.com/search?q=cache:MxdcC2n5c1wJ:https://www.hoganlovells.com/publications/foreign-investments-in-nigeria-preliminary-legal-issues+&cd=1&hl=en&ct=clnk&gl=ca>>.

increase to about \$USD1.85 trillion in 2018.²³² It is also projected that FDI to Africa will improve with a significant rise in oil prices and improvements in regional integration.²³³ This forecast connotes a potential increase in oil exploration activities in the Niger Delta and the attendant flaring of gas in the region by IOCs. The increasing number of IOCs operating in Nigeria's oil and gas sector demonstrates the impact of FDI in the sector.

3.3 Liberalization

As earlier stated in the introductory chapter of this thesis, Nigeria is yet to adequately tackle the incidence of gas flaring as a result of several reasons including the priority given to investment liberalization and investment protection over environmental protection. This emphasis on investment liberalization has resulted in a situation of imbalance between Nigeria's right to regulate its environment, including gas flaring regulation, and the right of the IOCs to guaranteed protection under Nigeria's investment laws, contracts and customary international law. Schram expresses the view that although improved trade and investment amongst nations could trigger economic development, reduce poverty and its effects, and stimulate investments and increase access to goods and technologies, investment liberalization comes with some potential risks.²³⁴ One of such risks in Nigeria is that gas flaring caused by IOCs in the Niger Delta will continue in the absence of legislative reforms among others. Within the context of this thesis, liberalization implies the removal of government controls.²³⁵

Although liberalization comes with a lot of practical and theoretical unpredictability, several countries in the global south have embraced it.²³⁶ Generally, the volume of Regional Trade

²³² See United Nations Conference on Trade and Development, "World Investment Report 2017" online: <http://unctad.org/en/PublicationsLibrary/wir2017_en.pdf> at x.

²³³ *Ibid.*

²³⁴ Ashley Schram et al, "The Role of Trade and Investment Liberalization in the sugar-sweetened carbonated beverages market: a natural experiment contrasting Vietnam and the Philippines" (2015) 11:41 *Globalization and Health* at 2.

²³⁵ Anthony Orji, Jonathan Ogbuabor & Onyinye Anthony-Orji, "Financial Liberalization and Economic Growth in Nigeria: An Empirical Evidence" (2015) 5:3 *International Journal of Economics and Financial Issues* at 663.

²³⁶ James Markusen "Trade Versus Investment Liberalization" (1997) National Bureau of Economic Research Working Paper No 6231, online: <<http://www.nber.org/papers/w6231.pdf>> at 1.

Agreements (RTA) around the world has increased over the years, and the range of contemporary RTAs now includes FDI and investment liberalization for foreign investors.²³⁷ For example, in South East Asia, the Association of South East Asian Nations' (ASEAN) Investment Guarantee Agreement (AIGA) was signed to offer a legal structure for the protection of investors, provide acceptable compensation for expropriation as well as an investor-state dispute settlement mechanism.²³⁸ However, the ASEAN Comprehensive Investment Agreement (ACIA) which has recently been signed seeks to reduce foreign-ownership restrictions in a number of industries with the ASEAN member countries.²³⁹ Regional integration like this aims to decrease investment costs for foreign investors in partner countries but such goodwill does not extend to non-partner countries.²⁴⁰ Most RTAs contain clauses which make provisions that reconcile the agreements with multilateral or other environmental agreements.²⁴¹ The benefits of environmental provisions in RTAs include bolstering enforcement of environmental laws including the legislative reforms that this thesis envisages, and increasing environmental principles.²⁴²

As regards Africa, regional integration aimed at liberalization goes beyond trade and market integration and entails getting larger regional markets and more resourceful production systems aimed at improving Africa's competitiveness and positioning the continent to attract a bigger share of the global market.²⁴³ The signing of the *Treaty Establishing the African Economic Community* in 1991²⁴⁴ and its coming into force in 1994 confirmed the

²³⁷ Kiyoyasu Tanaka & Shawn Arita, "The Impact of Regional Investment Liberalization on Foreign Direct Investment: A Firm Level Simulation Assessment" (2016) 38 *Japan and the World Economy* at 1 [Tanaka & Arita].

²³⁸ *Ibid.*

²³⁹ *Ibid.*

²⁴⁰ Shawn Arita & Tanaka Kiyoyasu, "Regional Investment Liberalization and FDI" (2013) REITI Discussion Paper Series No 13-E-088, online: <<http://www.rieti.go.jp/jp/publications/dp/13e088.pdf>> at 1.

²⁴¹ Organization for Economic Co-operation and Development, "Environment and Regional Trade Agreements: Summary in English" online: <<https://www.oecd.org/env/38599709.pdf>> at 2.

²⁴² *Ibid* at 3 – 4.

²⁴³ United Nations Conference on Trade and Development, "Trade Liberalization, Investment and Economic Integration in African Regional Economic Communities Towards the African Common Market" (2012), online: <http://unctad.org/en/PublicationsLibrary/ditctncd2011d2_en.pdf. > at 20.

²⁴⁴ See *Treaty Establishing the African Economic Community*, 3 June 1991, (entered into force 12 May 1994).

commitment of African countries to create an African Economic Community. With respect to West Africa, the development of a regional trade agreement for the Economic Community of West Africa States (ECOWAS) will raise Nigeria's negotiating power, as such negotiation will be done jointly with other ECOWAS countries.²⁴⁵ As the giant of Africa, Nigeria can play a key role in developing an RTA restricted to ECOWAS member states. Although most of the IOCs operating in Nigeria are not from countries within the ECOWAS region, an ECOWAS-based RTA could nonetheless be relevant in strengthening co-operation in environmental issues of shared interest amongst member countries such as gas flaring. This RTA could contain provisions requiring parties to implement their laws and regulations as well as provisions requiring parties not to undermine their environmental laws in order to attract investment.

3.4 Nigerian Law on Foreign Investment Protection

Nigerian lawmakers have increased their drive to enact laws that will stimulate and protect foreign investment in Nigeria since the mid-1980s.²⁴⁶ The economic deprivation experienced as a result of the nationalization programmes of countries in the global south partly necessitated the Nigerian government's adoption of the liberalization agenda.²⁴⁷

The enactment of the NIPCA and the numerous BITs signed by Nigeria were both the outcome of the Nigerian government's liberalization agenda. Although foreign investment has contributed significantly to the growth of Nigeria's oil and gas sector, the sector remains the major emitter of hazardous substances into the environment in Nigeria. This is evidenced *inter alia*, in the incessant flaring of gas, which has continued as a result of the emphasis of the Nigerian government on the sustenance of the revenue being generated from the IOCs operating in the sector, without having due regard to the effect of the continuous flaring of gas on the environment. This strengthens the call for legislative reforms aimed at gas flaring reduction as an important step that must be undertaken by the Nigerian government. In

²⁴⁵ Raquel Fernandez, "Returns to Regionalism: An Analysis of Nontraditional Gains from Regional Trade Agreements" (1998) 12: 2 *The World Bank Economic Review* at 212.

²⁴⁶ Vincent Akpotaire, "The Legal Imperatives for Foreign Investment in Nigeria: Their Success Index Explored" (2004) 5:2 *Journal of World Investment and Trade* at 324.

²⁴⁷ Adetokubo Odiase-Alegimenlen, "An Appraisal of Foreign Investment Promotion and Protection Measures Operating in Nigeria" (2002) 3 *Journal of World Investment and Trade* at 363 [Odiase-Alegimenlen] at 354.

examining the practicability of legislative reform, this section will consider the NIPCA and Nigeria's BITs and ascertain whether they could hinder legislative reforms in Nigeria's oil and gas sector.

3.4.1 The Nigerian Investment Promotion Commission Act (NIPCA)

The NIPCA is the main legislation regulating foreign investment in Nigeria and its objectives include the encouragement of both local and foreign investments.²⁴⁸ With an objective of liberal and open door policy to investments, the Act was enacted, following the shift in the economic policy of the Nigerian government from indigenization to liberalization in order to strengthen Nigeria's image at the international level.²⁴⁹

The most important characteristic of the Act is that it allows for full equity participation in any enterprise in Nigeria and this is a significant departure from the earlier 40% equity participation required by the government's indigenization policy.²⁵⁰ The Act also makes provision for guarantees and incentives such as guarantee against expropriation, dispute settlement mechanisms,²⁵¹ transfer of capital, profits and dividend guarantees,²⁵² right of access to court and due process.²⁵³ The guarantee against expropriation provided under the Act is worthy of consideration as it could impact gas flaring regulation.

3.4.1.1 Nationalization And Expropriation

Although expropriation and nationalization are comparable, it is important to differentiate the terms.²⁵⁴ Generally, while nationalization cuts across an industry, expropriation aims at a

²⁴⁸ Khrushchev Ekwueme, "Nigeria's Principal Investment Laws in the Context of International Law and Practice" (2005) 49: 2 *Journal of African Law* at 177 [Ekwueme].

²⁴⁹ *Ibid.*

²⁵⁰ *Ibid* at 179.

²⁵¹ NIPCA, *supra* note 225 at section 26.

²⁵² *Ibid* at section 24.

²⁵³ *Ibid* at section 25.

²⁵⁴ *SAUR International S.A v. Argentine Republic* (2012) *ICSID Case ARB/04/4* at para. 368.

particular business.²⁵⁵ Nationalization refers to a situation where a host state indulges in an indiscriminate taking of property of investors with the aim of putting an end to their economic control and dominance of the economy or sectors of the economy.²⁵⁶ One important feature of this method of taking is that it impacts a sector of the economy or the economy at large.²⁵⁷ Expropriation is a forceful taking by the Government of tangible or intangible property owned by private persons by way of an administrative or legislative action.²⁵⁸ Scholars such as Ekwueme assert that expropriation covers situations where administrative or legislative actions transfer assets to third parties different from the expropriating state or where such administrative or legislative actions deprive persons of their ownership over assets, without transferring the assets to the government or third parties.²⁵⁹ Basically, expropriation can be classified as direct or indirect. Direct expropriation is easily identifiable and entails an open or noticeable government taking of a foreign investment.²⁶⁰ In other words, it is an intentional and unconcealed taking of foreign-owned facilities or mandating a compulsory transfer of title.²⁶¹ Indirect expropriation is an interference with an asset that, while detrimental, does not amount to an actual transfer of title.²⁶² It is a drastic interference with an investor's use of their property to the extent that their ability to make profit is acutely eroded even though ownership remains.²⁶³

²⁵⁵ Sornarajah, *supra* note 226 at 349.

²⁵⁶ *Ibid* at 346.

²⁵⁷ *Ibid* at 348.

²⁵⁸ See *Técnicas Medioambientales Tecmed, S.A. v. United Mexican States* (2003), ICSID Case No. ARB (AF)/00/2 at para. 113 [Tecmed v Mexico].

²⁵⁹ Ekwueme, *supra* note 239 at 188. Similarly, *De facto* expropriation was described in *Attorney General of Nova Scotia v. Mariner Real Estate Limited et al.* (1999) 177 D.L.R. (4th) 727 (N.S.C.A.) as a regulation that is of 'sufficient severity to remove virtually all of the rights associated with the property holders interest'. *De jure* expropriation is one which is in accordance with the strict provisions of statutes and requires the payment of full and just compensation to the owner of the property. See James Beaton, "Expropriation without Compensation: *De facto* and *De jure* Expropriation In Canada After *Canadian Pacific Railway v City of Vancouver*" online: < http://www.oea.on.ca/bursary/2015/2015_bursary_winner.pdf > at 4 .

²⁶⁰ Peter Isakoff, "Defining the Scope of Indirect Expropriation for International Investments" (2013) 3: 2 *The Global Business Law Review* at 191.

²⁶¹ *Ibid* at 192.

²⁶² Collins, *supra* note 224 at 161 – 162.

²⁶³ *Ibid* at 162.

With respect to the debate on whether indirect expropriation was contemplated by NIPCA, it is critical to highlight the provision of section 25 of the NIPCA which provides as follows:²⁶⁴

- (1) Subject to subsections (2) and (3) of this section
 - (a) no enterprise shall be nationalized or expropriated by any Government of the Federation; and
 - (b) no person who owns, whether wholly or in part, the capital of any enterprise shall be compelled by law to surrender his interest in the capital to any other person.
- 2) There shall be no acquisition of an enterprise to which this Act applies by the Federal Government, unless the acquisition is in the national interest or for a public purpose and under a law which makes provision for
 - (a) payment of fair and adequate compensation; and
 - (b) a right of access to the courts for the determination of the investor's interest or right and the amount of compensation to which he is entitled.
- (3) Any compensation payable under this section shall be paid without undue delay, and authorisation for its repatriation in convertible currency shall where applicable, be issued.

Clearly, the above-quoted expropriation provision of NIPCA omits the phrase 'actions tantamount to nationalization or expropriation' as well as the word 'indirect'. It could be argued that omission of the word 'indirect' and the phrase 'actions tantamount to nationalization or expropriation' from the expropriation provision of NIPCA suggests that only direct expropriation is contemplated by NIPCA. This is based on the principle that the expression of one thing is the exclusion of another.²⁶⁵ This is further bolstered by the provision of the NIPCA to the effect that no person shall be compelled by law to surrender

²⁶⁴ NIPCA, *supra* note 225 at section 25.

