

**SUSTAINING OIL EXPLORATION AND EXPLOITATION IN THE EMERGING
CONTEXT OF SUSTAINABLE DEVELOPMENT: THE CASE OF THE NIGER-
DELTA**

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Declaration

I declare that this thesis is my own work. This thesis has not been submitted for the award of a higher degree or Doctoral award elsewhere.

O. L. EJENAVI

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bless you all.

Abbreviations

BAT	Best Available Technics
CPA	Climate and Pollution Control Agency
DECC	Department of Energy and Climate Change
DPR	Department of Petroleum Resources
EA	Environment Agency in England
EIA	Environmental Impact Assessment
ES	Environmental Statement
EFTA	European Free Trade Association
GDP	Gross domestic product
HSE	Health and Safety Executive
HRMRC	Her Royal Majesty's Revenue and Customs
HMRC	Revenue and Customs (HMRC)
MPE	Ministry of Petroleum and Energy (Norway)
NRW	Natural Resources Wales
NNPC	Nigerian National Petroleum Corporation
CPA	Norwegian Climate and Pollution Agency
OUGO	Office of Unconventional Gas and Oil
OGA	Oil and Gas Authority UK.
OGIC	Oil and Gas Innovation Centre (UK)

OEL	Oil Exploration Licence
OML	Oil Mining Lease
OPL	Oil Prospecting Licence
PEDL	Petroleum Exploration and Development Licence
PID	Petroleum Inspectorate Department
PCA	Pipeline Construction Authorisation
PA	Pipelines Act (UK)
PPP	Polluter Pays Principle
PSC	Production Sharing Contract
RFCT	Ring Fence Corporation Tax
SEPA	Scottish Environment Protection Agency
SEA	Strategic Environmental Assessments
EA	Environment Agency
EEA	European Economic Area
EU	European Union
PA	Petroleum Act
NPD	Norwegian Petroleum Directorate
PRT	Petroleum Revenue Tax
PSA	Petroleum Safety Authority Norway
UKPA	UK Petroleum Act

UK S E L	UK Seaward Exploration Licenses
UKCS.	UK Continental Shelf
UK	United Kingdom
UNECE	United Nations Economic Commission for Europe

Statutes

African Charter on Human and Peoples' Rights (Ratification and Enforcement) Act

Laws of the Federation of Nigeria (2004)

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

Associated Gas Re-Injection Act 1979 (as amended in 1985) CAP 20, LFN 2004

Clean Air Act

Climate Change (Scotland) Act 2009

Endangered Species Act, Cap E9, LFN 2004

Energy Act (UK)

Federal Environmental Protection Agency Act of 1988

Greenhouse Gas Emission Trading Act (Norway)

Mineral Oils Ordinance of 1914

Mineral Regulation (Oil) Ordinance of 1907

National Oil Spill Detection Regulatory Agency Act (NOSDRA) Act, 2006

Niger Delta Development Commission Act 2000

Nigerian Sovereign Wealth Fund Act (NSIA) 2011

Norway Petroleum Activities Act of November 1996 (PAA)

Norway Petroleum Regulations (NPR) 1997

Oil in Navigable Waters Act (1968)

Oil Taxation Act (UK) 1975

Petroleum Act (PA) (1969)

Petroleum Profits Tax Act (PPTA)

Pollution Control Act, the Product Control Act

The Climate Change Act (UK) 2008

The Mineral Oils Act of 1959

The Nigerian National Petroleum Corporation Act (NNPC) Act 1977

The Petroleum Drilling and Petroleum Refining Regulations

The Petroleum Ordinance of 1889.

The UK Petroleum Act 1998

Treaties

Energy Charter Treaty (ECT)

Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone

African Charter on Human and Peoples' Rights

African Convention on Nature Conservation (Maputo Convention)

Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer

Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention)

Convention for the Protection of the Ozone Layer (Vienna Convention)

Convention on the Conservation of Migratory Species of Wild Animals

Convention on Transboundary EIA

Geneva Convention on Long Range Transboundary Air Pollution

IMO Convention on Oil Pollution Preparedness, Response and Cooperation

International Convention on Civil Liability for Oil Pollution Damage, Brussels

International Convention on Oil Pollution Preparedness, Response and Cooperation

International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage

International Labour Organization Convention 169 Concerning Indigenous and Tribal Peoples in Independent Countries (ILO Convention 169).

Organisation for Economic Cooperation and Development (OECD) Anti-bribery Convention

Protocol concerning Cooperation in combating Pollution in cases of Emergency

Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents

Protocol on Environmental Protection to the Antarctic Treaty

Protocol on Strategic Environmental Assessment (Kyiv, 2003). The Kiev (SEA) Protocol

Protocol on Substances that deplete the Ozone Layer (Montreal Protocol)

The 1997 Kyoto Protocol

Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention)

The Desertification Convention (1994)

The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters

UN-ECE Protocol on Pollutant Release and Transfer Registers (PRTR)

United Nations Convention against Corruption (UNCAC).

United Nations Convention on Biological Diversity (CBD)

United Nations Economic Commission for Europe Convention on the Protection and Use of Transboundary Watercourses and International Lakes

United Nations Framework Convention on Climate Change (UNFCCC)

SUSTAINING OIL EXPLORATION AND EXPLOITATION IN THE EMERGING CONTEXT OF SUSTAINABLE DEVELOPMENT: THE CASE OF THE NIGER-DELTA

Abstract

Sustaining oil exploration and exploitation in Nigeria's Niger-delta in harmony with sustainable development forms the topic and core of this thesis. This research considers a beleaguered Nigerian oil industry and the pervasive contemporary struggles to sustain lucrative oil production in the Niger-delta. Currently, Nigeria grapples with unrelenting and intractable challenges in its oil industry and apparently, a plausible means of alleviating the extensive negative impacts of untenable oil exploitation patterns in the Niger-delta have remained elusive.

From the foregoing, the missing ingredient seems to be a dismal lack of sustainability endeared approaches to guarantee a green petroleum industry, economic growth and poverty eradication which remain vital considerations for a developing state like Nigeria. Apparently, the development that meets the needs of the present without compromising the interests, options and indeed, the needs of future generations, summed-up in the definition of sustainable development,¹ appears to be a maxim with minimal recognition or import in the Niger-Delta.

This Research is thus motivated by the constantly evolving, yet irrefutable implications arising from the concept of Sustainable Development and how it can be realistically applied to oil and gas exploitation. Undoubtedly, the pivotal principles of Sustainable development as enunciated

¹ See, The Report of the Commission, World Commission On Environment And Development, "Our Common Future" 43 (1987).

in: Agenda 21, the Rio Declaration², the WSSD of 2002 as well as the Rio+20³ which have triggered extraordinary impact on the development policies, goals, projects and infrastructure of nations on a global scale ironically constitute the missing elements in Nigeria's quest for sustaining oil production in the Niger-delta. Likewise, the awareness of this phenomenal concept and its application in petroleum industries of more developed states has awakened a considerable situation of unrest in the Niger-Delta region of Nigeria. This is because the immense petroleum resources in the Niger-delta have not translated into societal or economic wealth of the Niger-delta people. Undoubtedly, the vast network of petroleum resource development paraphernalia in the region which served to trigger tremendous economic growth in Nigeria for 6 decades has simultaneously and adversely impacted all aspects of the economic, environmental and social life of the indigenes due to unsustainable petroleum exploitation practices.⁴

A stark contrast is thus evident when the Niger-delta is considered in this thesis alongside developed economies which have better aligned with international law provisions to achieve greener oil industries like the UK and Norway. A comparison with these jurisdictions is provoked by the more tangible impact of sustainable development principles in the petroleum regulations of these jurisdictions. More so, oil exploitation in these countries appear to be conducted more harmoniously with nature, whilst depicting a tapestry of multifarious synergies interwoven and intersecting across the sustainable development goals.⁵

² See, the United Nations Conference on Environment and Development (Rio Declaration) UN. Doc. A/CONF.151/26, Vol. II. 17 (1982), available at: <https://sustainabledevelopment.un.org/milestones/unced> See also, Agenda 21, available at: <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

³ See, World Summit on Sustainable Development or the Johannesburg Convention (WSSD 2002. Available at: http://www.unmillenniumproject.org/documents/131302_wssd_report_reissued.pdf See also, United Nations Conference on Sustainable Development "The Future We Want" (UNCSD 2012), available at: <https://sustainabledevelopment.un.org/rio20> .