²⁶⁵ Jeswald Salacuse, *The Law of Investment Treaties* (Oxford: Oxford University Press, 2010) at 294 [Salacuse].

his interest in the capital to any person.²⁶⁶ Compelling a person by law to surrender his interest in capital to any other person shows direct expropriation. Be that as it may, investors often place reliance on the provisions of BITs, rather than domestic statutes when filing claims against host nations at arbitral tribunals. The definition of expropriation by arbitral tribunals often includes indirect expropriation in view of the fact that many BITs explicitly include ‘indirect’ and/or the phrase ‘actions tantamount to nationalization or expropriation’.²⁶⁷ This, therefore, shows that the decisions of arbitral tribunals may not be helpful in interpreting some of the provisions of the NIPCA on expropriation.

While it may be argued that the words ‘expropriation’ and ‘nationalization’ used in NIPCA do not cover indirect expropriation, the argument may have no basis in practice as investors often hinge their claims against host states on BITS which explicitly make provision for indirect expropriation by making use of the word and/or phrase, ‘indirect’ and ‘measures having effect equivalent to nationalization or expropriation’ respectively. Nevertheless, where Nigeria does not have a BIT with an investor’s home country, the NIPCA and/or contracts assume significance. It remains unclear whether the NIPCA contemplates both direct and indirect expropriation. However, if the direct/indirect expropriation argument were to be made, it would appear that legislative reforms on gas flaring reduction will amount to neither direct nor indirect expropriation. As will be discussed in the next subsection, environmental measures such as gas flaring regulation fall within the scope of regulatory measures that do not require the payment of compensation. Scholars such as Subedi have also argued that states are allowed under customary international law to take restrictive measures with the aim of protecting the environment and such measures could be deemed appropriate even if they negatively impact foreign investors.²⁶⁸ Based on the foregoing analysis, this thesis contends that the NIPCA will not hinder legislative reforms aimed at gas flaring reduction in Nigeria.²⁶⁹

²⁶⁶ NIPCA, *supra* note 225 at section 25(1).

²⁶⁷ See *Daimler Financial Services AG v. Argentine Republic*, (2012), ICSID Case No. ARB/05/01 at para 87.

²⁶⁸ Surya Subedi, *International Investment Law: Reconciling Policy and Principle*, 2nd ed (Portland: Hart Publishing, 2012) at 160 [Subedi].

²⁶⁹ In further arguing for legislative reforms, this thesis contends that a subsequent gas flaring regulation will not be affected by the provisions of the NIPCA considering that the AGRA has been in effect along with the expropriation provision of the NIPCA.

3.4.2 Nigeria's Bilateral Investment Treaties and Expropriation

BITs are regarded as the foundation of FDI protection under international law and the modern legal framework in international investment law is principally molded by the remarkable volume of bilateral agreements between states on matters of foreign investment.²⁷⁰ Most BITs are formed between developed countries and countries in the global south.²⁷¹ Salacuse argues that these global south countries have been unrelenting in signing more BITs as they believe it will trigger economic growth and development.²⁷²

BITs emerged as a major feature in international investment towards the end of the 20th century.²⁷³ They strive to put in place rules by which the investments made by the nationals of two states parties in each other's state will be protected.²⁷⁴ The purport of BITs is often found in the preamble of the instruments. For example, the Canada-Nigeria BIT of 2014 provides as follows:

CANADA AND THE FEDERAL REPUBLIC OF NIGERIA (the "Parties"),

RECOGNIZING that the promotion and the protection of investments of investors of one Party in the territory of the other Party will be conducive to the stimulation of mutually beneficial business activity, to the development of economic cooperation between them and to the promotion of sustainable development, and acknowledging the right of each Party to define the conditions under which foreign investments are admitted, consistent with this Agreement, and investors' duty to respect and operate within the framework of its laws, which must be consistent with this Agreement, HAVE AGREED.....

²⁷⁰ Jan Peter Sasse, *An Economic Analysis of Bilateral Investment Treaties*, 1st ed (Hamburg: Gabler, 2010) at 45.

²⁷¹ Sornarajah, *supra* note 226 at 207.

²⁷² Salacuse, *supra* note 265 at 15.

²⁷³ Sornarajah, *supra* note 226 at 204.

²⁷⁴ *Ibid* at 205.

Although treaties are presumably made for the advantage of state parties, in practice, the national investors of one party investing in the country of the other party gains from the benefits found in the treaty.²⁷⁵ In addition, in theory, a state party itself can file an action against the other party under international law for neglecting to uphold the treaty's obligations.²⁷⁶ BITs are based on the view that they encourage investment from investor territories to investor-receiving territories.²⁷⁷ The aim of BITs is not only to set out a particular standard of protection available to foreign investors but to also make provision for international investor-state arbitration as a practical inducement and protection for foreign investors.

Investing in countries in the global south, including Nigeria, is seen as involving some degree of unpredictability for the foreign investor in view of the prevailing socio-political and economic challenges being faced by such countries.²⁷⁸ While there is no concrete proof to support the fact that BITs have enlarged the flow of foreign investment from developed countries, they undoubtedly have provided some form of security to foreign investors.²⁷⁹ They provide guarantee to foreign investors that if anything goes wrong within the host state as a result of governmental intervention, they will have an international remedy.²⁸⁰

Nigeria has signed 30 BITs, out of which 15 are in force.²⁸¹ Three of the BITs in force have been entered into with home states of IOCs. They are the Nigeria – UK BIT, the Netherlands – Nigeria BIT and the Italy – Nigeria BIT. Although Nigeria has yet to enter into any BIT with the United States, US IOCs operating in Nigeria are protected under the provisions of the NIPCA, relevant contracts, and customary international law. The Preamble of the Nigeria – UK BIT highlights some of the purposes of the BIT. It states that the Governments of Nigeria and the UK, desirous of establishing good conditions for bigger investments by

²⁷⁵ Collins, *supra* note 224 at 35.

²⁷⁶ *Ibid.*

²⁷⁷ *Ibid* at 36.

²⁷⁸ Odiase-Alegimenlen, *supra* note 247 at 363.

²⁷⁹ Subedi, *supra* note 268 at 113.

²⁸⁰ *Ibid.*

²⁸¹ Investment Policy, “Nigeria” online: <<http://investmentpolicyhub.unctad.org/IIA/CountryBits/153>> [Investment Policy, “Nigeria”].

persons and corporations of one country in the territory of the other, acknowledging that the promotion and reciprocal safeguard of such investment under international standards will be favourable and lead to prosperity of both countries, and acknowledging the right of each party to describe the circumstances under which foreign investment can be received, agree to the provisions of the BIT. It is apparent that these BITs aim at improving foreign participation and making sure investments are protected.²⁸² The benefits of foreign investments in countries in the global south like Nigeria could be enjoyed when there is an environmentally responsible framework in place.²⁸³

As regards the expropriation provision of Nigeria's BITs, the Nigeria – UK BIT, Netherlands – Nigeria BIT and Italy – Nigeria BIT all have expropriation provisions but do not define expropriation.²⁸⁴ For instance the Netherlands-Nigeria BIT provides as follows:²⁸⁵

Neither Contracting Party shall take any measures depriving, directly or indirectly, nationals of the other Contracting Party of their investments unless the following conditions are complied with:

- (a) the measures are taken in the public interest and under due process of law;
- (b) the measures are not discriminatory or contrary to any undertaking which the Contracting Party which takes such measures may have given;
- (c) the measures are accompanied by provision for the payment of just compensation. Such compensation shall represent the genuine value of the investments affected, shall include interest at a normal commercial rate until the date of payment and shall, in order to be effective for the claimants, be

²⁸² Miles, *supra* note 97 at 131.

²⁸³ *Ibid* at 132.

²⁸⁴ *Nigeria – United Kingdom Bilateral Investment Treaty*, 11 December 1990 art 5 (entered into force 11 December 1990); *Netherlands – Nigeria Bilateral Investment Treaty*, 2 November 1992 art 6 (entered into force 1 February 1994); *Italy – Nigeria Bilateral Investment Treaty*, 27 September 2000 art 5 (entered in force 22 August 2005).

²⁸⁵ *Netherlands – Nigeria Bilateral Investment Treaty*, 2 November 1992 art 6 (entered into force 1 February 1994).

paid and made transferable, without undue delay, to the country designated by the claimants concerned and in the currency of the country of which the claimants are nationals or in any freely convertible currency accepted by the claimants.

The absence of a definite description of expropriation may unjustifiably allow IOCs to claim that the expropriation provision in this BIT covers environmental regulation including gas flaring regulation since it has bearing on foreign investments in Nigeria.²⁸⁶ It is apparent from the Netherlands-Nigeria BIT that it refers to indirect expropriation. Tribunals have reached different conclusions in determining the serious question of whether environmental regulation amounts to an indirect expropriation.²⁸⁷ The divergent decisions of tribunals may be attributed to the absence of *stare decisis* in making arbitral awards.²⁸⁸ In view of the fact that different tribunals may reach dissimilar conclusions when confronted with the same facts and law, it has been difficult to determine the question of whether environmental regulation amounts to indirect expropriation.²⁸⁹

Scholars such as Di Benedetto emphasize the importance of decoupling a proper exercise of regulatory powers by the government taken to protect fundamental environmental values from the scope of indirect expropriation.²⁹⁰ A number of scholars acknowledge the normative autonomy of regulatory measures deriving from regulatory state actions which does not

²⁸⁶ Salacuse, *supra* note 265 at 293.

²⁸⁷ See *S.D. Myers Inc. v Canada* (2000) UNCITRAL, Partial Award where the Tribunal interpreted Article 1114(1) of the NAFTA as “hortatory” and held that Canada’s ban on the export of harmful PCB waste from Canada to the United States, in order to properly manage Canadian PCB Waste in an environmentally friendly way in Canada, and to avoid any likely serious threat to the environment or human health did not amount to expropriation. However, in *Santa Elena v Costa Rica* (2000) ICSID Case No. ARB/96/1, the tribunal held that measures taken to safeguard the environment amount to expropriation. See also *Azurix Corporation v Republic of Argentina* (2006) ICSID Case No. ARB/01/12 and *Metalclad Corporation v The United Mexican States* (2000) ICSID Case No. ARB(AF)/97/1.

²⁸⁸ See Paul Idionigie, *Investment Treaty Arbitration and Emerging Markets: Issues, Prospects and Challenges* (Lagos: Nigerian Institute of Advanced Legal Studies, 2011) at 48 [Idionigie]. This is also akin to the *Statute of the International Court of Justice*, 1945, art 59 (entered into force 24 October 1945) which explicitly stipulates that the decision of the International Court of Justice only has binding force between the parties and with regard to the instant case.

²⁸⁹ *Ibid* at 48.

²⁹⁰ Saverio Di Benedetto, *International Investment Law and the Environment* (Massachusetts: Edward Elgar Publishing Limited, 2013) at 120 [Di Benedetto].

require compensation.²⁹¹ Indeed, one of the criteria used by arbitral tribunals in differentiating between regulatory measures which require no compensation and an action tantamount to indirect expropriation is the legitimate expectation test.²⁹² Legitimate expectation is not violated if a change in a host state's action happens within the confines of usual modifications customary in the host state and allowed in other states.²⁹³ Since gas flaring regulation through the AGRA falls within the customary practice of Nigeria, a change in gas flaring regulation could fall within the confines of legitimate expectations of the investor. Within the context of this thesis, it could be argued that Nigeria may not have to pay any compensation to the IOCs operating in the Niger Delta in order to implement its legislation on gas flaring. This stems from the fact that gas flaring regulation falls within the scope of regulatory measures that do not require payment of any compensation. Basically, Nigeria could adopt legislative reforms and such reforms will not amount to indirect expropriation.²⁹⁴

Given that this thesis recognizes that contracts could either impede or enhance legislative reforms, the next section discusses environmentally relevant clauses and standards in oil and gas contracts in Nigeria.

²⁹¹ K.A Bryne, "Regulatory Expropriation and State Intent" (2000) 89 Canadian Yearbook of International Law cited in *ibid*; Andrew Newcombe, "The Boundaries of Regulatory Expropriation in International Law" (2005) 1 ICSID Review cited in *ibid*.

²⁹² See *Tecmed v Mexico*, *supra* note 274 at paras. 122, 150. Also see *Sempra Energy International v. Argentine Republic*, ICSID Case No. ARB/02/16, Award, 28 September 2007, para. 2882. Similarly, in *Salaka Investments BV (the Netherlands) v the Czech Republic*, Partial Award, ICGJ 368 (PCA 2006), 17th March 2006, Permanent Court of Arbitration [PCA], the tribunal stated that "No investor may reasonably expect that the circumstances prevailing at the time the investment is made remain totally unchanged. In order to determine whether frustration of the foreign investor's expectations was justified and reasonable, the host State's legitimate right subsequently to regulate domestic matters in the public interest must be taken into consideration as well".

²⁹³ Rudolph Dolzer & Christoph Schreuer, *Principles of International Investment Law* (Oxford: Oxford University Press, 2012) at 115 [Dolzer & Schreuer, "Principles of International Investment Law"].

²⁹⁴ Furthermore, Newcombe and Paradell contend that where restrictive measures taken to protect the environment are not likely to lead to substantial deprivation, such restrictive measures may not amount to indirect expropriation. See Andrew Newcombe & Lluís Paradell, *Law and Practice of Investment Treaties* (AH Alpen aan den Rijn: Wolters Kluwer, 2009) at 357.

3.5 Recognizing Environmentally Relevant Clauses and Standards in Oil And Gas Contracts

In canvassing the central argument of this thesis which lies in legislative reforms, this thesis acknowledges that Nigeria's contracts with IOCs can either strengthen or undermine gas flaring reduction efforts in Nigeria. Gao argues that environmental concerns have not "received enough attention" in oil and gas agreements.²⁹⁵ According to Tienhaara, the oil and gas industry in developed countries is confronted with stringent environmental standards.²⁹⁶ However, most of the world's established crude oil reserves are found in countries in the global south such as Nigeria which do not possess advanced regimes for environmental protection.

In the Nigerian oil and gas sector, contracts are the means through which the relationship between the government and foreign investors are concretized.²⁹⁷ The contracts in the Nigerian oil and gas industry often take the form of production sharing contracts, concession contracts, joint-venture agreements and risks service contract.²⁹⁸ The most common form of oil and gas agreement is the joint-venture agreement.²⁹⁹ The Nigerian government, through the NNPC obtains participation interests in IOCs' oil mining leases through the joint venture.³⁰⁰ Apart from reference to domestic law and industry standards, it could be necessary for these oil and gas contracts to make reference to applicable international

²⁹⁵ Zhiguo Gao, *International Petroleum Contracts: Current Trends and New Directions* 213 (1994) cited in Kyla Tienhaara, "Foreign Investment Contracts in the Oil and gas Sector: A Survey of Environmentally Relevant Clauses" online: <<http://www.iisd.org/itn/2011/10/07/foreign-investment-contracts-in-the-oil-gas-sector-a-survey-of-environmentally-relevant-clauses/>>

²⁹⁶ Kyla Tienhaara, "Foreign Investment Contracts in the Oil and gas Sector: A Survey of Environmentally Relevant Clauses" online: <<http://www.iisd.org/itn/2011/10/07/foreign-investment-contracts-in-the-oil-gas-sector-a-survey-of-environmentally-relevant-clauses/>> [Tienhaara in IISD].

²⁹⁷ Odumosu-Ayanu 2014, *supra* note 92 at 274.

²⁹⁸ Kim Talus, Scott Looper & Steven Otilar, "Lex Petroleum and the internationalization of Petroleum Agreements: Focus on Host Government Contracts" (2012) 5: 3 *Journal of World Energy Law and Business* at 182.

²⁹⁹ Odumosu 2005, *supra* note 27 at 121.

³⁰⁰ *Ibid.*

environmental standards and principles.³⁰¹ For instance, Liberia’s Model Petroleum Sharing Contract provides as follows:³⁰²

The Contractor further undertakes to carry out all petroleum operations in accordance with Environmental Protection and Management Laws of Liberia and all international environmental practice.

Although ‘international environmental practice’ mentioned in the above Liberia’s Model Petroleum Sharing Contract could be interpreted to cover gas flaring reduction, the phrase, ‘international environmental practice’ seems vague. Be that as it may, in addition to domestic law and industry standards, it is important that all oil and gas contracts in Nigeria make reference to relevant international environmental standards on GHG emissions that impact gas flaring.

This thesis will proceed to examine some of the environmentally relevant clauses which could enhance or impede gas flaring regulation. The clauses which could enhance gas flaring regulation in Nigeria include clauses on gas flaring and environmental impact assessment clauses. This section also considers whether stabilization clauses would impact the practicability of legislative reforms.

3.5.1 Environmental Impact Assessment Clauses

Environmental Impact Assessment (EIA) is a basic requirement in the oil and gas sector, and is compulsory for all development projects in the public and private sectors.³⁰³ The *Environmental Impact Assessment Act* (EIAA) deals with the concerns of environmental

³⁰¹ Kyla Tienhaara , “Foreign Investment Contracts in the Oil & Gas Sector-A Survey of Environmentally Relevant Clauses” (2011) 11:3 Sustainable Development Law and Policy at 17 [Tienhaara 2011].

³⁰² Article 6.5 of the National Oil Company of Liberia, Model Production Sharing Contract, (2009) cited in *Ibid*.

³⁰³ Nerry Echefu & Akpofure Taigbenu, “Environmental Impact Assessment in Nigeria: Regulatory Background and Procedural Framework” online: <<https://www.iaia.org/pdf/case-studies/EIANigeria.pdf>> at 66. See also the United Nations Commission for International Trade Law (UNCITRAL) tribunal’s decision in *Clayton/Bilcon v Canada* (2009) UNCITRAL, PCA Case No. 2009-04 where the tribunal failed to take into account a Joint Review Panel’s recommendation that a project should not be allowed to progress as it would have a substantial and harsh environmental effect.

effects with respect to public and private projects in Nigeria.³⁰⁴ The main aim of an EIA is to make sure that possible environmental risks are anticipated at the right stage of a project and eliminated in advance.³⁰⁵ These risks may include the dangers posed by gas flaring in Nigeria. The EIA procedure must suggest mitigation measures in order to reduce the adverse effects of the project on the environment and property.³⁰⁶ The nature of EIA clauses differs and could range from a short note of the existence of the requirement to a properly outlined detail about what the EIA should cover and when it should be put forward.³⁰⁷ Basically, the EIA clauses in oil and gas contracts enhance gas flaring reduction efforts and will not likely undermine legislative reforms.

3.5.2 Clauses On Gas Flaring

Some oil and gas contracts contain explicit provisions on gas flaring. For instance, article 5(5) of the Democratic Republic of Timor-Leste's model Production Sharing Contract provides that gas flaring will only be allowed with the consent of the government or in an emergency.³⁰⁸ In some cases, such clauses may restrict the government from unreasonably withholding or delaying consent.³⁰⁹ Some oil and gas contracts may sometimes make permissive provisions on gas flaring. In buttressing this point, Tienhaara cites article 15(3) of Bangladesh 2008 Model Production Sharing Contract and contends that even though this

³⁰⁴ EIAA, *supra* note 85.

³⁰⁵ Nwoko, *supra* note 87.

³⁰⁶ *Ibid.*

³⁰⁷ Tienhaara 2011, *supra* note 301 at 18.

³⁰⁸ See La'o Hamutuk, "Democratic Republic of Timor-Leste's Model Production Sharing Contract under the Petroleum Act" online: < <https://www.laohamutuk.org/Oil/PetRegime/PSC%20model%20270805.pdf> > at art 5(5).

³⁰⁹ Draft Production Sharing Agreement for Petroleum Exploration, Development and Production in the Republic of Uganda by and Between The Government of the Republic of Uganda and Heritage Oil and Gas Limited, art. 19.3 (Jan. 27, 2007) (Uganda) cited in Tienhaara 2011, *supra* note 301 at 19.

clause gives preference to gas utilization, it appears to be tolerant of gas flaring.³¹⁰ This thesis contends that if clauses on gas flaring are included in oil and gas contracts in Nigeria, they could support existing laws in curtailing the incidence of gas flaring. Such clauses will not likely undermine legislative reforms aimed at reducing gas flaring.

3.5.3 Stabilization Clauses

In ascertaining the practicability of legislative reforms, this thesis considers *inter alia* whether stabilization clauses in oil and gas contracts would impact legislative reforms. Stabilization clauses do not assume a specific form and can take the form of a freezing stabilization clause, economic equilibrium clause or hybrid clause. While freezing stabilization clauses seek to ‘freeze’ the legal framework applicable to the investment at the time the contract is formed,³¹¹ the nature of stabilization clauses has developed in recent years, resulting in kinds of stabilization clauses that seek to ensure economic equilibrium between parties.³¹² Unlike the freezing stabilization clause, the economic equilibrium clause does not restrict modification to the legal framework governing a project.³¹³ Instead, it contemplates that where such modifications happen, the contracting parties shall be restored to the position they were before the modifications.³¹⁴ For example, the West African Gas Pipeline Agreement stipulates that the contracting parties shall make sure a solution is negotiated which restores the West African Gas Pipeline Company and/or its shareholders to the same or an economically corresponding position it was or they were before a modification

³¹⁰ Tienhaara 2011, *supra* note 301 at 18. See article 15(3) of the Bangladesh 2008 Model Production Sharing Contract which provides that “Any Associated Natural Gas as is not used under Article 15.1 or Article 15.2 and which Contractor does not consider possible to recover economically shall be offered to Petrobangla without any payment to Contractor but at Petrobangla’s cost at the well-head or field facilities in the Production Area. To the extent that Petrobangla does not so take any of such Associated Natural Gas, Contractor may flare such Associated Natural Gas provided that such flaring is included in the Development Plan submitted under Article 8.10”.

³¹¹ Tienhaara in IISD, *supra* note 296.

³¹² Evaristus Oshionebo, “Stabilization Clauses in Natural Resources Extraction Contracts: Legal, Economic and Social Implications for Developing Countries” (2010) 10: 1 *Asper Review* at 4 [Oshionebo 2011].

³¹³ *Ibid.*

³¹⁴ *Ibid.*

to the legislative framework governing the project was made.³¹⁵ The hybrid clause maintains the features of a freezing and economic equilibrium clause.³¹⁶ The hybrid clause seeks to freeze the legal framework governing a project while also making provision for the restoration of economic equilibrium or payment of compensation where a modification to the legal framework negatively impacts the fiscal interest of a company.³¹⁷ Basically, stabilization clauses may be firmly restricted to cover only some issues although the parties may clearly include or exclude issues such as environmental protection.³¹⁸

Since the primary consideration of IOCs is the stability of the agreements entered with host states, stabilization clauses are often included in agreements between IOCs and host states in order to safeguard the interest of the oil companies.³¹⁹ Stabilization clauses such as the economic equilibrium and the hybrid stabilization clauses could be considered as part of the mechanisms for protecting foreign investors from political hazards while ensuring that the host state maintains its legislative responsibilities including legislative reforms. Several countries in the global south including Nigeria now provide legal backing for stabilization clauses by including stabilization requirements in some statutory enactments.³²⁰ One of such legislation in Nigeria is the law establishing the Liquefied Natural Gas Project (LNG Project).³²¹ The stabilization clause prevents the Nigeria LNG Limited from being subject to new legislation or policies that are not applicable to companies incorporated in Nigeria or to shareholders in companies incorporated in Nigeria.³²² Stabilization requirements such as this will not likely impact gas flaring regulation as Nigeria's gas flaring regulations do apply to

³¹⁵ See Clause 36.2(a) of the West African Gas Pipeline Agreement: International Project Agreement cited in Peter Cameron, "Stabilisation in Investment Contracts and Changes of Rules in Host Countries: Tools for Oil & Gas Investors" online: < https://www.aipn.org/forms/uploadFiles/155A00000081.toc.TOC_Stabilization.pdf >.

³¹⁶ Andrea Shemberg, "Stabilization Clauses and Human Rights" cited in Oshionebo 2011, *supra* note 312 at 6 – 7.

³¹⁷ *Ibid.*

³¹⁸ Tienhaara 2011, *supra* note 301 at 17.

³¹⁹ Dolzer & Schreuer, "Principles of International Investment Law, *supra* note 309 at 82.

³²⁰ Oshionebo 2011, *supra* note 312 at 7.

³²¹ See *Nigeria LNG (Fiscal Incentives, Guarantees and Assurances) Act*, CAP N87 Laws of the Federation of Nigeria 2004 [Nigeria LNG Act].

³²² *Ibid* at paragraph 3 of the second schedule.

both IOCs and companies incorporated in Nigeria. The legislative reforms envisaged in this thesis encompass both local and foreign oil companies operating in Nigeria.

Be that as it may, the validity of ‘freezing’ stabilization clauses in Nigeria has been challenged. Under the Nigerian constitution, the National Assembly has power to enact laws concerning any matter falling within the purview of the areas itemized in both the exclusive legislative list and the concurrent legislative list.³²³ Oshionebo argues that a contractual or statutory stabilization clause is invalid and unconstitutional if it seeks to restrict the capacity of the National Assembly to enact laws that modify the legal framework governing a project.³²⁴ He further contends that while freezing stabilization clauses seek to restrict host states from making modifications to the legal framework governing a project, they cannot, in law, restrict host states from modifying their legal framework.³²⁵

In the same vein, arbitral tribunals have held that despite a stabilization clause, host states could modify the legal framework recognized in oil and gas contracts where the modification is required in the public interest. Particularly, in *BP Exploration Co. (Libya) Ltd. v. Government of the Libyan Arab Republic*,³²⁶ the arbitral tribunal recognized that even though the stabilization clause restricted the Government of the Libyan Arab Republic’s freedom to unilaterally modify the terms of the agreement, Libya could modify such terms in the public interest.³²⁷ Oshionebo argues that the finding of the tribunal finds support in the premise that legislation created by the host state maintains its validity even if the legislation contravenes the stabilization requirements stated in previous contracts entered into by the State.³²⁸ Infact, a stabilization clause is invalid if it constrains the host state for a very long period”.³²⁹

³²³ Nigerian Constitution 1999, *supra* note 111 at section 4.

³²⁴ Oshionebo 2011, *supra* note 312 at 11- 12.

³²⁵ *Ibid* at 3.

³²⁶ *BP Exploration Co. (Libya) Ltd. v. Government of the Libyan Arab Republic* (1979) 53 International Law Reports at 297 [BP Exploration v Libya].

³²⁷ *Ibid.* at 318-321, 324, 327.

³²⁸ Oshionebo 2011, *supra* note 312 at 16.

³²⁹ Subrata Chowdhury, “Permanent Sovereignty Over Natural Resources: Substratum of the Seoul Declaration” cited in Paul de Waart, Paul Peters & Erik Denters, eds., *International Law and Development* (The Hague: Martinus Nijhoff Publishers, 1988) at 81.