⁴ See, the United Nations Environment Programme (UNEP) Report on the Niger-delta available at: <http://www.unep.org/science/chief-scientist/Activities/DisastersandConflicts/OilPollutionintheNigerDeltaNigeria.aspx>

⁵ See, "Transforming Our World: The UN 2030 Agenda For Sustainable Development" A/RES/70/1 - Transforming our world: the 2030 Agenda for Sustainable Development See also, Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2016/2/Rev.1)

Furthermore, an analysis of the Nigerian petroleum regulatory framework and policies pinpoints the loopholes which serve to undermine a sustainable or green oil industry in the Niger-delta, inadvertently engendering environmental degradation and poverty. Notwithstanding this array of negative externalities accruing from unsustainable oil exploitation in the Niger-delta, this research proposes optimism and insight regarding the way forward. The research properly endorses sustainable development of oil and gas resources to chart an acceptable course from the petroleum induced dilemma in the Niger-delta, whilst prompting crucial policy and regulatory reforms to sustain and “green” oil exploration and exploitation in Nigeria.

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INTRODUCTION

0.1. Nigeria's Niger-Delta and Petroleum Exploitation: A Contextual Overview

The Niger Delta is geographically situated along the Atlantic coasts of southern Nigeria. It is notably the world's second largest delta as well as Africa's largest wetland.⁶ The Niger-delta region of Nigeria specifically comprises of 9 states: Abia, Akwa-Ibom, Bayelsa, Cross-River, Delta, Edo, Imo, Ondo and Rivers states out of the 36 states that make up the federal Republic of Nigeria.⁷ It spreads over 70,000 km and forms 7.5% of Nigeria's land mass.⁸ Moreover, the Niger-delta accommodates an estimated 31 million people and at least 40 ethnic groups.⁹ It was primarily sustained by a system of rich agriculture, dense rainforests, numerous rivers, streams and natural resources with most of the population deriving sustainable livelihoods from fishing, hunting and farming.¹⁰

Oil exploration in Nigeria kick-started in 1907 when the Nigerian Bitumen Corporation conducted the earliest exploratory activity.¹¹ Actual drilling only commenced in 1951 resulting in the discovery of non-commercial quantities of oil in 1953. Shell-BP discovered oil in commercial quantities at Oloibiri in the Niger-delta in 1956 and the first export of 847,000 tonnes of crude oil eventually occurred in 1960.¹² More recently, the Niger-delta which has been playing host to the Nigerian petroleum industry for about 6 decades appears quite overcome by its culturally diverse and dense population, residing amidst 7,000 km of pipelines,

⁶ Kadafa, Adati Ayuba. "Oil exploration and spillage in the Niger Delta of Nigeria." Civil and Environmental Research 2, no. 3 (2012): 38-51.

⁷ See, Part I, S. 3, Federal Republican Constitution of Nigeria (FRCN) 1999.

⁸ See, A. Ikelegbe, "The economy of conflict in the oil rich Niger Delta region of Nigeria." Nordic Journal of African Studies 14, no. 2 (2005): 208-234.

⁹ See, Selina Nwulu, Briefing Notes: Oil exploitation in the Niger Delta and the legacy of Ken Saro-Wiwa Available at, <https://www.freewordcentre.com/explore/briefing-notes-oil-exploitation-in-the-niger-delta-and-legacy-of-ken-saro>

¹⁰ Ibid

¹¹ See, J.G. Frynas, Oil in Nigeria: Conflict and litigation between oil companies and village communities. (2000) Vol. 1. LIT Verlag Münster.

¹² Ibid

5,000 oil wells, over 300 oil fields, 275 flow stations, ten export terminals, 22 petroleum storage depots, numerous gas plants, petro-chemical plants and four state-owned refineries.¹³

Unsurprisingly, the people of the region are frustrated with the extensive level of environmental damage, bio-diversity loss and decades of degradation arising from oil exploitation.

Consequently, the extreme level of environmental contamination has engendered social instability, human rights violations, weak institutions which foment corruption, economic relapse, paucity of resources and is accountable for the excruciating poverty and incessant civil unrests in the region.¹⁴ In addition, whole communities have been annihilated due to fire disasters resulting from oil spills. Ultimately, the resounding clamour for urgent environmental restorative actions has become inevitable because of the deplorable living conditions prevalent in the region. Despite the existence of a few urban communities with affluent residents, a considerable fraction of the local population remains confronted with the undeniable and unattractive side-effects of crude oil exploitation. This catalogue of issues effectively constitutes collateral damage resulting from decades of unsustainable patterns of oil and gas exploitation in the Niger-Delta.

Due to the foregoing supervening problems plaguing the region, the Nigerian government however sought effective measures to sustainably develop petroleum resources and address oil exploitation induced challenges in the Niger-delta by proposing oil and gas industry reforms.¹⁵ More importantly, the government's quest to mitigate the situation via comprehensive petroleum regulations and the initiation of an omnibus Petroleum Industry Bill (PIB) appeared

¹³ Freedom Onuoha "Poverty, pipeline vandalism/explosion and human security. Integrating disaster management into poverty education in Nigeria (2010). See also, Onuoha, F. (2009)" Why the poor pay with their lives: Oil pipeline vandalism, fires and human Security in Nigeria, (2009) (3):369-389. 17. Ugwuanyi, E. (2013).

¹⁴ Snapps, Oboreh, and Donald I. Hamilton. "Youth restiveness and industrial disruption in the Niger Delta." American Review of Political Economy 9, no. 1 (2011): 18.

¹⁵ Iledare, Wumi. "An appraisal of oil and gas industry reform and institutional restructuring in Nigeria." International Association of Energy Economics, Fourth Quarter (2008): 23-26.

to be logical steps to achieve these reforms.¹⁶ Nevertheless, the government's sincerity or commitment to the proposed reforms have been called into question as the Petroleum Industry Bill (PIB) which was first introduced a decade ago in 2007, is still yet to materialize as a statute in Nigeria's oil regulatory framework.¹⁷ This invariably leads us to the crucial questions raised by this research regarding the sustainability or otherwise of oil and gas exploitation in the Niger-delta.

0.2. Research Questions and Objectives

This research considers petroleum exploitation in the context of sustainable development. It considers how a comprehensive, evolutive and dynamic concept such as sustainable development can be confined and operationalized via its principles, goals and targets within an oil industry context to engender a green economy in developing oil producing states. The research also appraises the level to which elements of sustainable development can interlink the sustainable development goals (SDGs) to engender tools and partnerships for environmental protection, economic growth and social development during petroleum exploitation, whilst verifying the extent to which sustainability tools can strengthen equity goals towards poverty eradication in petro-states.

Moreover, the research purposely targets oil exploitation in Nigeria via sustainability tinted lenses in accordance with the three-pillar paradigm of sustainable development: environmental protection, economic growth and social development. This scrutiny aims to identify and expatiate on the existence or absence of integral weaknesses in the Nigerian rules which justifies the need for regulatory enhancements. This exercise certainly considers whether any

¹⁶ Oyewunmi, Olabode, and Olusola J. Olujobi. "Transparency in Nigeria's Oil and Gas Industry: Is Policy Re-Engineering the Way Out?." *International Journal of Energy Economics and Policy* 6, no. 3 (2016).