Going forward, stabilization clauses can be formulated in a manner that excludes areas such as environmental protection including gas flaring regulation from their application. In buttressing this point, Tienhaara cites a Kazakhstan agreement which provides for a caveat to its stabilization clause as follows:³³⁰

provided, however, that no amendment to this Agreement shall be required hereunder as the result of (i) changes to Laws concerning health, safety or environmental protection that cause such Laws to be consistent with international standards for health, safety or environmental legislation and are applied on a non-discriminatory basis.

Nigeria can take a cue from the above-cited provision of the Kazakhstan agreement in excluding gas flaring regulation from the application of stabilization clauses. With respect to existing stabilization clauses, this thesis relies on the analysis of their validity under Nigerian law, as well as the decision of the arbitral tribunal in *BP Exploration Co. (Libya) Ltd. v. Government of the Libyan Arab Republic*³³¹ and posits that under Nigerian and international laws, existing stabilization clauses will not restrict legislative reforms aimed at gas flaring reduction in Nigeria.

3.6 Conclusion

In investigating the practicability of legislative reforms, this chapter has analyzed the regulatory framework for international investment law in Nigeria and argued that gas flaring regulation may not be restricted by Nigeria's investment laws, BITs and contracts. As discussed in the preceding chapter, the continuous flaring of gas in Nigeria has given rise to environmental, health and social challenges. This can be attributed to the inadequacies of the current gas flaring reduction law. Clearly, the incidence of gas flaring in Nigeria demonstrates that legislative reform is an important measure that must be undertaken by the Nigerian government. This chapter has explored the question of whether legislative reform

³³⁰ The Republic of Kazakstan and JSC National Oil and Gas Company Kazakoil, art 40.2 (Nov. 18, 1997) cited in Kyla Tienhaara, "Foreign Investment Contracts in the Oil and gas Sector: A Survey of Environmentally Relevant Clauses" online: <<http://www.iisd.org/itn/2011/10/07/foreign-investment-contracts-in-the-oil-gas-sector-a-survey-of-environmentally-relevant-clauses/>>.

³³¹ *BP Exploration v Libya*, *supra* note 326.

would be considered expropriation of an IOC's investment. Basically, the chapter contends that legislative reforms that aim at gas flaring reduction would not amount to expropriation of an IOC's investment. The chapter also showed that under Nigerian and international laws, existing stabilization clauses will not restrict legislative reforms aimed at gas flaring reduction in Nigeria.

Some IOCs are already participating in gas flaring reduction efforts by supporting the World Bank's Global Gas Flaring Reduction Initiative and developing parameters aimed at avoiding routine flaring of gas.³³² While gas flaring reduction requires several approaches as noted in chapter one, legislative reform is a necessary component to that reduction. The next chapter analyzes legislative reform and the components of such reform.

³³² See ExxonMobil, "Reducing emissions-mitigating greenhouse gas emissions within our operations" online: <<http://corporate.exxonmobil.com/en/current-issues/climate-policy/climate-perspectives/natural-gas-reducing-ghg-emissions>>.

CHAPTER 4: INCORPORATING INTERNATIONAL ENVIRONMENTAL STANDARDS INTO DOMESTIC LAWS AND ENACTING NEW GAS FLARING LEGISLATION

4.1 Introduction

Central to this thesis is the argument that the challenges posed by GHG emissions from gas flaring in Nigeria can be addressed through legislative reforms. However, as indicated in the introductory chapter, this thesis does not anticipate solving the problem of gas flaring in Nigeria through legislative reforms in isolation. Legislative reform is a step that must be undertaken by the Nigerian government as the current legislation governing gas flaring is inadequate, ineffective, and unconstitutional. This chapter analyzes the formulation of effective legislation in Nigeria's oil and gas sector well as the domestication of international environmental standards on GHG emissions to which Nigeria is a party as components of the legislative reform envisaged in this thesis.

This chapter argues that the incidence of GHG emissions from gas flaring in Nigeria could possibly be effectively addressed if international treaties on GHG emissions to which Nigeria is a party are incorporated into domestic laws. In addition to the domestication of international environmental standards, the chapter presents some of the insights proposed by Institutional Legislative Theory and Methodology (ILTAM) as a possible guide for designing the legislative reforms.

Apart from this introduction, two substantive sections comprise this chapter. Section one undertakes a critical analysis of international environmental standards on GHG emissions. This analysis demonstrates the capacity of the Nigerian government to domesticate these GHG emissions standards. The second section explores the importance of domesticating the international environmental standards discussed in section one. The section also proposes the enactment of new legislation that addresses the inadequacies of the AGRA. Essentially, the chapter focuses on the public participation of people affected by gas flaring which may be fostered through ILTAM's interest in transparency, clear problem identification and public participation in the enactment and monitoring of legislation. The chapter ends on a positive note, presenting issues requiring further research, and positing that part of the solution to

reducing GHG emissions from gas flaring in Nigeria lies in enacting new legislation as well as domesticating international environmental standards on GHG emissions.

4.2 Analysis of International Environmental Standards and Principles on Gas Flaring

As discussed in earlier chapters, gas flaring comes with negative environmental, health, social and climatic implications. The consensus within the literature suggests that gas flaring contributes substantially to climate change through the emissions of GHGs,³³³ and this has severe consequences for Nigeria and the rest of the world. Particularly, gas flaring in Nigeria has contributed more emissions of GHG than all other sources in sub-Saharan Africa put together.³³⁴

Climate change has been termed the most serious hazard that threatens the earth's biodiversity, natural resources, agriculture, water availability etc.³³⁵ It is among the most serious challenges of our generation and contributes substantial stress to society and the environment.³³⁶ Climate change can be attributed to human use of fossil fuels, which emit carbon dioxide and other GHGs into the atmosphere.³³⁷ This carbon dioxide and GHGs capture heat within the atmosphere, which affects the climate by way of rising sea levels, harsh weather conditions, and famines. According to the UN Intergovernmental Panel on Climate Change (IPCC), climate change is real and humans are the major cause through the emission of GHGs.³³⁸ Without doubt, GHGs are vital to human life as they prevent some of the sun's heat from making the earth unlivable. However, industrial activities such as gas flaring have increased the quantity of GHGs in the atmosphere. Over the past few years, the

³³³ FOE, *supra* note 147 at 5.

³³⁴ *Ibid* at 21.

³³⁵ Thoko Kaime, *International Climate Change Law and Policy: Cultural Legitimacy in Adaption and Mitigation* (New York: Routledge, 2014) at 27.

³³⁶ United Nations, "Climate Change" online: <<http://www.un.org/en/sections/issues-depth/climate-change/index.html>>.

³³⁷ Diane Pataki et al, "An Integrated Approach to Improving Fossil Fuel Emissions Scenarios with Urban Ecosystem Studies" (2009) 6 *Ecological Complexity* at 1- 14.

³³⁸ Intergovernmental Panel on Climate Change, "Report" online: <<http://www.ipcc.ch/report/ar5/wg1/>>.

earth's average temperature has increased by 3 degrees centigrade.³³⁹ Climate change has seriously impacted countries of the global south and this is demonstrated by the frequent and exacerbated floods and storms caused by rising sea levels and warming of ocean temperatures. Despite the challenges posed by climate change, countries in the global south, including Nigeria, seem to be interested in the constant flow of foreign revenue into their territories without taking into account the climatic implications of foreign investment. In the same vein, climate change skeptics have often posited that recent variations in climate ascribed to human and corporations' activities could be described as part of the normal changes in earth's climate and temperature, and that it is impracticable to establish a nexus between climate change and any climate conditions.³⁴⁰ However, several years of data analysis lend credence to the reality of this challenge as well as the human factor associated with it. A synthesis report of the Intergovernmental Panel on Climate Change (IPCC) reveals that human impact on climate change is visible and contemporary anthropogenic release of GHGs is the largest in history.³⁴¹ Gas flaring is one of such human components linked to the recent variations in the earth's climate.

The recognition and entrenchment of environmental principles such as sustainable development will bolster gas flaring reduction efforts in Nigeria. A report of the World Commission on Environment and Development, "Our Common Goal", described sustainable development as a change process in which resource exploitation, the alignment of investment, the adaptation of technological development and institutional change are all in consonance and promote present and future likelihood to address human needs and objectives.³⁴² Verschuuren conceives of the notion of sustainable development as an "ideal", rather than a principle.³⁴³ According to Verschuuren, the ideal of sustainable development as articulated in numerous instruments does not stipulate fundamental rules without which it is impracticable

³³⁹Cyrus Martin, "An Arctic Refugium under Assault" (2013) 23:23 *Current Biology* at R1020 – R1022.

³⁴⁰ Take Part, "What is Climate Change?" online: <<http://www.takepart.com/flashcards/what-is-climate-change/index.html>>.

³⁴¹ Intergovernmental Panel on Climate Change, "Climate Change 2014 Synthesis Report Summary For Policymakers" online: <https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf>at 2.

³⁴² United Nations Documents, "Report of the World Commission on Environment and Development: Our Common Future" online: <<http://www.un-documents.net/our-common-future.pdf> at 43>.

³⁴³ Jonathan Verschuuren, "Sustainable Development and the Nature of Environmental Legal Principles" (2006) 9:1 *PER/PELJ* at 227- 228 [Verschuuren,].

to have an ordered society, but sustainable development is an inexact, indefinite and undefined, general notion of the perfection that states ought to target.³⁴⁴ This thesis argues that regardless of the distinction between an ‘ideal’ and ‘principle’ regarding the conceptualization of sustainable development, there is no doubt that sustainable development challenges faced by Nigeria includes pollution caused by gas flaring. Just as the preambles of Nigeria’s BITs are beginning to make reference to sustainable development, the restructured and domesticated legislation proposed in this thesis should also take cognizance of sustainable development. The integration of sustainable development into legislation entails the need to ensure that economic and social interests, where they are represented, do not ignore environmental considerations.³⁴⁵ It also requires that when environmental protection measures aimed at gas flaring reduction are carried out, the economic or social effects of such measures need to be taken into consideration.³⁴⁶

There is presently no treaty particularly devoted to putting an end to gas flaring. In view of this, this section will analyze international environmental standards on GHG emissions such as the United Nations Framework Convention on Climate Change (UNFCCC),³⁴⁷ the Kyoto Protocol to the UNFCCC (Kyoto Protocol)³⁴⁸ and the Paris Agreement on Climate Change (Paris Agreement).³⁴⁹ These conventions are aimed at reducing GHG emissions, and in the absence of a specific international convention on gas flaring, the provisions of these conventions implicate GHG emissions from gas flaring.

³⁴⁴ *Ibid.*

³⁴⁵ Christina Voigt, *Sustainable Development as a Principle of International Law: Resolving Conflicts between Climate Measures and WTO Law* (Boston: Leiden, 2009) at 37 [Voigt].

³⁴⁶ *Ibid.* The inexact and undefined nature of sustainable development presents serious challenge for its enforcement.

³⁴⁷ United Nations Climate Change, “United Nations Framework Convention on Climate Change” online: <<https://unfccc.int/resource/docs/convkp/conveng.pdf>>.

³⁴⁸ United Nations Climate Change, “Kyoto Protocol to the United Nations Framework Convention on Climate Change”online: < <https://unfccc.int/resource/docs/convkp/kpeng.pdf>>.

³⁴⁹ United Nations Climate Change, “Paris Agreement” <http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf>.

4.2.1 United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC is the foremost and most significant watershed in the multidimensional effort to tackle climate change.³⁵⁰ The UNFCCC is one of the three conventions adopted at the Rio Earth Summit in 1992,³⁵¹ and its ultimate goal is to stabilize GHG concentrations in the atmosphere at a degree that will inhibit dangerous human interference with the climate system.³⁵² The Convention requires that such degree should be attained within a time-frame necessary to permit ecosystems to adapt naturally to climate change, to make sure that food production is not endangered, and to foster sustainable economic development.³⁵³ The Convention came into force on March 21, 1994, and presently, 197 countries have ratified it.³⁵⁴ In furtherance of article 22 of the Convention, the UNFCCC is subject to ratification, adoption, or approval by countries and regional economic integration associations.³⁵⁵ It allows countries and regional economic integration associations that have not signed the Convention to agree to it at any time.³⁵⁶

Farber and Peeters write that the UNFCCC sets out numerous operating principles that offer conceptual anchorage for the climate regime.³⁵⁷ One of such principles is the equity and common but differentiated responsibilities and respective capabilities.³⁵⁸ Farber and Peeters assert that the Convention is the foremost international environmental standard to express the

³⁵⁰ Daniel & Marjan, *supra* note 68 at 215.

³⁵¹ The other Conventions adopted at the Summit were the UN Convention on Biological Diversity and the Convention to Combat Desertification. See Europa, “Environment, Climate Change and Green Economy” online: <<https://europa.eu/capacity4dev/public-environment-climate/document/united-nations-framework-convention-climate-change-rio-1992>>.

³⁵² *United Nations Framework Convention on Climate Change*, 4 June 1992, art 2 (entered into force 21 March 1994) [UNFCCC].

³⁵³ *Ibid.*

³⁵⁴ United Nations Treaty Collections, “United Nations Framework Convention on Climate Change” online: <https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=IND&mtdsg_no=XXVII-7&chapter=27&Temp=mtdsg3&clang=_en#1> [UN Treaty Collections].

³⁵⁵ See UNFCCC, *supra* note 352 at art 22.

³⁵⁶ United Nations Climate Change, “Status of Ratification of the Convention” online: <<https://unfccc.int/process/the-convention/news-and-updates>> .

³⁵⁷ Daniel & Marjan, *supra* note 68 at 209.