¹⁷ See, <http://thenationonlineng.net/nigeria-loses-200b-non-passage-pib/> Accessed at 07 Jun. 17
<https://www.thisdaylive.com/index.php/2016/04/26/avoiding-a-pib-of-controversy/> Accessed at 07 Jun. 17

evident factors that militate against sustainable oil exploitation in the Niger-delta could be positively influenced by regulatory or policy change, international law and global best practices in the oil industry. Accordingly, this research is premised on the hypothesis that oil and gas exploitation in Nigeria and as currently operational in the Niger-delta, is perhaps inimical to the interests of sustainable development. This hypothesis fundamentally raises two research questions. Firstly, can Nigeria's legal approach to oil and gas exploration in the Niger-Delta possibly incorporate the norms of sustainable development enshrined in international legal instruments? Secondly, to what extent can the Nigerian oil and gas exploitation regime be impacted by experiences and lessons from jurisdictions with more sustainable petroleum exploitation practices like Norway and the United Kingdom?

In furtherance of these research questions, this thesis considers how far it is possible to argue for the improvement of Nigerian petroleum laws to achieve a more holistic, cohesive and sustainability engendered regulatory framework. The research therefore addresses pertinent issues regarding the means and extent to which Nigerian petroleum regulations can sustain a petroleum industry in harmony with nature in the Niger-delta whilst reconciling gaps between the current petroleum laws and the achievement of the sustainable development goals (SDGs).

Bearing in mind that sustainable development is an all-encompassing, fluid and evolutive concept, its application in the context of oil and gas exploitation in relation to a developing petro-state like Nigeria, potentially and unarguably poses complexities. Nevertheless, this thesis by means of specific tools and partnerships identified in this research engages with the principles of sustainable development and the subsequent SDGs as a means of operationalizing this dynamic concept in the petroleum industry context.

Furthermore, the research addresses the Nigerian oil and gas laws and their lack of strategic focus on issues of environmental protection, economic growth and social development. The

reason for this assessment is predicated on the increasing global trend of sustainable development and sustainable use of natural resources that make it essential for governments to provide coordinated and pro-active regulations for hydrocarbons exploitation. Indeed, competent, efficiently coordinated and implemented regulations in the oil industry mutually reinforce each component of the sustainable development paradigm to actualize oil industry sustainability. Whereas, the converse holds true, as: inefficient, weak or unclear petroleum regulations reinforce resource waste, environmental degradation, economic deficits, corruption, petro-curse, inequities and social malaise, as is all too evident in the Niger-delta, thus necessitating urgent policy and regulatory reforms.

0.3. Research Topicality/Originality and Significant Contribution to Knowledge

Sustainable development is re-contextualized in this thesis to assess its utility in triggering development devoid of negative environmental and social externalities in developing oil producing states. Moreover, the extent to which sustainable development can eradicate poverty and inequality to achieve green economic growth in petro-states is verified on all pillars of the SD paradigm. Whereas the research validates and builds on existent theoretical frameworks afforded by international law and principles of sustainable development, it goes further to expand contemporary discourse on the concept of sustainable development by incorporating and assessing the interlinkages and tensions between the SDGs.

The research further expatiates on how petroleum exploitation directly impacts the interplay between the SDGs and how it can potentially amount to a lever towards synergies for sustainable development or become antithetical to sustainable growth by prompting trade-offs and tensions across the SDGs. In the same vein, the research provides insightful applications of SD principles and the SDGs to formulate tools capable of catalysing sustainable

development within the petroleum industry context, to drive national and regional efforts towards achieving the sustainable development goals.

Moreover, these formulated tools are denoted as, governance tools to attenuate governance or institutional challenges in petro-states and substantive tools which are derived from SD elements articulated in the Rio Declaration to temper oil exploitation processes. These tools are carefully designed to protect and preserve eco-systems and society, including boosting equity goals and poverty eradication. Thus, the institutional/governance tools include: International and multi-stakeholder partnerships, efficient regulatory guidelines/policies, transparency and accountability mechanisms, green taxation and sovereign wealth funds. While substantive tools embrace: Environmental Impacts Assessments (ELAs), Strategic Environmental Assessments (SEAs) and Human Rights Impacts Assessments (HRIAs). Likewise included are, pollution controls, innovative technology, access to information, justice and public participation.

An additional significant contribution to knowledge in keeping with a recurring theme of the research, accrues from goals 16 and 17 of the SDGs. It relates to adapting multi-stakeholder engagement and international partnerships, into core drivers of sustainable governance in developing, oil-producing states. The research proposes these collaborations as crucial links towards enhancing the competence of reforms in the petroleum industry value-chain. Likewise, such partnerships are posited as essential towards enhancing eco-system and habitats protection of off-shore oil producing areas in developing states in a regional or sub-regional context.

Evidently, sustainable development and sustainable use of natural resources habitually applies to living natural resources. This research however, reconfigures sustainable development and adapts its incumbent principle of sustainable use to determine how it can impact on the control and use of finite petroleum resources to extend the life-span and utility of petroleum, whilst

targeting petroleum resource use patterns in developing states to eliminate waste, unsustainable consumption and high carbon footprint.

Moreover, this thesis provides a significant and methodological contribution to knowledge via its adoption of the comparative approach. The research embraces this means to chart a novel pathway of demonstrating the utility of the designated tools in reconciling, oil exploitation in the Niger-Delta, with sustainability infused regulations posited by international law and the UK/Norwegian prototypes.

A final original contribution to knowledge of this research, is the advocating of Human Rights Impacts Assessments (HRIAs) as a core aspect of a state's fulfilment of due diligence obligations to prevent against state and corporate violations of human rights in the oil industry. This research thus argues for HRIAs with specific focus on the Nigerian oil industry, as a fundamental safe-guard to reinforce social development objectives and enhance human rights protection during oil exploitation.

To substantiate the fore-going assertions relating to research originality and topicality, it is clarified that to a considerable extent, the bulk of materials relating to sustainable development in an oil industry context, usually tackle the geological, scientific or engineering aspects,¹⁸ of oil exploitation or address either one of: the environmental pillar, economic growth pillar,¹⁹ or social development pillar or in some cases, human rights. Indeed, literature encapsulating all 3 pillars of the SD paradigm, including equity and sustainable use of petroleum resources are rare. Nevertheless, this research pushes beyond existing boundaries and examines these pivotal elements of sustainable development. Moreover, it analyses the positive impacts of

¹⁸ Wellmer, F-W., and J. Becker-Platen. "Sustainable development and the exploitation of mineral and energy resources: a review." *International Journal of Earth Sciences* 91, no. 5 (2002): 723-745.

¹⁹ Steinbach, Volker, and Friedrich-W. Wellmer. "Consumption and use of non-renewable mineral and energy raw materials from an economic geology point of view." *Sustainability* 2, no. 5 (2010): 1408-1430.

operationalizing sustainable development in a diverse national and cultural context such as Nigeria's Niger-Delta.²⁰

Similarly, while there exists Nigerian literature addressing petroleum exploitation in the Niger-Delta, the majority of such materials often target either the socio-economic²¹, scientific²² or social²³ aspects of oil induced pollution in the Niger-Delta and are lacking in a holistic or robust assessment from international law perspectives.²⁴ In view of the foregoing compelling reasons, this research posits a means towards bridging these gaps and proffers positive steps to influence sustainable development and poverty eradication in the Niger-Delta. The research thus argues for oil sector sustainability in Nigeria in accordance with international law provisions. This potentially serves to benefit a massive population of about 180 million people²⁵, without mentioning the positive regional implications, including successive generations via buttressing ways by which the oil sector can foster the SDGs.

0.4. Methodology

This research undertakes a multidisciplinary approach since it considers economic, social and legal views for enhancing the sustainable development debate as a feasible solution for

²⁰ See, Jike, V. Teddy. "Environmental degradation, social disequilibrium, and the dilemma of sustainable development in the Niger-Delta of Nigeria." *Journal of Black Studies* 34, no. 5 (2004): 686-701. See also, Moffat, David, and Olaf Lindén. *"Perception and reality: assessing priorities for sustainable development in the Niger River Delta."* *Ambio* (Sweden) (1995).

²¹ See, K. Omeje, "Petrobusiness and security threats in the Niger Delta, Nigeria." *Current Sociology* 54, no. 3 (2006): 477-499.

²² See, B. Ordinioha, and S. Brisibe. "The human health implications of crude oil spills in the Niger delta, Nigeria: An interpretation of published studies." *Nigerian Medical Journal* 54, no. 1 (2013): 10. See also, Nwilo, Peter C., and Olusegun T. Badejo. "Impacts and management of oil spill pollution along the Nigerian coastal areas." *Administering Marine Spaces: International Issues* 119 (2006): 1-15.

²³ See, Boele, Richard, Heike Fabig, and David Wheeler. "Shell, Nigeria and the Ogoni. A study in unsustainable development: I. The story of Shell, Nigeria and the Ogoni people—environment, economy, relationships: conflict and prospects for resolution." *Sustainable development* 9, no. 2 (2001): 74-86. See also, Boele, Richard, Heike Fabig, and David Wheeler. "Shell, Nigeria and the Ogoni. A study in unsustainable development: II. Corporate social responsibility and 'stakeholder management' versus a rights-based approach to sustainable development." *Sustainable Development* 9, no. 3 (2001): 121-135.

²⁴ See, J.C. Ebegbulem, D. Ekpe, and T. O. Adejumo. "Oil exploration and poverty in the Niger delta region of Nigeria: A critical analysis." *International Journal of Business and Social Science* 4, no. 3 (2013): 279-287. Also, Odalonu H. Boris, "The Upsurge of Oil Theft and Illegal Bunkering in the Niger Delta Region of Nigeria: Is There a Way Out?." *Mediterranean Journal of Social Sciences* 6, no. 3 S2 (2015): 563. See also, P. N. Mba, and Uchechi R. Ogbuagu. "Environmental and Socio-Economic Impact of Oil Exploration on the Niger Delta Region: A Case Study of Iboko, Nigeria." (2012).

²⁵ See, UN Department of Economic and Social Affairs: Population Division, available at: <http://countryometers.info/en/Nigeria> Accessed at 15/06/17

restoring the Niger-Delta whilst sustaining oil exploration. The methodology adopted is a combination of methods. The research employs the Doctrinal methodology, the “Law in Action” approach and the Comparative methodology. The essence of combining research methods in this thesis extends beyond the need to enhance knowledge and academic contribution relating to the subject matter of the thesis, but also to achieve an efficient, realistic and theoretically precise means of resolving the research questions. The research undertakes an appraisal of international law embodying the tenets of sustainable development and the oil and gas laws of the UK and Norway. The research through the comparative approach identifies how the existent Nigerian petroleum laws may be improved by constructive lessons and experiences from the UK, Norway and international law.

Moreover, the research via the doctrinal approach, considers the meaning and extended implications of the complex and sometimes interconnected body of local and international law governing sustainable development. The thesis therefore, utilizes the “law in action” approach to assess not just the national laws, and in this context, the Nigerian petroleum legislation as codified, but examines, how Nigerian petroleum law has been applied, and how the law ought to be.²⁶ At this juncture, it is important to clarify that, the law in action approach adopted in this thesis is differentiated from the socio-legal research²⁷, or sociology of law²⁸ approaches which are grossly dependent on empirical data, normally derived from: interviews, opinion polls, questionnaires and other metrics based assessments.²⁹ Law in action in this thesis is substantiated by the assessment of Nigerian petroleum policy and regulations, as well as the

²⁶ See D. Nelken, ‘*The “Gap Problem” in the Sociology of Law: A Theoretical Review*’ (1981) 1 Windsor Yearbook of Access to Justice. (35), addressing the idea that there is frequently a ‘gap’ between the ‘paper rules’ systematised in law books and law in action.

²⁷ See Nelken, (Ibid.)

²⁸ The Sociology of law approach aims to discover the causal relationships between law and society, it seeks to discover the patterns from which one can infer whether and under what circumstances law affects human behaviour and conversely, how law is affected by social change, whether of a political, economic, psychological, or demographic nature.

²⁹ Michael Salter and Julie Mason, “*Writing law dissertations: an introduction and guide to the conduct of legal research*” (Harlow, England, Longman, 2007) 153

potential societal impacts generated by the implementation or non-implementation of such policies. This approach thus emphasises the missing links, or legal problems or needs in the Nigerian oil and gas laws that justify the call for reforms and greening of the oil industry as crucial aspects of sustaining oil exploratory activity in the Niger-delta.

This research also undertakes the Comparative approach in the third chapter essentially to compare the petroleum regulatory framework of two different states, the UK and Norway. This is because the comparative approach allows for the juxtaposition of the spirit and style of different legal systems, including the utilized methods of thought and procedures.³⁰ Comparative analysis can also be a particularly useful methodology for considering the desirability of introducing forms of legal regulation that have been successfully introduced in other jurisdictions as a response to analogous or corresponding issues. For these compelling reasons therefore, the fourth chapter of the thesis similarly adopts the comparative method as it embraces sustainability geared reforms discernible from international law which are already operational in the UK and Norway and are considered in terms of their suitability for Nigeria.³¹ Consequently, the issues of function and compatibility are stressed as the vital ingredients for the comparison of foreign rules. It is for these same reasons that this research hinges on the functional approach to decipher sustainability endeared approaches from these jurisdictions to solve the challenges of the Niger-delta.

Notwithstanding, the underlying basis for a comparative research envisages that only rules which perform the same function and address the same real problem or conflict can be profitably or usefully compared.³² This remains the justification for adopting the comparative analysis approach in this thesis as it is used to ascertain how the positive laws, specifically

³⁰ K. Zweigert and H. Kotz, “*An Introduction to Comparative Law*” 3rd. Ed, (Oxford, Clarendon Press, 1996) 4.

³¹See Macro-comparison in K. Zweigert and H. Kotz, “*An Introduction to Comparative Law*” 3rd. Ed, (Oxford, Clarendon Press, 1996) 4.

³² Ibid

Nigerian petroleum laws compare with international law in the context of the sustainable development goals and tools identified in this research. It also examines how the legislative lacunae in Nigerian petroleum regulations can be eliminated. A similar aim of the comparative analysis approach in this thesis is to provide a broader or more inclusive range of model solutions available from other jurisdictions to resolve the environmental, social and economic gaps in the Nigerian petroleum regulations.

Consequently, the jurisdictions predominantly discussed include the UK and Norwegian laws in the oil industry context. The research considers these countries as they maintain vibrant economies that have crucially escaped the “petro-curse phenomenon”³³ whilst retaining reasonable environmental and social standards despite decades of petroleum exploitation. This approach is thus in furtherance of the claim that, “comparative analysis extends and enriches the supply of solutions and offers the scholar of critical capacity the opportunity of finding the better solutions for his time and space”.³⁴ Thus, underscoring why this method is considered useful for law reform in developing countries, with authors claiming that the reception of foreign legal institutions is not a matter of nationality but of usefulness and need.³⁵

0.4.1. Addressing Relevant Challenges of Juxtaposing Jurisdictions via Legal Transfers

This sub-section thus raises the issue of legal transfers which in very basic terms is considered as a movement of law from one legal tradition to another by conscious process of law-making or legal reform.³⁶ Although a contested concept developed by Alan Watson, and claimed as a detracting aspect of the functional approach, it highlights the notable factors that influence the

³³ Resource curse or Petro-curse phenomenon is addressed in later sub-sections

³⁴ See, K. Zweigert and H. Kotz, “*An Introduction to Comparative Law*” 3rd. Ed, (Oxford, Clarendon Press, 1996) 4.

³⁵ *Ibid*

³⁶ A Watson, *Legal Transplants: An Approach to Comparative Law* (Scottish Academic Press, 1974; American ed. University Press of Virginia, 1974). See also, Tatiana Kyselova, “*The Concept of Legal Transplant:*” (Literature Review Draft, Centre for Socio-Legal Studies University of Oxford) 2008.

legal transplantation process as well as their corresponding impact on comparative analysis.³⁷

These factors identified as: the source of law, pressure force or opposition force, transplant bias, amongst others are deemed accountable for the success or compatibility of the adopted foreign or transplanted laws in national contexts. Despite contrary views on the implausibility of legal transplants³⁸, regarding this research, it is quite adequate that Nigerian Petroleum regulations would be primarily compared with international standards evident in jurisdictions of common law extraction which already bear similarities in legal systems. These include, the UK from where Nigeria's legal system evolved through colonization. This justifies the basis for comparison and assessment of the sustainability indices or potential of the petroleum regulations and policies operational in the Niger-delta. It is also the underlying reason for the recommendations on how the laws may be strengthened to achieve sustainable development of petroleum resources in the Niger-delta.