³⁵⁸ See UNFCCC, *supra* note 352 at art 3.

principle of equity and common but differentiated responsibilities and respective capabilities in a workable provision.³⁵⁹ The principle developed from the understanding of the “common heritage of mankind” and is a demonstration of universal principles of equity in international law.³⁶⁰ It acknowledges historical disparities in the contributions of developed and global south countries to global environmental challenges, as well as disparities in their respective economic and technical abilities to address these challenges.³⁶¹ In line with their common but differentiated responsibilities and respective capacities, as well as social and economic circumstances, parties to the Convention recognize that the universal nature of climate change demands the broadest practicable cooperation by all countries.³⁶² This principle has worked as a guiding principle as well as a basis for arguments in the UN climate negotiations. For instance, while global south countries like Nigeria have argued on the basis of this principle for developed countries’ leadership and differential treatment for global south countries, developed countries contend that the principle must be understood as a dynamic notion that changes concurrently with changing economic and other circumstances.³⁶³

Also, in reflecting the principle, the Convention splits countries into “Annex I” and “non-Annex I” countries, with the former representing developed countries and the latter representing global south countries.³⁶⁴ The Convention stipulates greater mitigation roles for Annex I countries compared to the non-Annex I countries.³⁶⁵ Nigeria is not included in the Annex I countries, and this suggests lesser mitigation responsibilities for Nigeria. Despite the incessant gas flaring in Nigeria, one cannot compare the levels of GHGs emitted from all sources in industrialized countries to GHG emissions from Nigeria. However, there is no basis for allowing countries such as Nigeria to enjoy lesser commitments under the

³⁵⁹ Daniel & Marjan, *supra* note 68 at 209.

³⁶⁰ Center for International Sustainable Development Law, “Law and Governance for the Sustainable Development Goals: Integrating Environment, Human Rights, and Economy Through Legal Scholarship and Empowerment” online: <http://cisdl.org/public/docs/news/brief_common.pdf>.

³⁶¹ *Ibid.*

³⁶² See UNFCCC, *supra* note 352.

³⁶³ Daniel & Marjan, *supra* note 68 at 209.

³⁶⁴ Climate Nexus, “Common But Differentiated Responsibilities and Respective Capabilities” online: <<https://climatenexus.org/climate-change-news/common-but-differentiated-responsibilities-and-respective-capabilities-cbdr-rc/>>.

³⁶⁵ *Ibid.*

Convention in view of the level of GHG emitted from gas flaring in Nigeria. Conversely, assuming the Convention created binding obligations on Nigeria, it will only be enforceable after it has been domestically incorporated into a law.³⁶⁶

Furthermore, the UNFCCC acknowledges that the absence of complete scientific certainty on issues of climate change ought not to serve as a justification for delaying action.³⁶⁷ Specifically, the Convention provides in article 3(3) as follows:³⁶⁸

The Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.

Article 3(3) is drafted in a manner that its language is unassertive and weak. Farber and Peeters argue that article 3(3) refers to “precautionary measures”, and neither defines precaution as a “principle” nor an “approach”. They contend that while an “approach” is rather unclear from a legal perspective, a “principle” presupposes legal effects.³⁶⁹ This thesis agrees with the writers and argues that the drafters of article 3(3) preferred the phrase “precautionary measures” to “principle” which presupposes a non-obligatory plan or course of action. Relatedly, article 3(3) also depicts a right to take preventive measures, and not an obligation to take action.³⁷⁰ Also, the provision of article 3(3) is permissive in nature in view of the fact that it provides that parties “should” take precautionary measures, rather than “shall” which is much more prescriptive and forceful. As a result, the permissive provision of article 3(3) makes it easier for Nigeria to avoid taking actions aimed at mitigating GHG emissions from gas flaring. Nigeria became a signatory to the UNFCCC on June 13, 1992,

³⁶⁶ Nigerian Constitution 1999, *supra* note 111 at section 12.

³⁶⁷ Daniel & Marjan, *supra* note 68 at 210.

³⁶⁸ UNFCCC, *supra* note 352 at art 3(3).

³⁶⁹ Daniel & Marjan, *supra* note 68 at 23.

³⁷⁰ *Ibid.*

and ratified same on August 29, 1994,³⁷¹ but did not domesticate the UNFCCC which was eventually operationalized by the Kyoto Protocol.

4.2.2 Kyoto Protocol

The Kyoto Protocol was adopted on December 11, 1997, and entered into force on February 16, 2005 as a result of the intricate ratification process.³⁷² At the moment, there are 192 parties to the Protocol.³⁷³ The Kyoto Protocol operationalizes the UNFCCC and commits industrialized countries to stabilize GHG emissions based on the principles of the Convention, and in line with agreed individual targets.³⁷⁴ The UNFCCC itself merely induces countries to do so. The Protocol bolsters the commitments of the UNFCCC, particularly article 4(2) (a) and (b) by presenting a firm agenda for the reduction of GHG emissions to be accomplished within 2008-2012.³⁷⁵

In line with the principle of common but differentiated responsibilities, the Kyoto Protocol also imposed legally binding mitigation commitments only on Annex I countries, and made no provisions for binding commitments for the global south countries.³⁷⁶ In this respect, Bothe writes that the exclusion of non-Annex I countries creates a “firewall” between developed countries and global south countries, which was vital in the United States’ refusal to ratify the Protocol, and has occasioned massive tensions over the years.³⁷⁷ According to Richardson, the disparity between developed and global south countries fails to take into account substantial socio-economic and environmental disparities amongst global south

³⁷¹UN Treaty Collections, *supra* note 354.

³⁷² United Nations Framework Convention on Climate Change, “Summary of the Kyoto Protocol” online: <<http://bigpicture.unfccc.int/printtool.html?article%5B66%5D%5B%5D=66>>.

³⁷³ *Ibid.*

³⁷⁴ *Ibid.*

³⁷⁵ David Freestone, “The UN Framework Convention on Climate Change, the Kyoto Protocol, and the Kyoto Mechanisms” cited in David Freestone & Charlotte Streck (eds.) *Legal Aspects of Implementing the Kyoto Protocol Mechanisms: Making Kyoto Work* (New York: Oxford University Press, 2004) at 9.

³⁷⁶ *Ibid.*

³⁷⁷ Michael Bothe, “Doha and Warsaw: Reflections on Climate Law and Policy” (2014) 4:1-2 *Climate Law* at 5.

countries.³⁷⁸ This is in view of the fact that some of these non-Annex I countries such as China and India are gradually evolving as the largest emitters of GHG.³⁷⁹ The preceding chapters, for instance, have also shown that Nigeria is one of the largest gas flaring countries in the world.

Annex I countries are required to adopt national policies and take corresponding measures to reduce their emissions.³⁸⁰ The Protocol also presented Annex I countries with flexible mechanisms³⁸¹ namely, International Emission Trading, Clean Development Mechanism (CDM), and Joint Implementation. These three market-based mechanisms presuppose that the market is the institution most capable of allocating resources cost-effectively, and in connection with environmental policy.³⁸² Driesen has critiqued the strong emphasis of the Protocol on cost-effectiveness through the market-based mechanisms, and asserts that this has led to a huge effort to develop them, perhaps shifting attention from the primary aim of the protocol.³⁸³ The goal of the Protocol was to reduce industrialized countries' collective emissions of GHG by 5.2% compared to the year 1990.³⁸⁴ In making particular reference to Nigeria, Agbonifo has argued that the market-based mechanism, particularly the CDM, would have created enormous prospects for the reduction of gas flaring which the current gas flaring law has failed to address.³⁸⁵ Nevertheless, Nigeria has been unable to attract a substantial part of the global CDM project³⁸⁶ partly in view of the fact that the Kyoto

³⁷⁸ Benjamin Richardson et al, "Introduction: Climate Change and Developing Countries" cited in Benjamin Richardson et al, eds *Climate Law and Developing Countries Legal and Policy Challenges for the World Economy* (Cheltenham: Edward Elgar, 2010) at 6.

³⁷⁹ *Ibid* at 7.

³⁸⁰ UNFCCC, *supra* note 352 at art 2.

³⁸¹ *Ibid* at arts 17, 12 & 6.

³⁸² Ian Rowlands, "Atmosphere and Outer Space" cited in Daniel Bodansky, Jutta Brunnee & Ellen Hey, eds. *The Oxford Handbook of International Environmental Law* (New York: Oxford University Press, 2007) at 331.

³⁸³ David Driesen, "The Limits of Carbon Pricing" (2014) 4:1-2 *Climate Law* at 107.

³⁸⁴ Kyoto Protocol, "Kyoto Protocol" online: < <http://kyotoprotocol.com/>>.

³⁸⁵ Philip Agbonifo "Reforming the Clean Development Mechanism (CDM) to Tackle the Environmental Policy Gap in the Nigeria Oil and Gas industry" (2015) 17:2 *Journal of Sustainable Development in Africa* at 68.

³⁸⁶ *Ibid*.

Protocol and its mechanisms were not incorporated into domestic laws in Nigeria.³⁸⁷ Although Nigeria acceded to the Protocol on December 10, 2004,³⁸⁸ it did not domesticate the Protocol in line with the provisions of the Constitution.³⁸⁹ This further reinforces the need for the domestication of international environmental standards on GHG emissions to which Nigeria is a party.

The Doha Amendment to the Kyoto Protocol was adopted on December 8, 2012.³⁹⁰ The amendment created new commitments for Annex I parties to the Protocol who accepted to undertake commitments to reduce GHG emissions by at least 18 percent beneath 1990 levels in a second commitment period beginning from January 1, 2013 and ending on December 31, 2020.³⁹¹ Presently, the Doha Amendment is not in force in view of the fact that only 112 parties have deposited their instrument of acceptance as against 144 parties required by law.³⁹² However, under *decision 1/CMP.8*,³⁹³ state parties may temporarily apply the amendment pending its entry into force in line with the provisions of the Kyoto Protocol, and state parties who wish to do so must provide notification of any such provisional application to the depository.³⁹⁴ Also, parties that do not intend to apply the amendment as required under *decision 1/CMP.8* will enforce their commitments and other obligations in respect of the second commitment period in a way “consistent with their national legislation or domestic processes” as of January 1, 2013 until the entry into force of the amendment.³⁹⁵ Nigeria is one of the state parties to the Protocol that are yet to sign or accept the Doha Amendment.³⁹⁶ It is also doubtful whether Nigeria has deposited any notification of

³⁸⁷ Nigerian Constitution 1999, *supra* note 111 at section 12.

³⁸⁸ UN Treaty Collections, *supra* note 354.

³⁸⁹ Nigerian Constitution 1999, *supra* note 111 at section 12.

³⁹⁰ United Nations Climate Change, “KP Introduction” online: <<https://unfccc.int/process/the-kyoto-protocol> >.

³⁹¹ *Ibid.*

³⁹² United Nations Climate Change, “Doha Amendment” online: <<https://unfccc.int/process/the-kyoto-protocol/the-doha-amendment>> [Doha Amendment].

³⁹³ See *Doha Amendment to the Protocol*, 8 December 2012, art 3(5) (not in force).

³⁹⁴ See Doha Amendment, *supra* note 408. Also see *Kyoto Protocol*, 11 December 1997, arts 20 & 21 (entered into force 16 February 2005).

³⁹⁵ *Ibid.*

³⁹⁶ See UN Treaty Collections, *supra* note 354.

provisional application of the Amendment. It suffices to say that Nigeria has not demonstrated any intention to apply the Amendment. Since state parties who do not intend to apply the Amendment are required to implement their commitments in a manner consistent with their national legislation or domestic processes, it remains to be seen how Nigeria will enforce its own commitments.

The Doha Amendment, which Nigeria is yet to ratify only covers the period before 2020, which is essential in the general GHG reduction efforts aimed at keeping the rise in global average temperature beneath 2 degrees Centigrade above pre-industrial levels.³⁹⁷ The new 2015 Paris Agreement will replace the Doha Amendment from 2020.³⁹⁸

4.2.3 Paris Agreement

At the 2015 United Nations Climate Change Conference, Paris, also known as COP 21, parties to the UNFCCC reached a landmark agreement to eliminate climate change and intensify the actions needed for a sustainable low carbon future by signing a legally binding agreement on the climate.³⁹⁹ The Agreement rests on the UNFCCC, and for the first time, carries all countries into a universal cause to pursue determined efforts to address climate change and adapt to its impacts, with heightened support to aid global south countries to do so.⁴⁰⁰ The key objective of the Agreement is to bolster the global reaction to the danger posed by climate change by maintaining a “global temperature increase this century far beneath 2 degrees Centigrade beyond pre-industrial levels and to push towards efforts to restrict the temperature rise even further to 1.5 degrees Centigrade”.⁴⁰¹ The Paris Agreement is focused

³⁹⁷ United Nations, “Frequently Asked Questions Relating to the Doha Amendment to the Kyoto Protocol” online: <https://unfccc.int/files/kyoto_protocol/doha_amendment/application/pdf/frequently_asked_questions_doha_amendment_to_the_kp.pdf>.

³⁹⁸ *Ibid.*

³⁹⁹ European Commission, “Paris Agreement” online:

<https://ec.europa.eu/clima/policies/international/negotiations/paris_en>.

⁴⁰⁰ United Nations Climate Change, “The Paris Agreement” online: <<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>>.