0.4.2. Diffusion and Infusion of laws

It is further clarified that, the possibility of creating virtual laws pose serious threats to the effectiveness of comparative approaches via legal transplants. As also posited by Orucu, these virtual laws refer to rules or legal doctrine that fail to achieve the desired effect or positive outcomes. They are thus bereft of influence.³⁹ Such regulatory or legal handicaps are often outcomes of conflicts between legal rules and pervading local, social or political interests, non-enforcement of the rules, failure of sanctions, lack of awareness of such rules and even local and social perceptions regarding the relevance of those rules.⁴⁰ This challenging situation posed

³⁷ Alan Watson, From Legal Transplants to Legal Formants, 43 AM. J. Comp. L 469-70 (1995)

³⁸ O Kahn-Freund 'On Uses and Misuses of Comparative Law' 37 Mod. L. Rev. 1 (1974) 7, 11-13. See also, O Chase 'Cultural Dimensions in Civil Procedure' 45 Am. J. Comp. L. 861 (1997) 863.

³⁹ See, Esin Örücü "Infusion Of The Diffused: Four Circles Of Diffusion Infusing The Legal System Of Turkey" In, Sue Farran, James Gallen, Jennifer Hendry, Christa Rautenbach. (eds) *The Diffusion Of Law : The Movement Of Laws And Norms Around The World* (Farnham, Surrey, UK England ; Burlington, VT, USA : Ashgate Publishing, 2015)

⁴⁰ See, J.M. Smiths "Systems Mixing and In Transition, Import and Export of Legal Models: The Dutch Experience" In E.H. Hondus (ed.) *Nederlands Report to the Fifteenth International Congress of Comparative Law* (Intersentia

by virtual laws can be avoided by the process of diffusion and infusion of law.⁴¹ This entails that the recipient or borrowing state must simulate a steeping or internalization process to expedite the absorption or permeation of the foreign rule, law or doctrine with local values to guarantee that it serves its aims or “is fit for purpose”.⁴² The diffused must thus get infused through the effort of “domestic improvers and renovators”.⁴³ This is often achievable through the process of technical infusion of the law, engendered by teaching in secondary schools or legal education in tertiary institutions, seminars, lectures, public awareness schemes, NGO collaboration and other forms of re-education.

There is also the possibility of preventing virtual laws via positive impact from judicial and legislative influencers, international organizations, international finance or development institutions, as well as civil rights groups. Furthermore, the criteria of using the law to go to court on specific grounds and in this case going to court for enforcement of social, environmental, human and access rights or to seek redress for environmental violations in relation to petroleum exploitation would serve as a yardstick for measuring the success of the transplant or infusion of sustainable development norms in the Nigerian oil industry.

0.5. Thesis Structure

This thesis comprises of an introductory chapter, four substantive chapters, conclusion and bibliography. The first chapter is subdivided into two parts, A and B. The aim of such division is to accommodate core areas affecting the conceptualization of sustainable development at international law. Part A therefore, examines the origins, highlights and achievements of sustainable development in international law. It articulates the theoretical components of the

Rechtswetenschappen 1998) 55, where it was argued that “where a transplanted legal system is not compatible with the culture in the receiving country, without appropriate transposition and tuning, only a virtual reality would be created”

⁴¹ Diffusion in this case is synonymous with the spreading, dispersal or propagation of these transplanted legal rules. *Ibid.*

⁴² See, W. Twining, “Diffusion of Law: A Global Perspective” (2004) 49 *Journal of Legal Pluralism*, 1-45

⁴³ *Ibid*

concept of sustainable development whilst determining its legal status at international law. Also, Part A crucially sets out the international law approaches used to concretize this pliable concept, including a foray into the ways the SD concept has evolved over time to accommodate not just the principles or elements of sustainable development, but contemporary goals and indicator frameworks as pathways towards its operationalization.

Notwithstanding, potential or palpable areas of tensions or trade-offs are all too evident and inevitable in reconciling these varied goals and diverging objectives. Albeit, the chapter in Part B, scrutinizes SD operationalization at international law specifically from an oil industry context. It thus makes credible efforts via designated governance and substantive tools in tackling these knotty issues accruing from integrating core elements of the SD paradigm. The chapter stays true to the essence of the SD concept and highlights areas and the means of competent goal synergies to drive the sustainable development agenda in the context of petroleum exploitation.

The second chapter of the thesis portrays the Nigerian oil and gas regulations as they are, both in their positive and detracting aspects. Likewise, these regulations are assessed in accordance with the identified sustainable development tools identified in chapter 1 as prerequisites for a green oil and gas industry. It examines these regulations to determine their sustainability quotient and to ascertain their capacity to achieve the sustainable development goals essential for not just a robust and dynamic petroleum industry, but also a transformed Niger-Delta. The chapter further assesses the incontrovertible governance challenges plaguing the Nigerian oil industry and portrays how corruption, inchoate or inept oil industry guidelines, including how regulatory and technical incapacities, reinforce each other to render the Nigerian oil industry unsustainable on all pillars of the SD paradigm.

The third chapter of the thesis considers the oil and gas laws of the United Kingdom and Norway in line with the thesis' designated tools of sustainable development. It also undertakes a comparative and systematic appraisal of the petroleum regulations of both jurisdictions to more clearly ascertain the areas of congruence or divergence that triggered sustainable and dynamic growth of these economies without undermining the options or opportunities of succeeding generations.

Ultimately, the fourth chapter entails a submission of critical and informed reforms based on international law obligations and appropriate examples from the UK and Norwegian jurisdictions. These reforms also harmonize with the specific tools of sustainable development of petroleum resources identified in this thesis. All the foregoing approaches are thus considered as they constitute the essential means of filling the legislative gaps in the Nigerian petroleum regime to achieve a green economy and sustainable development.

Chapter 1

Sustainable Development: Perspectives and Approaches for the Exploitation of Petroleum Resources

PART A

Introduction

Sustainable development is a recognised concept of international law and a principle of international environmental law.⁴⁴ It has even been further argued to be a principle of international law with significant normative value.⁴⁵ However, it has been trailed by controversy⁴⁶ mostly because of the inherent difficulties in the integration of two fundamentally divergent goals,⁴⁷ environmental protection and economic development.⁴⁸ Indeed, Principle 4 of the Rio declaration provides; “In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it”.⁴⁹ This entrenches the concept of sustainable development as an incorporation of development goals and environmental protection. Sustainable development is likewise deemed a vague and elusive concept,⁵⁰ even

⁴⁴See, The Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion) [1996] ICJ Rep 226, 9 Sands, P. (2003) *Principles of International Environmental Law*, (2nd edn, Cambridge, pp. 4). See also, the ICJ opinion of sustainable development as a concept in the Gabčíkovo-Nagymaros project case between Hungary and Slovakia (1997) ICJ Report (1997) 7 at 78, Including; P. Sands, ‘UNCED and the Development of International Environmental Law’ 3 YBIEL, (1992) 17. And, P. Sands, ‘International Courts and the Application of the Concept of “Sustainable Development”’, 3 Max Planck, Yearbook of United Nations Law (1999) 404

⁴⁵ See the dissenting opinion of Judge Weeramantry in the ICJ ruling in Gabčíkovo-Nagymaros case (supra) at 90 And see, D. French, *International Law and the Policy of Sustainable Development*, (Manchester, Manchester University Press, 2005) 47 at 51.