⁴⁰¹ *Ibid.*

on bolstering the capacity of countries to address the effects of climate change.⁴⁰² The Agreement was opened for signature on April 22, 2015 and as at September 2018, 180 parties have ratified it.⁴⁰³ It entered into force on November 4, 2016, and charts a new course in the global climate effort.⁴⁰⁴ Although Nigeria has signed and ratified the Paris Agreement,⁴⁰⁵ the Agreement is yet to be domestically incorporated into a law as required by the Nigerian Constitution.

As with the preceding instruments, the Paris Agreement also recognizes the principle of equity and common but differentiated responsibilities and respective capabilities.⁴⁰⁶ For this reason, scholars such as Pardy state that the Agreement and its preceding Convention are all about “wealth distribution, social justice and development”.⁴⁰⁷ He writes that rather than requiring mitigation of GHG emissions and energy use, the Agreement envisions the transfer of resources from developed countries to global south countries as well as a rise in energy consumption in the global south.⁴⁰⁸ In the same vein, the United States Government also claims that the Agreement imposes largely discriminatory environmental standards on US corporations and workers.⁴⁰⁹ Consequently, the US has given notice of its intention to the United Nations to leave the Agreement by 2020, in line with article 28 of the Agreement which allows state parties to withdraw from the Agreement at any time after three years from the date on which the Agreement comes into force.⁴¹⁰

⁴⁰² *Ibid.*

⁴⁰³ United Nations Framework Convention on Climate Change, “Paris Agreement-Status of Ratifications” online: <http://unfccc.int/paris_agreement/items/9444.php>.

⁴⁰⁴ *Ibid.*

⁴⁰⁵ Climate Analytics, “Paris Agreement Ratification Tracker” online: <<http://climateanalytics.org/briefings/ratification-tracker.html>>.

⁴⁰⁶ Paris Agreement, *supra* note 19 at art 2(2).

⁴⁰⁷ Bruce Pardy, “Paris is a Progressive Fairy Tale: In Praise of American Withdrawal” (2018) 32 *Forthcoming Journal of Environmental Law and Practice* at 6.

⁴⁰⁸ *Ibid.*

⁴⁰⁹ New York Times, “Trump Will Withdraw U.S From Paris Climate Agreement” online: <<https://www.nytimes.com/2017/06/01/climate/trump-paris-climate-agreement.html>>.

⁴¹⁰ Valerie Volcovici, “U.S. submits formal notice of withdrawal from Paris climate pact” (August 4, 2017) Reuters <<https://www.reuters.com/article/us-un-climate-usa-paris/u-s-submits-formal-notice-of-withdrawal-from-paris-climate-pact-idUSKBN1AK2FM>>.

In the build-up to the Paris Conference, parties were required to submit Intended Nationally Determined Contributions (INDCs) which showed each country's agenda for tackling climate change, mitigating GHG emissions, and how the countries intend to meet those objectives.⁴¹¹ The Paris Agreement now recognizes these INDCs as Nationally Determined Contributions (NDC) and mandates parties to carry on and communicate determined efforts through their NDCs to respond to the challenges posed by climate change.⁴¹² Parties are also mandated to report on a frequent basis on emissions and progress towards their NDCs under a transparency framework created in article 13 of the Agreement. In line with the requirement of the Agreement, Nigeria has submitted its NDC which reports that emissions in Nigeria are anticipated to rise to around 900 million tonnes per year by 2030, which means about 3.4 tonnes per individual.⁴¹³ A critical look at Nigeria's NDC reveals that it acknowledges the impact of GHG emissions from gas flaring on climate change.⁴¹⁴ It provides that one of its key aspects is to work towards ending gas flaring by 2030.⁴¹⁵ In order to achieve this, the NDC proposes several mitigation measures which include reducing the potential GHG emissions from gas flaring by 64 million tonnes per year, from 2030.⁴¹⁶ A practical means of achieving Nigeria's gas flaring reduction target under its NDC, is to enact comprehensive legislation in this regard.

A synthesis report released by the UNFCCC on the cumulative impact of the NDCs submitted by state parties reveals that NDCs are anticipated to bring about substantial emissions reductions and reduce GHG emissions progression in the coming years, but would be insufficient to counter the rising trend of global GHG emissions by 2025 and 2030.⁴¹⁷ A more recent synthesis report of the UNFCCC has now concluded that greater GHG emissions

⁴¹¹ Parliament of Australia, "Paris Climate Agreement: A Quick Guide" online: <https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1718/Quick_Guides/ParisAgreement>.

⁴¹² Paris Agreement, *supra* note 19 at art 3 & 4(2).

⁴¹³ Nigeria's NDC, *supra* note 37.

⁴¹⁴ *Ibid* at iii.

⁴¹⁵ *Ibid*.

⁴¹⁶ *Ibid* at iv.

⁴¹⁷ United Nations Climate Change, "Synthesis Report on the Aggregate Effect of the Intended Nationally Determined Contributions" online: <<https://unfccc.int/resource/docs/2015/cop21/eng/07.pdf>>.

mitigation efforts than those related to the NDCs will be needed in the period after 2025 and 2030 in order to maintain the temperature increase below 2 degrees Centigrade beyond pre-industrial levels.⁴¹⁸ Considering the amount of GHGs emitted by gas flaring, this calls for a lasting legal solution to the intractable problem of gas flaring in Nigeria.

The commitments under the Paris Agreement require governments to be more prescriptive about mitigating GHG emissions from gas flaring.⁴¹⁹ The Paris Agreement makes some binding provisions on Nigeria, but in the absence of domestication, these provisions will not be enforceable in Nigeria. Some of these provisions include the obligation to undertake domestic mitigation measures with the aim of achieving its NDCs,⁴²⁰ preparation and communication of strategies for low GHG emissions development reflecting its peculiar circumstance,⁴²¹ communication of its NDCs every five years,⁴²² formulation and communication of long term low GHG emissions development plans,⁴²³ and provision of national inventory report of anthropogenic emissions as well as information required in assessing progress made in enforcing and achieving its NDC.⁴²⁴

Given that gas flaring reduction is an important aspect of Nigeria's NDC, it will be imperative for Nigeria to show that it is carrying out domestic mitigation measures aimed at reducing gas flaring. It is also mandatory for Nigeria to prepare and communicate its strategies such as legislative reforms aimed at achieving low GHG emissions including emissions from gas flaring as required under the Paris Agreement. Also, the national inventory report of anthropogenic emissions required to be submitted could assist in

⁴¹⁸ United Nations Climate Change, "Aggregate Effect of the Intended Nationally Determined Contributions: An Update" online: < <https://unfccc.int/resource/docs/2016/cop22/eng/02.pdf> >.

⁴¹⁹Fluenta, "Flaring Regulations Series: European Union" online: <<https://www.fluenta.com/news/flaring-regulations-series-european-union/> >.

⁴²⁰ Paris Agreement, *supra* note 19 at art 4(2).

⁴²¹ *Ibid* at art 4(6).

⁴²² *Ibid* at art 4(9).

⁴²³ *Ibid* at art 4(19).

⁴²⁴ *Ibid* at art 13 (7).

monitoring progress made towards implementing and achieving Nigeria's NDC as it relates to gas flaring reduction.

In order for these provisions to be enforceable in Nigeria, they must be incorporated into domestic laws. Accordingly, this thesis contends that one of the solutions to the gas flaring challenge lies in enacting new legislation and domesticating the provisions of international environmental standards on GHG emissions such as the Paris Agreement.

4.3 Restructuring the Legal and Regulatory Framework for Gas Flaring Reduction in Nigeria

The preceding chapters of this thesis have identified several factors including the ineffectiveness of the legal framework for gas flaring as factors militating against gas flaring reduction in Nigeria. The legislative reform envisaged in this thesis involves enacting new evidence-based legislation in Nigeria's oil and gas sector and domesticating international environmental standards on GHG emissions to which Nigeria is a party. In order to situate the proposed reform, it is imperative to first demonstrate the importance of domesticating international environmental standards on GHG emissions to which Nigeria is a party.

4.3.1 Domesticating International Environmental Standards

As a means of solving the gas flaring problem in Nigeria, this thesis, in part, proposes the domestication of the relevant international environmental standards on GHG emissions to which Nigeria is a party. As discussed in the preceding sections, Nigeria signed and ratified the Paris Agreement but has failed to incorporate the Agreement into domestic laws as required by the Constitution. The non-domestication of international environmental standards on GHG emissions presents serious implications for their enforceability in Nigeria.

One of the methods of acquiring obligations at international law is by accepting the text of the treaty creating such obligations, and an intention to be so bound by the text is usually demonstrated by becoming a signatory to the Agreement.⁴²⁵ According to Onomrerhinor,

⁴²⁵ Flora Onomrerhinor, "A Re-examination of the Requirement of Domestication of Treaties in Nigeria (2016) 17 NAUJILJ at 17 [Onomrerhinor].

apart from being a signatory to a treaty, such a treaty may also have to be domesticated by a state party to enable the citizens of a state party fully benefit from its provisions.⁴²⁶ In Nigeria, the requirement for domestication of treaties is contained in section 12 of the Constitution as follows:⁴²⁷

- (1) No treaty between the Federation and any other country shall have the force of law to the extent to which any such treaty has been enacted into law by the National Assembly.
- (2) The National Assembly may make laws for the Federation or any part thereof with respect to matters not included in the Exclusive Legislative List for the purpose of implementing a treaty.
- (3) A bill for an Act of the National Assembly passed pursuant to the provisions of subsection (2) of this section shall not be presented to the President for assent, and shall not be enacted unless it is ratified by a majority of all the House of Assembly in the Federation.

This provision shows that beyond the ratification of a treaty, it is imperative for Nigeria to adopt such treaty into its domestic laws.⁴²⁸ It also shows that Nigerian courts lack the power to apply the provision of a treaty without the prior approval of the National Assembly. Over the years, Nigeria has ratified numerous treaties including the Kyoto Protocol and the Paris Agreement, but in view of the fact that these agreements were not domesticated, they have no legal force in Nigeria, and are mere documents in Nigeria's legal framework. In Nigeria, a treaty can be transformed into domestic law by re-enactment or reference.⁴²⁹ While re-enactment involves recreating specific provisions or the whole the treaty, a treaty can also be

⁴²⁶ *Ibid.*

⁴²⁷ Nigerian Constitution 1999, *supra* note 111.

⁴²⁸ It is important to note that section 254 (c) (2) of the 1999 constitution (as amended) appears to have excluded the application of section 12(1) of the constitution to treaties relating to labour, employment, workplace and industrial relations. International environmental law treaties are still within the purview of section 12(1) of the constitution.

⁴²⁹ Oyebode, *supra* note 112.

domesticated by making reference to the treaty generally in the title (long or short), preamble or schedule of the domestic law.⁴³⁰

Egede has critiqued the notion of domestication and argued that it is a “colonial relic” borne out of the several years of colonial domination under the British.⁴³¹ In canvassing his argument that Nigeria embraced the British standard requiring a treaty to be domesticated into law in order to apply locally, Egede refers to the decision of the Nigerian Supreme Court in *Ibidapo v Lufthansa Airlines* where the court remarked that “Nigeria, like any other Commonwealth country, inherited the English common law rules governing the municipal application of international law”.⁴³² Nonetheless, the Nigerian courts have also reiterated the relevance of domestication as provided under the Constitution. In *Abacha v Fawehinmi*,⁴³³ the Supreme Court posited that an international treaty entered into by Nigeria only becomes binding upon its enactment into law by the National Assembly. In other words, until such a treaty is incorporated into domestic law, it will remain non-justiciable before the Nigerian courts. In *Abacha v Fawehinmi*, the court further remarked emphatically that “no matter how beneficial to the country or the citizenry an international treaty to which Nigeria has become a signatory may be it remains unenforceable, if it is not enacted into law of the country by the National Assembly”.⁴³⁴ Similarly, in *Mhwun v Minister of Health & Productivity & Ors*,⁴³⁵ the court re-emphasized the importance of domestication and held as follows:

In so far as the ILO convention has not been enacted into law by the National Assembly, it has no force of law in Nigeria and it cannot possibly apply....Where, however, the treaty is enacted into law by the National Assembly as was the case with the African Charter which is incorporated into our municipal (i.e domestic) law by the African Charter on Human and People’s Rights (Ratification and Enforcement) Act, Cap. 10, Laws of the

⁴³⁰ *Ibid.*

⁴³¹ Edwin Egede, “Bringing Human Rights Home: An Examination of the Domestication of Human Rights Treaties in Nigeria” (2007) 51:2 *Journal of African Law* at 251 [Egede].

⁴³² *Ibidapo v Lufthansa Airlines* [1997] 4 NWLR (Part 498) 124 at 150 [Ibidapo’s case].

⁴³³ *Abacha v Fawehinmi* [2000] 6 NWLR (pt 660) p 228 at 228 [Abacha’s case].

⁴³⁴ *Ibid* at 356–57.

⁴³⁵ *Mhwun v Minister of Health & Productivity & Ors* [2005] 17 NWLR pt. 953 p. 155-157.

Federation of Nigeria 1990, it becomes binding and our courts must give effect to it like all other laws falling within the judicial powers of the Courts

Although the above *dictum* relates to the provisions of the International Labour Organization Convention, it is nonetheless a treaty within the contemplation of section 12 of the Constitution. In critiquing the notion of domestication, Egede further writes that the government may ratify treaties to the advantage of its citizens, enact them as law and proceed to modify or amend the laws in order to rob its citizens of the benefits of the treaties.⁴³⁶

On a related note, when states meet to discuss and agree to the text of a treaty, it presupposes that the states parties agree to the obligation and responsibility arising from the treaty. Onomrerhinor argues that it is a demonstration of bad faith for state parties to assert inability to accept the responsibilities arising from a treaty on grounds of non-domestication.⁴³⁷ It is also argued that the lack of domestication of treaties is often a tactic to avoid obligations arising from the treaty.⁴³⁸ If this argument is applied to the non-domestication of the Paris Agreement and the Kyoto Protocol, one may assert that non-domestication is a tactic adopted by Nigeria to avoid domestic obligations that could arise from the domestication of the Agreements.⁴³⁹ This is worrisome considering the importance of the agreements and their potential impact in mitigating GHG emissions from gas flaring. However, as earlier indicated in the preceding chapters, it is gratifying that the Nigerian government is beginning to demonstrate willingness to mitigate GHG emissions from gas flaring.

Nevertheless, the provisions of non-domesticated agreements could be applied indirectly. For instance, the courts can rely on them as aids in interpreting similar provisions in the constitution or other local laws.⁴⁴⁰ Similarly, a treaty which has not been incorporated into a domestic law may apply in Nigeria if its underlying principles have evolved into rules of

⁴³⁶ Egede, *supra* note 431 at 258.

⁴³⁷ Onomrerhinor, *supra* note 425 at 17.

⁴³⁸ *Ibid.*

⁴³⁹ However, this does not extend to Nigeria's obligation to comply with the Agreements under international law.

⁴⁴⁰ Egede, *supra* note 431 at 275; Also see the case of *Mojekwu v Ejikeme* [2000] 5 NWLR 402 where the court made reference to an unincorporated Convention in declaring a custom repugnant.

customary international law. The courts have consistently noted that in Nigeria, as in other common law countries, treaties could be applied as customary international law.⁴⁴¹ The premise for this assertion lies in the fact that a conventional rule can be regarded to have evolved into customary international law if it is a rationally expedient and a self-evident result of essential international law principles or if it forms *opinio juris*.⁴⁴² In order to be considered an *opinio juris*, there must be an established and undeniable practice of states to act in conformity to the rule, and states must obey the rule because they regard themselves legally bound by the rule.⁴⁴³ A conventional rule must also meet the requirement of widespread participation in it, to be considered customary international law.⁴⁴⁴ A critical look at the various international environmental standards on GHG emissions including the Paris Agreement to which Nigeria is a party reveals that they are informed by international environmental principles such as sustainable development and have been adopted widely by most countries. It could be argued that their provisions are gradually evolving as customary international law. However, it is doubtful whether this has obviated the need for the domestication of the Agreement under section 12 of the constitution in view of the supremacy of the Nigerian Constitution.⁴⁴⁵

Nonetheless, this thesis maintains that undomesticated treaties continue to present critical challenges in terms of their enforcement in Nigeria. In buttressing this point, Okeke and Anushiem express the view that the lack of domestication of treaties comes with serious consequences.⁴⁴⁶ It prevents citizens who already lack jurisdiction to enforce their rights under the treaties in international courts, from approaching domestic courts to do so.⁴⁴⁷ For

⁴⁴¹ Ibidapo's case, *supra* note 432.

⁴⁴² Rule of Law Institute of Australia, "What is Customary International Law" online: <<https://www.ruleoflaw.org.au/customary-international-law/>> .

⁴⁴³ *Ibid.*

⁴⁴⁴ See *Federal Republic of Germany v Denmark and Netherlands (the North Sea Continental Shelf cases)* 8 ILM 340 (1969).

⁴⁴⁵ Ozuu Isdore, "The Status of Customary International Law in Nigeria" online: <http://www.academia.edu/10838046/THE_STATUS_OF_CUSTOMARY_INTERNATIONAL_LAW_IN_NIGERIA> at 46-51.

⁴⁴⁶ C.E Okeke & Mathew Anushiem, "Implementation of Treaties in Nigeria: Issues. Challenges and the Way Forward" (2018) 9:2 NAUJILJ at 222.

⁴⁴⁷ *Ibid.*

instance, if the Paris Agreement is not domesticated, Nigerians may be unable to approach domestic courts to ensure Nigeria's commitments under its NDCs are met. Also, some of Nigeria's binding commitments under the Paris Agreement will be enforceable in Nigeria if the Agreement is domesticated. As earlier indicated, some of these commitments include carrying out domestic mitigation measures aimed at reducing gas flaring, preparing and communicating strategies aimed at achieving low GHG emissions from gas flaring and maintaining a national inventory report of anthropogenic emissions. Basically, the non-domestication of treaties does not only encourage state parties including Nigeria to avoid their treaty obligations, but also encourages such state parties to breach critical environmental commitments with serious impacts on the well-being of citizens.

It bears repeating that the Nigerian Government cannot be held liable by impacted communities and Nigerians as a whole for failing to comply with agreements such as the Paris Agreement, which are yet to be domesticated. This further reinforces the need for the domestication of international environmental standards on GHG emissions to which Nigeria is a party. While this thesis acknowledges that effective legislative reform entails the domestication of international environmental standards, it also emphasizes the need for the enactment of a new gas flaring legislation.

4.3.2 Towards a New Gas Flaring Legislation

In achieving the reforms advocated in this thesis, this section discusses some of the insights presented by the concept of evidence-based legislation. This discussion is only an introduction to what the process of enacting and implementing the new legislation proposed in this thesis could look like.

The concept of evidence-based legislation is fairly novel but stems from a wide-ranging body of disciplines including evidence-based medicine and evidence-based policy.⁴⁴⁸ It demands the use of the best accessible empirical evidence and methodically obtained data, when accessible, by lawmakers as a basis for the writing and enactment of laws.⁴⁴⁹ In describing

⁴⁴⁸ Rob Van Gestel & Jurgan De Poorter, "Putting Evidence-Based Law Making to the Test: Judicial Review of Legislative Rationality" (2016) 4:2 *The Theory and Practice of Legislation* at 155 [Gestel & Poorter].

⁴⁴⁹ Revolvly, "Evidence-Based Legislation" online: <<https://www.revolvly.com/topic/Evidence%252Dbased-legislation>>.

the move towards evidence-based legislation, one scholar writes that “the legislator in his choices for legislative interventions takes a rational and focused approach and does not let himself be guided by just political and ideological reasoning, but also by relevant results of scientific inquiry assessing the (expected) effectiveness of those interventions”.⁴⁵⁰ Another scholar posits that “laws and policy initiatives are to be supported by research evidence, and policies are preferably introduced on a trial and error basis”.⁴⁵¹ He further asserts that enforcement should only be contemplated on a wider scale after an assessment of experiments has been done.⁴⁵² However, critics assert that the benefits of an evidence-based approach should not be overemphasized in view of the fact that politicians and lawmakers are not often willing to put scientific insights into consideration in lawmaking.⁴⁵³ Critics also contend that placing so much reliance on the need to support legislative drafts with scientific data and evidence could yield counter-productive results, and “turn evidence based policy-making into policy-based evidence-making”.⁴⁵⁴ Nonetheless, scholars such as Rachinski express the view that as lawmakers are becoming exposed to scientific ways of thinking about legal issues, evidence-based legislation is gradually emerging as a genuine lawmaking phenomenon.⁴⁵⁵ Similarly, other scholars have continued to advocate for law and policy makers to base their decisions on the findings of research driven by facts.⁴⁵⁶ The evidence-based guide considered in this thesis is the ILTAM.

⁴⁵⁰ M. Antokolskaia, “Van Politiek Gestuurde Wetgeving Naar Evidence-Based Wetgeving: Nog Een Lange Wegte Gaan” cited in W. van Boom, I. Giesen & A. Verheij (eds.), *Capita Civilogie Handboek Empirie en Privaatrecht* (Boom: Juridische Uitgevers, 2013) at 174.

⁴⁵¹ R. van Gestel, “Evidence-Based Lawmaking and the Quality of Legislation: Regulatory Impact Assessments in the European Union and the Netherlands” cited in H. Schäffer and J. Iliopoulos-Strangas (eds.), *State Modernization in Europe* (Berlin: Wissenschaftsverlag, 2007) at 141.

⁴⁵² *Ibid.*

⁴⁵³ Gestel & Poorter, *supra* note 448 at 156.

⁴⁵⁴ United Kingdom Parliament, “House of Commons Science and Technology Committee, Scientific Advice, Risk and Evidence Based Policy Making” online:

< <https://publications.parliament.uk/pa/cm200506/cmselect/cmsctech/900/900-i.pdf> > at 47.

⁴⁵⁵ Jeffrey Lachlinski, “Evidence-Based Law” (2011) 96:4 Cornell Law Review at 923.

⁴⁵⁶The National Center for Biotechnology Information, “Evidence Based Policy Making” online: <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2548491/pdf/bmj00575-0005.pdf>> .

4.3.2.1 Enacting New Gas Flaring Reduction Law that Encourages Public Participation of Local Communities

In order to achieve the substantial reforms proposed in this thesis, this thesis presents some of the insights proposed by ILTAM as a possible tool for designing the legislative reforms. This thesis considers the ILTAM model in enunciating a problem-solving approach encompassing four decision-making steps which a drafter needs to follow when creating and implementing new legislation or regulation. These steps include ascertaining the social problem at issue,⁴⁵⁷ identifying the reasons for the problematic behaviours,⁴⁵⁸ drafting the legislation,⁴⁵⁹ as well as monitoring and enforcing the new law, assessing it and providing details as regards its enforcement and social effects.⁴⁶⁰ The monitoring and assessment component of the ILTAM requires the lawmaker to include provisions on monitoring and implementation in the draft bill. In view of the fact that gas flaring persists in Nigeria, partly because of the ineffectiveness of Nigeria's gas flaring law, the ILTAM could serve as a possible tool for achieving the legislative reforms proposed in this thesis. The ILTAM could possibly help in the enactment of laws that have good chances of working. A law works if it induces its specified behaviour and helps to resolve the targeted social problem.⁴⁶¹ In drafting the new bill, this thesis posits that the bill should take cognizance of GHG emissions reduction standards as well as international environmental principles such as sustainable development and polluter pays principle, and make clear provisions regarding its implementation. The deficiencies of the AGRA discussed in chapter two should also be taken into account in drafting the bill.

In addressing a social problem, the ILTAM proposes that a law must put into consideration the problematic conducts of two classes of social actors namely "the role occupants", and the "implementing agencies".⁴⁶² While the role occupants comprise actors whose conducts the

⁴⁵⁷ Ann Seidman & Robert Seidman, "ILTAM: Drafting Evidence-Based Legislation for Democratic Change" (2009) 89:435 Boston University Law Review at 452 [Seidman & Seidman, ILTAM].

⁴⁵⁸ *Ibid* at 453.

⁴⁵⁹ *Ibid* at 455.

⁴⁶⁰ *Ibid*.

⁴⁶¹ Seidman & Seidman, ILTAM, *supra* note 457 at 438.

⁴⁶² *Ibid* at 452.

law seeks to transform, the implementing agencies have the obligation of increasing the possibility that the principal role occupant adapt their conducts to prescriptions addressed to them.⁴⁶³ Basically, the purport of ILTAM is to address the problematic behaviours of the role occupant and the implementing agencies. The problematic behaviour of the primary role occupant and the implementing agencies make up the social problem.⁴⁶⁴ This thesis presents the incidence of gas flaring and its impact in the Niger Delta as a social problem to be addressed by law. Within the context of this thesis, the primary role occupants are the IOCs operating in the Niger Delta, and the implementing agencies include such agencies as DPR, NESREA and NOSDRA.

This thesis is particularly interested in the participation, in the reform process, of persons affected by gas flaring which may be encouraged through ILTAM's interest in transparency, clear problem identification and public participation in the enactment and monitoring of legislation. ILTAM emphasizes that the effectiveness of legislation does not conclude with its drafting. The ILTAM demands monitoring and assessing the enforcement and social implication of every new legislation *ex post* to evaluate whether and how the legislation induces its specified behaviour and helps to resolve the targeted social problem.⁴⁶⁵ The ILTAM compels the lawmaker to make certain that in the bill itself, there is a provision for an effective, transparent, accountable and participatory monitoring and assessment mechanism by persons affected by the social problem.⁴⁶⁶ This mechanism could stipulate conditions for collecting the evidence and feedback needed to evaluate whether the law has induced its specified behaviour and helped to resolve the targeted social problem.⁴⁶⁷ This mechanism could encourage public participation of persons affected by the impact of gas flaring in the Niger Delta in monitoring, assessing and providing feedback on the effectiveness of the law in order to resolve the targeted social problem.

⁴⁶³ *Ibid.*

⁴⁶⁴ *Ibid.*

⁴⁶⁵ Seidman & Seidman, ILTAM, *supra* note 457 at 456.

⁴⁶⁶ Ann Seidman, Robert Seidman and Nalin Abeysekere, *Legislative Drafting for Democratic Social Change: A Manual for Drafters* (Kluwer Law International, London 2001) at 92 [Seidman & Abeysekere].