⁴⁶ A Dobson, *Green Political Thought* (London, Routledge, 2000) 62. See also, Wilfred Beckerman, “*Sustainable Development*”: Is it A Useful Concept? (3 Environmental Values, 1994) 191, at 191-206

⁴⁷ M. Fitzmaurice, *Contemporary Issues in International Environmental Law* (Cheltenham, Edward Elgar Publishing 2009) 67

⁴⁸ G. Carvalho, ‘Sustainable development: Is it Achievable Within the Existing International Political Economy Context? (2001) 9 Sustainable Development 61–73; H. E Daly, *Beyond Growth: the Economics of Sustainable Development* (Beacon Press: Boston, 1997).

⁴⁹ Principle 4 of the Rio Declaration on Environment and Development, 1992, 31 ILM 874.

⁵⁰ M.C. Cordonier Segger & C. G. Weeramantry, eds., “*Introduction to Sustainable Development; Implementing International Sustainable Development Law*. Also, *Sustainable Justice: Reconciling Economic, Social and Environmental Law* (Leiden: Martinus Nijhoff, 2004).

considered to be, “one orthodoxy with many interpretations”⁵¹ and lacking in any universally agreed upon definition.

Notwithstanding, sustainable development has evolved into an acceptable and ever recurrent feature in international legal and political discourse relating to virtually all spheres of human endeavour.⁵² Also of crucial relevance to the meaning of sustainable development are the core elements of conservation and sustainable use of natural resources. More so, the concept characteristically circumscribes the integrated themes of economic development, environmental protection, equity and empowerment.⁵³ However, these rather contradictory tenets have also significantly belied its adoption and practical implementation. Reason being that, sustainable development requires the amalgamation of its constituent elements to optimize its aims. Therefore, striking the appropriate balance between these disparate elements, whilst prioritizing amongst mutually reinforcing interests, in diverse contexts, renders the concept supremely challenging.⁵⁴

Nevertheless, the dominant theme of this chapter is ‘sustainable development’. This extensive concept is yet narrowed down to ascertain its relevance to petroleum exploitation. The chapter examines sustainable development as a fundamental tool for regulatory and policy change to sustain the production of petroleum resources in a developing state like Nigeria. It thus identifies the links and the extent to which it is possible to argue for the application of sustainable development principles in the exploration and production of hydrocarbon resources. Likewise, the chapter examines the concerns and challenges arising from the

⁵¹ See, D. French, *International Law and Policy of Sustainable Development* (Manchester, Manchester University Press, 2005) at 14.

⁵² D. French, *International Law and Policy of Sustainable Development* (Manchester, Manchester University Press, 2005) 67

⁵³ M. Jacobs, *Sustainable Development as a Contested Concept*, in A. Dobson (ed.), *Fairness and Futurity, Essays on Environmental Sustainability and Social Justice* (Oxford, Oxford University Press, 1999)37

⁵⁴ These complications will be all too evident in the course of further deliberations.

operationalization of such an all-encompassing concept in the petroleum industry, especially in developing states. It thus articulates a multi-disciplinary approach to tackle these challenges by means of a framework anchoring on key themes elaborated in the Rio Declaration and the 2030 Agenda for Sustainable development.⁵⁵ The chapter appraises the sustainable development goals (SDGs) and identifies what circumstances they can be more specifically relevant as tools for the operationalization of sustainable development in the oil industry context. Unarguably, sustainable development remains a dynamic and broad-based concept with potential to engender viable synergies or trigger trade-offs, due to its innately integrative element. The chapter nonetheless considers the trade-offs that interlinks the sustainability discourse in conjunction with fossil fuels use, whether they are avoidable and if not, the extent to which sustainable development concepts imbedded in regulatory mechanisms can mitigate their impacts in the oil industry.

The first part of the chapter denoted as Part A, commences with an overview of sustainable development, its conceptual challenges, controversies, application and consequent progression into the sustainable development goals (SDGs). The first part of the chapter further elucidates on the operationalization of sustainable development at international law. The second part of the chapter anchors on sustainable development and its implementation in the petroleum industry. This section also examines the international legal framework governing sustainable development and oil exploitation whilst appraising the role of international organisations and partnerships like the World Bank, the UNEP, the EITI, including International finance institutions in charting a nexus between sustainable development and petroleum exploitation in developing states. A systematic analysis regarding the implications and complex challenges

⁵⁵ See, UNGA/RES/70/1 – “Transforming our world: the 2030 Agenda for Sustainable Development. See also, the SDGs and Global Indicator Framework Resolution adopted by the General Assembly on Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development (A/RES/71/313).

accruing from this collaboration with international organisations for sustainable development in petro-states is subsequently addressed.

Ultimately, the chapter assesses how far it is possible to argue for the integration of all pillars of the sustainable development paradigm, including enhancing synergies across the SDGs to achieve crucial targets of the 2030 Agenda in the oil industry and within emerging petro-states. Thus, in fulfilling these aims, the chapter designates tools to optimize oil sector governance and substantive tools. These include: International and multi-stakeholder partnerships, efficient regulatory guidelines/policies, transparency and accountability mechanisms, green taxation and sovereign wealth funds. The substantive tools on the other hand, embrace: EIAs, SEAs, HRIAs, including, pollution controls, innovative technology, access to information, justice and public participation.

1.1. Sustainable Development at International Law: Background and Progression

Earliest support for the sustainable development agenda commenced in the 1972 Stockholm Conference on the Human Environment.⁵⁶ The conference initiated discussions on the human right to a healthy and productive environment.⁵⁷ Thereafter, in 1983 the UN set up the World Commission on Environment and Development (WCED)⁵⁸ also known as the Brundtland Commission to seek or harness support from governments on the pursuit and realization of sustainable development. The report of the commission “Our Common Future”⁵⁹ which was

⁵⁶ See, Principle 1 Stockholm Declaration (1972); F. Dodds, M. Strauss, and M. F. Strong. *“Only one earth: the long road via Rio to sustainable development.”* (London, Earthscan, 2012).

⁵⁷ See, Principles 2-3 of the Stockholm Declaration (1972). Available at: <http://www.un-documents.net/aconf48-14r1.pdf>

⁵⁸ UN General Assembly Resolution 38/161 “Process of preparation of the Environmental Perspective to the Year 2000 and Beyond”, establishing the Commission. [6] In A/RES/38/161.

⁵⁹ See, Report of the World Commission on Environment and Development, General Assembly Resolution 42/187, 11 December 1987. See also, I. Borowy, *Defining Sustainable Development for Our Common Future: A History of the World Commission on Environment and Development* (Brundtland Commission). Routledge, 2013.

published in 1987 articulated the popular definition of sustainable development as, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.⁶⁰

The Brundtland report evoked optimism regarding a future, that could reconcile development aspirations of states with environmental protection. Moreover, it held the promise of tackling inequities and poverty eradication via the equitable distribution of opportunities and resources within present generations and across successive ones. The Brundtland definition of sustainable development thus embraces such a fair distribution and optimization of natural resources or wealth for economic growth whilst counteracting environmental degradation. Thus, indicative of the fact that, development can only be sustainable when it is within the carrying capacity of the environment, or within limits imposed by environmental constraints. Indeed, the Brundtland definition and sustainable development have been criticized as purely “anthropocentric in nature”, focusing more on development than environmental sustainability, or the needless harnessing of nature to meet human needs or growth and unduly optimistic.⁶¹

Nevertheless, the fact of the matter is that, the Brundtland definition and Report served to revolutionize the concept of sustainable development whilst launching it on a more globalized and far-reaching platform to address development challenges of states. The Report is arguably more than an assumption of the needs of the world’s poor, it goes further to articulate the extent to which underdevelopment interlinks with poverty, which in turn correlates with environmental stress and ecological challenges. For instance, the Brundtland Report clarifies

⁶⁰ See, The Report of the Commission, World Commission On Environment And Development, “Our Common Future” 43 (1987).

⁶¹ See, M. McCloskey, ‘The Emperor has no Clothes: The Conundrum of Sustainable Development’, 9 Duke Environmental Law and Policy Forum (1999) 153. Available at: <http://www.law.duke.edu/journals/9DELPFMcCloskey>

that “many forms of development erode the environmental resources upon which they may be based,” and “that environmental” degradation can undermine economic development.⁶²

Evidently, the report maintains that “[a] world in which poverty and inequity are endemic will always be prone to ecological and other crises”.⁶³ The Report thus elucidates on the interconnectedness between economic development, environmental sustainability, fueled by innovative technologies which is invariably dependent on the considerable funding accrueable from sustainable economic growth.

The Sustainable development agenda as facilitated by the Brundtland Report progressed even further and ushered in the 1992 Earth summit in Rio or the United Nations Conference on Environment and Development (UNCED).⁶⁴ The vital aims of the conference entailed identifying rallying points for reconciling economic growth objectives of states with environmental protection for the benefit of the global community. These summits were also notable for producing crucial outcome documents and international legal instruments such as the Rio Declaration, Agenda 21, the Biological Diversity Convention, (CBD) which have even more clearly outlined the meaning of sustainable development.⁶⁵

Moreover, Principles 2 - 5 of the Rio Declaration, clarify that environmental protection for the benefit of present and successive generations, should form an essential part of development

⁶² See, Report of the World Commission on Environment and Development, General Assembly Resolution 42/187, 11 December 1987.

⁶³ See, Report of the World Commission on Environment and Development, General Assembly Resolution 42/187, 11 December 1987, (3, 6, 43-44.)

⁶⁴ See, Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992 (United Nations publication, Sales No. E.93.I.8 and corrigenda), vol. I: Resolutions adopted by the Conference, resolution 1, annex I.

⁶⁵ See, The Rio Declaration, Agenda 21, Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3-14 June 1992 (United Nations publication, Sales No. E.93.I.8 and corrigenda), vol. I: Resolutions adopted by the Conference, resolution 1, annex I. Also, Annex I and II; See also, the United Nations Framework Convention on Climate Change (UNFCCC) that led to the Kyoto Protocol, Agenda 21, the United Nations Convention on Biological Diversity (CBD) and the United Nations Convention to Combat Desertification (UNCCD).

plans and their implementation as crucial steps to tackle poverty. These form the core points integral to the meaning of sustainable development subsumed in the Brundtland definition and replicated in the Rio Declaration bordering on: poverty eradication, environmental protection, economic growth and equity.⁶⁶

Consequent to the endorsement of sustainable development as part of the international political debate in 1992, there was a progression from the consideration of sustainable development in terms of the binary relationship of economic development and environmental protection to include social development.⁶⁷ The UNCED articulated a paradigmatic shift from “environmental protection as a goal in its own right to be a means of achieving economic and social development”.⁶⁸ Agenda 21 enunciated the integration of environment and development concerns, also initiating the idea of according greater attention to social development for the fulfilment of basic needs.⁶⁹ A partnership was thus proposed which would respect the indivisibility of environmental protection and economic growth as a crucial component of the development process.⁷⁰ Sustainable development thereafter proceeded to encompass social development as indicated by the Johannesburg Plan of implementation, WSSD (2002) which provides, “efforts will also promote the integration of the three components of Sustainable Development – economic development, social development and environmental protection – as interdependent and mutually reinforcing pillars”.⁷¹

⁶⁶World Commission on Environment and Development, *Our Common Future* (Oxford: Oxford University Press, 1987).

⁶⁷Ibid

⁶⁸D. French, *International Law and Policy of Sustainable Development* (Manchester, Manchester University Press, 2005) 15

⁶⁹Paragraph 1.1, Agenda 21, UNCED 1992. See also, the 1997 Programme for further Implementation of Agenda 21 to “A new global partnership for Sustainable Development”.

⁷⁰Paragraph 2, Agenda 21. See also, D. French, *International Law and Policy of Sustainable Development*, (Manchester, Manchester University Press, 2005) 19

⁷¹UN Doc A/CONF.199/20. For critical discussion, see M Pallemaerts, ‘International Law and Sustainable Development: Any Progress in Johannesburg?’ (2003) 12 Review of European Community and International Environmental Law 1.

Undoubtedly, this expansion of sustainable development as a concept to include social development has been riddled with criticisms. Critics mostly condemned the inclusion of social development as an acute digression from the paramount matter of “environmental protection and sustainable development”.⁷² However, it is pertinent to acknowledge that the approach adopted by the WSSD, sought to rely less on political expressions, but instead focused on practical approaches to actualize sustainable development for the meaningful improvement of the environment and society, through poverty alleviation in developing states. This it does with the use of identifiable indicators and targets.⁷³ These indicators essentially strive to measure sustainable development in its entirety, by considering the multi-dimensional aspects which require integration for actualizing sustainable development.⁷⁴

Albeit, the concept of sustainable development has advanced to accommodate the current notions of sustainability which incorporate the idea of a “green economy”⁷⁵ in the context of sustainable development and poverty eradication.⁷⁶ Notions of a green economy indicate significant emphasis on the need to promote social and economic development within the carrying capacity of the environment and delink⁷⁷ economic growth and environmental degradation via improved efficiency and sustainability.⁷⁸ It is further emphasized that an accompanying or recurring facet of the sustainable development discourse has remained

⁷² A. Ross, ‘Is the Environment Getting Squeezed Out of Sustainable Development?’ [2003] Public Law 249. See also, P. Galizzi “From Stockholm to New York, via Rio and Johannesburg, Has the Environment Lost its Way On the Global Agenda?” (2006) 29 Fordham Intl Law Journal 952.

⁷³ K. Gray, “World Summit on Sustainable Development: Accomplishments and New Directions?”, 52 International and Comparative Law Quarterly (2003) 267. See also, United Nations, Indicators of Sustainable Development: Guidelines and Methodologies, Second Edition, UN Sales Publication No. E.01.II.A.6 (New York, September 2001) with specific indicators like; Poverty, Governance, Health, Consumption and production patterns, Economic development, biodiversity, etc. Specific discussion of sustainable development goals and indicators will be addressed in subsequent sections.

⁷⁴ See, Department of Economic and Social Affairs, United Nations Secretariat, (DESA) Publication “Indicators of Sustainable Development: Guidelines and Methodologies”. 3rd Edn. October 2007.

⁷⁵ In, Pearce, Markandya and Barbier’s, “Blueprint for a Green Economy” (1989). The term “green economy” was first adopted in their pioneering report in 1989 for the Government of the United Kingdom.

⁷⁶ A/CONF.216/PC/6 and A/CONF.216/PC/1, See also, Principle 4 (Rio+20).

⁷⁷ Entails dissociating the achievement of economic growth through wanton environmental exploitation.

⁷⁸ P.K. Rao, *International Environmental Law and Economics* (Oxford Blackwell Publishers Inc. 2002).

poverty eradication. This enduring theme as also re-echoed in the Rio+20 “The future We Want”⁷⁹ consistently appeals to developing states and is instrumental to the SD’s continued relevance as an evolutive or dynamic concept with requisite potential to target: global development, poverty and environmental challenges without neglecting social development on a multi-lateral scale.

The concept has even more recently evolved or advanced into the 17 Sustainable development goals and 169 targets articulated in “Transforming Our World: The 2030 Agenda for Sustainable Development”.⁸⁰ The foregoing milestones from Brundtland to contemporary times indicate an escalating profile of sustainable development at international law. The pertinent issue for subsequent consideration however, is whether or not this global status of sustainable development is entirely political or if it bears any legal significance.

1.2. Legal Nature of Sustainable Development

Following from preceding postulations regarding the progression and increasing relevance of sustainable development at international law, this sub-section expatiates on the crucial points bordering on the status of sustainable development at international law. Whether or not it is a binding principle of international law? In as much as sustainable development is a dynamic and multi-faceted concept, it is apposite to question if its relevance on the global scale remains political or if it embodies any kind of legal obligation, legal duties or normativity at international law. To answer these questions or ascertain the legal nature of sustainable development, it is thus relevant to assess its legal scope to determine whether the concept imposes legal obligations or that it constitutes a binding positive rule at international law.