⁴⁶⁷ *Ibid.*

Cohen and Uphoff posit that public participation takes various forms including participation in decision-making, participation in benefits as well as participation in implementation.⁴⁶⁸ The argument in support of public participation can be segmented into the “process-based goals perspective” and the “substantive-based goals perspective”.⁴⁶⁹ While the “process-based goals perspective” views public participation as an end in itself, the “substantive-based goals perspective” views public participation as contributing to some further result.⁴⁷⁰ From the process-based goals perspective, public participation is imperative because it can bolster local communities and other groups, provide legitimacy to decisions, aid governmental accountability, mitigate conflicts among competing interests, and present the public an opportunity to voice their concerns.⁴⁷¹ From the “substantive-based goals perspective”, public participation is necessary because it can serve as a path that results in decisions that are more environmentally protective and better reflect public value and local desires.⁴⁷² Both perspectives view public participation as contributing to sustainable development.⁴⁷³ As indicated earlier, the AGRA does not take environmental principles such as sustainable development into account. Although sustainable development is imprecise and lacks an exact definition, public participation is imperative in order for any decision related to development to be sustainable.⁴⁷⁴ Indeed, one of the essential requirements for the attainment of sustainable development is broad public participation in decision-making.⁴⁷⁵ Notwithstanding

⁴⁶⁸ Cohen, J.M., and Uphoff, N.T, “Participation’s Place in Rural Development: Seeking Clarity through Specificity”, 8/3 *World Development*, 1980 at 214 cited in Chilenye Nwapi, “A Legislative Proposal for Public Participation in Oil and Gas Decision-Making in Nigeria” 54:2 *Journal of African Law* at 187. For an extensive discussion on public participation in extractive industries, see Donald Zillman, Alastair Lucas & George (Rock) Pring eds., *Human Rights in Natural Resources Development: Public Participation in the Sustainable Development of Mining and Energy Resources* (Oxford: Oxford University Press, 2002) [Zillman, Lucas & Pring].

⁴⁶⁹ See George (Rock) Pring & Susan Noe, “The Emerging International Law of Public Participation Affecting Global Mining, Energy, and Resources Development” online: <<http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199253784.001.0001/acprof-9780199253784-chapter-2>> [Pring & Noe].

⁴⁷⁰ *Ibid.*

⁴⁷¹ *Ibid.*

⁴⁷² *Ibid.*

⁴⁷³ *Ibid.*

⁴⁷⁴ *Ibid.*

⁴⁷⁵ See United Nations Sustainable Development, “United Nations Conference on Environment & Development, Rio De Janerio, Brazil, 3 to 14 June 1992, AGENDA 21” online: <<https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>> at 23.2.

the benefits of public participation, it has been criticized on the grounds *inter alia* that special interest groups canvassing views that are opposed to public opinion on environmental matters are particularly more powerful.⁴⁷⁶ Overall, like other democratic values, public participation remains imperative. The ILTAM focuses, *inter alia*, on public participation in the monitoring and evaluation of laws. It requires that the monitoring and evaluation procedure must be “transparent and accountable” and “must ensure that those affected, especially the poor and vulnerable, have opportunity to provide input and feedback of relevant evidence as to the law’s impact on their lives”.⁴⁷⁷

In order to aid the process of policy/law enforcement, scholars such as Masango have argued for the involvement of citizens in the enforcement process where practicable.⁴⁷⁸ Public participation has the capacity to encourage compliance with the law, and reduce the likelihood of implementing agencies’ misuse of power.⁴⁷⁹ Odumosu-Ayanu has argued for the inclusion of host and affected communities in the decision-making process in response to the conflicting goals triggered by investment projects.⁴⁸⁰ The involvement of host and affected communities will impact regulation and encourage stronger regulatory decision-making and implementation as regulators may be compelled to ensure better enforcement by local communities. This inclusion of local communities has the capacity to reduce environmental harm, improve regulatory compliance, and is seen as a “a democratizing shift” which “aligns neatly with a move away from a ‘command and control’ orientation of government”.⁴⁸¹

⁴⁷⁶ See Pring & Noe, *supra* note 469 at 25.

⁴⁷⁷ Seidman & Seidman, ILTAM, *supra* note 457 at 456. The monitoring and assessment mechanism helps in finding out whether the new law works.

⁴⁷⁸ Reuben Masango, “Public Participation in Policy-Making and Implementation with Specific Reference to the Port Elizabeth Municipality” online:

<<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.914.5812&rep=rep1&type=pdf> > at 124.

⁴⁷⁹ Shahin Alam, “Public Participation in the Enforcement of Environmental Laws: Issues and challenges in the light of the legal and regulatory framework with special reference to EIAs in Malaysia” 3:1 Bangladesh Research Foundation Journal at 89.

⁴⁸⁰ See Odumosu-Ayanu 2014, *supra* note 92 at 274.

⁴⁸¹ See Fiona Haines, “Vanquishing the Enemy or Civilizing the Neighbour? Controlling the Risks from Hazardous Industries” (2009) 18 Soc & Leg Stud 397 cited in *Ibid* at 296.

Omogbe argues that although local communities are not described in any national laws in Nigeria, there is no dispute regarding what a community means and who a member of a community entails.⁴⁸² Local communities are persons who are “customarily resident or who are widely known as the owners of the land upon which the development is taking place”.⁴⁸³ She argues that any proposed solution that does not put into consideration the rights of local communities will most likely fail.⁴⁸⁴ Indeed, the democratic process ensures effective empowerment of the public expressed through legislation.⁴⁸⁵ Omogbe also argues that the only way resources can be peacefully exploited is by giving the local communities a voice in the development of energy, oil and mineral resources process.⁴⁸⁶

Odumosu-Ayanu has expressed the view that local communities can participate in foreign investment projects in Nigeria’s oil and gas sector through binding contracts.⁴⁸⁷ In proposing a multi-actor approach to investment contracts, she writes that the contractual approach does not envision the local communities undertaking a regulatory role, as regulators will retain their regulatory powers.⁴⁸⁸ Basically, the contractual approach responds to the government’s regulatory challenges and inadequacies.⁴⁸⁹ It enhances the fulfillment of the ideal of democratic governance. The contractual approach entails an agreement between the IOCs, host communities and the government which allows the host communities to obtain factual evidence and feedback needed to ascertain whether gas flaring is effectively being addressed by the legislation. This contractual approach could be particularly beneficial in unstable economic circumstances in view of the fact that it permits oversight by host communities at times when governments may prefer to concentrate on economic stability to the detriment of

⁴⁸² Yinka Omogbe, “The Legal Framework for Public Participation in Decision-making on Mining and Energy Development in Nigeria: Giving Voices to the Voiceless” online: <<http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780199253784.001.0001/acprof-9780199253784-chapter-15>>.

⁴⁸³ *Ibid.*

⁴⁸⁴ *Ibid.*

⁴⁸⁵ *Ibid.*

⁴⁸⁶ *Ibid.*

⁴⁸⁷ See Odumosu-Ayanu 2014, *supra* note 92 at 306.

⁴⁸⁸ *Ibid* at 307.

⁴⁸⁹ *Ibid* at 300.

other pertinent issues such as environmental protection.⁴⁹⁰ Given that communities are often in close proximity to sites of gas flaring, they are better suited to provide reports of discrepancies with the regulator, monitor the effectiveness of the regulatory agency, and hold the regulator accountable.⁴⁹¹ This thesis posits that the monitoring and evaluation mechanism in the new legislation will encourage public participation of persons affected by the incidence of gas flaring in order to ensure effective implementation.⁴⁹² As earlier stated, the local communities do not usurp the powers of the regulatory agency as the local communities do not undertake regulatory roles. The implementing agency retains its implementing powers.

However, this thesis has identified the lack of implementation of laws as a problematic behaviour of regulatory agencies that impacts the incidence of gas flaring in Nigeria. It bears reiterating that this problematic behaviour of regulatory agencies arises, in part, as a result of institutional overlaps and duplication of functions by regulatory agencies. It could also be attributed to NESREA's inadequate monitoring of the government's compliance with the provisions of international environmental standards as a result of the non-domestication of the standards, the unclear enforcement structures and responsibilities of the DPR in view of the absence of an explicit regulatory mandate to the DPR by the AGRA,⁴⁹³ and the unwillingness of the government to enforce its own laws. However, as earlier indicated, the successful adoption of the National Gas Policy and the signing of the Paris Agreement indicate the preparedness and willingness of the Nigerian government at this moment to effectively tackle the problem of gas flaring in Nigeria by legislative reform.⁴⁹⁴ Gas flaring reduction is also one of the key elements of Nigeria's NDC under the Paris Agreement.

In order to reduce the prevailing regulatory overlaps and duplication of functions, this thesis, in line with the provisions of the National Gas Policy and the PIGB, proposes that the current regulatory agencies could be consolidated into a single oil and gas regulatory body.

⁴⁹⁰ *Ibid* at 305.

⁴⁹¹ *Ibid* at 306.

⁴⁹² This presupposes a contractual arrangement between the role occupants (IOCs), host communities and the government in ensuring that gas flaring laws are implemented by the regulatory agency.

⁴⁹³ Odumosu 2005, *supra* note 27 at 147.

⁴⁹⁴ Also see New Flare Gas Regulations 2018, *supra* note 31.

This will save cost, lessen bureaucratic bottlenecks and avoid the unwarranted duplication of responsibilities. The proposed regulatory body will encompass the entire petroleum industry, absorb the activities of the current regulatory agencies and oversee some new regulatory activities that may be necessary. This agency should be responsible for the economic and technical regulation of the oil and gas sector in a manner that should not restrict foreign investment in the sector but should take into account Nigeria's BITs and its contractual obligations with IOCs. The responsibilities envisioned to form part of the new regulatory agency's authority should include upstream, midstream and downstream oil and gas regulation, as well as environmental compliance as it relates to the oil and gas sector. This responsibility to monitor compliance with environmental standards implicates the domestication of international environmental standards on GHG emissions to which Nigeria is a party. As earlier indicated, the Paris Agreement, for instance, requires each party to regularly provide a national inventory report of anthropogenic emissions of GHG by sources and removals by sink as well as information necessary to assess progress made in enforcing and achieving its NDC.⁴⁹⁵ The new agency could assist in providing information concerning the extent of Nigeria's GHG emissions from gas flaring as well as information regarding the achievement of Nigeria's NDC as it relates to gas flaring reduction. The possible limitation to the proposed consolidation of regulatory agencies lies in effectively transforming the present agencies into a strong new regulatory body. However, this will entail developing strong corporate values within the new agency that will ensure the effectiveness and sustainability of the new regulatory body.⁴⁹⁶ However, as earlier indicated in chapter one, the issue of corporate values does not fall within the scope of this thesis.

4.1 Conclusion

This thesis has examined the adequacy and effectiveness of the current legal regime for the reduction of GHG emissions from the flaring of natural gas, which often occurs as part of the oil and gas production process in Nigeria. It maintains that the continuous flaring of gas in Nigeria can be attributed, at least in part, to the ineffectiveness of the current laws on gas flaring, lack of sufficient resolve by the government to implement the legal framework for gas flaring, insufficient market and infrastructure for natural gas utilization in Nigeria, as well

⁴⁹⁵ Paris Agreement, *supra* note 19 at art 13(7).

⁴⁹⁶ National Gas Policy, *supra* note 14 at 36.

as the imbalance in the conflicting foreign investment and environmental protection goals in Nigeria. However, this thesis focuses on legislative reforms. The thesis does not envision solving the problem of gas flaring in Nigeria through legislative reforms alone. It contends that legislative reform is an important step that must be undertaken by the Nigerian government as the current legislation governing gas flaring is inadequate, ineffective, and unconstitutional.

Some conclusions can be drawn from the discussions in this thesis. First, the thesis advocates enacting new gas flaring legislation in Nigeria in order to address the shortcomings of the AGRA. Second, it proposes the domestication of some of the relevant international environmental standards on GHG emissions to which Nigeria is a party. Ultimately, in bringing these together, this thesis advocates the adoption of legislative reforms for addressing gas flaring and demonstrates that such legislative reforms will not be hindered by the legal framework for international investment in Nigeria. In particular, the proposed legislative reforms will not be impeded by claims of expropriation and stabilization requirements in oil and gas contracts. This thesis contends that legislative reforms could work at this time considering that the Nigerian government is beginning to demonstrate willingness to address gas flaring. In canvassing the argument for legislative reforms, this thesis presents some of the insights proposed by ILTAM as a possible tool for designing the reforms.

The justification for this thesis is hinged on advancing the cause of environmental protection and climate change mitigation. The flaring of natural gas associated with oil and gas production contributes to climate change through the emissions of GHGs, and Nigeria is one of the highest gas flaring countries in the world. As mitigation involves lessening the emission of heat-absorbing GHGs into the atmosphere, either by decreasing sources of these gases or strengthening the ‘sink’ that gather and store the gases,⁴⁹⁷ the arguments canvassed in this thesis are imperative as they are intended to ensure the reduction of the emission of GHGs from gas flaring in Nigeria into the atmosphere by means of effective laws and regulation. Also, the arguments do not intend to restrict foreign investment but to ensure that IOCs carry on business in Nigeria in a responsible manner, taking into account, environmental and climatic considerations.

⁴⁹⁷ NASA, “Responding to Climate Change” online: <<https://climate.nasa.gov/solutions/adaptation-mitigation/>>.

The legislative reforms advanced in this thesis is in line with the strategic objectives of the National Gas Policy. These strategic objectives of the National Gas Policy include ensuring gas flare out, and promoting gas utilization in Nigeria.⁴⁹⁸ Also, one of the visions of the National Gas Policy is to eliminate gas flaring and tackle environmental issues.⁴⁹⁹ However, the National Gas Policy does not provide a practical guide as to how this goal will be accomplished. Consequently, this research advocates enacting a piece of legislation with good chances of working, and domesticating international environmental standards on GHG emissions, while taking foreign investment goals into consideration. Legislative reform is an important measure that should be undertaken by the Nigerian government in addressing gas flaring.

⁴⁹⁸ National Gas Policy, *supra* note 14 at 33.

⁴⁹⁹ *Ibid* at 32.

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