⁷⁹ “Rio+20” United Nations A/RES/66/288-The Future We Want, Available at: <https://sustainabledevelopment.un.org/futurewewant.html>

⁸⁰ See, United Nations Docs. A/RES/70/1 - Transforming our world: the 2030 Agenda for Sustainable Development. Available at: <https://sustainabledevelopment.un.org/post2015/transformingourworld> Accessed at 03 March 2017 To be discussed in proceeding subsections.

Typically, a concept, agreement or proposition is legally binding if it is formulated to have legal scope or obligations. As opined by Barral, a proposition will have legal scope when it is formulated ‘with the intention to modify . . . elements of the existing legal order, or . . . that its implementation effectively achieves this result’.⁸¹ In this context, the Rio Declaration and Agenda 21 which set the backdrop for sustainable development may be considered to have legal scope as they propose rights and duties for states, with evident intention to modify the existent legal order and state conduct.⁸² Albeit, the mix of prescriptive and flexible language in both instruments has been considered an attenuating factor.⁸³ It is however clarified that occasionally, the legal scope of a proposition, agreement or concept can prove inadequate to bequeath it a legally binding status at international law.

Notwithstanding, a concept, agreement or proposition becomes a binding or valid, positive rule at international law if it falls within the sources of law articulated by Art. 38 (1) (a-d) of the Statute of the International Court of Justice (ICJ).⁸⁴ These include: conventions, custom, general principles of law and subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified writers, scholars or jurists as subsidiary means for the determination of rules of law. Of relevance therefore is whether the concept of sustainable development may be considered as coming within the confines of international law sources articulated by Art. 38 (1) of the Statute of the ICJ.

In view of the fore-going requirements of international law sources imposed by Art.38 (1) of the ICJ Statute, can sustainable development expressed in international legal instruments, therefore be deemed as binding in accordance with Art. 38 (1)(a) concerning “Conventions”?

⁸¹See, Barral, Virginie. "Sustainable Development In International Law: Nature And Operation Of An Evolutive Legal Norm." European Journal of International Law 23, no. 2 (2012): 377-400.

⁸² The Rio Declaration on Environment and Development, 1992, A/CONF.151/26 (vol. I). See principles 2–7, 10, 11, 13, 15, 17–19.

⁸³ See, Vaughan Lowe, "Sustainable development and unsustainable arguments." International Law and Sustainable Development: Past Achievements and Future Challenges 19 (1999): 36-37.

⁸⁴ See, Art. 38(1) of the ICJ Statute. 384 EJIL 23 (2012), 377–400

Certainly, sustainable development is reflected in numerous non-binding international legal instruments. Sustainable development is also mentioned in incalculable Declarations of countries or resolutions of international organisations. As a matter of fact, sustainable development is articulated in 112 multilateral treaties, with an estimated 30 of such treaties aimed at universal application.⁸⁵ However, sustainable development as mostly represented in these multifarious treaties is confined to the preamble, which creates non-binding connotations.⁸⁶ Even when sustainable development is retained in the operative parts of treaty texts and therefore *prima facie* binding on the contracting parties, its validity would operate in respect of specifically laid out measures to actualize the treaty objectives and obligations.⁸⁷ In as much as the plethora of international agreements proposing sustainable development principles appears indicative of an appreciable degree of consensus and acceptance of the concept at international law, it is still debatable whether it embodies the “hardness” or formalized status envisaged by Art. 38(1)(a) of the ICJ Statute relating to conventions.

Evidently, treaties or conventions are considered “hard law” or sources of international law,⁸⁸ nonetheless, sustainable development is arguably at a point where it veers of creating a legally binding obligation, regardless of the validity or strength of its formulation.⁸⁹ Moreover, Lowe argues that, sustainable development as echoed in the Rio Declaration, Agenda 21, or WSSD plans of implementation, etc. usually reflects vague, conditional or even imprecise terms or language, that this renders it inadequate as a binding treaty on state parties.⁹⁰ He proposes that such vague terminology is incapable of constraining state conduct in terms of Art.38(1)(a) and

⁸⁵ See, Barral, Virginie. "Sustainable Development In International Law: Nature And Operation Of An Evolutive Legal Norm." European Journal of International Law 23, no. 2 (2012): 377-400.

⁸⁶ See, Baxter, 'International Law "In Her Infinite Variety"', 29 ICLQ (1980) 549, at 554.

⁸⁷ See, Baxter, 'International Law "In Her Infinite Variety"', 29 ICLQ (1980) 549, at 554.

⁸⁸ Ian Brownlie, "Principles of Public International Law" (5th ed.). Oxford University Press. (1998) pp. 607–08. ISBN 0-19-876299-2.

⁸⁹ Virginie, Barral, "Sustainable Development In International Law: Nature And Operation Of An Evolutive Legal Norm." European Journal of International Law 23, no. 2 (2012): 377-400

⁹⁰ See, Vaughan Lowe, "Sustainable development and unsustainable arguments." International Law and Sustainable Development: Past Achievements and Future Challenges 19 (1999): 36-37.

also detracts from the capacity to operate as custom in the context of Art. 38(1)(b) of the ICJ Statute. Also, that treaty formulations and other provisions relating to sustainable development lack fundamentally norm-creating character and cannot, as such, form the basis of a general rule of international law as envisaged by Art. 38(1)(c). Ultimately purporting that the use of statements such as “states should develop sustainably” as opposed to ‘states must develop sustainably’ undermines the character of sustainable development as a binding norm of international law.⁹¹

Apparently, Lowe’s position is buttressed by the ICJ in the *North Sea Continental Shelf Cases*⁹² relating to customary norms or custom in terms of Art.38(1)(b), which purport that actions by States ‘not only must amount to a settled practice, but they must also be such, or be carried out in such a way, as to be evidence of a belief that this practice is rendered obligatory by the existence of the rule of law requiring it. The need for such a belief, ie the existence of a subjective element, is implicit in the very notion of the *opinio juris sive necessitatis*.⁹³ The States concerned must therefore feel that they are conforming to what amounts to a legal obligation’.⁹⁴ Thus, custom as a source of international law applies, where it fulfils the: subjective criteria, the objective criteria and where it is evident that such custom is of a general and accepted practice.⁹⁵

Undoubtedly, while there is no general obligation on states to develop sustainably, there is however, relative evidence of progressive state practice or *opinio juris* on states’ adoption of measures that reflect sustainable development. For example, Art. 3 of the UNFCCC which is

⁹¹ Ibid.

⁹²See, *North Sea Continental Shelf* (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands) (Judgment) [1969] ICJ Rep 3, 44 (‘North Sea Continental Shelf Cases’).

⁹³ As to evidence of state practice and belief necessary to establish a customary law principle, see Jan Klabbers, *International Law* (Cambridge University Press, 2013) 26-30; James Crawford, *Brownlie’s Principles of Public International Law* (Oxford University Press, 2012) 24.

⁹⁴ *North Sea Continental Shelf* (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands) (Judgment) [1969] ICJ Rep 3, 44 (‘North Sea Continental Shelf Cases’).

⁹⁵ David Harris, *Cases and Materials on International Law*, Seventh Edition, Sweet and Maxwell Publishers, 2010.

quite instructive for oil producing states, provides Principles to guide state conduct in combating climate change. It clearly articulates aspects of the Rio Declaration embracing: inter and intra-generational equity, precautionary measures, providing that, "Parties should take precautionary measures to anticipate, prevent, or minimise the causes of climate change and mitigate its adverse effects. That the Parties have a right to, and should, promote sustainable development".⁹⁶ Although the provisions are expressed in relative terms, with the use of "should" qualifying its application, they are not, as considered by some legally irrelevant.⁹⁷

In as much as, the flexibility of many formulations of sustainable development places it within the purview of "soft law"⁹⁸ it is nevertheless argued that such a placement does not necessarily detract from the relevance of sustainable development at international law, as an instigator of change in the positive reconciliation of development goals with environmental and social considerations.⁹⁹ Basically, it's non-binding form in many instruments does not limit it in the context of customary international law making as in the words of Boyle,

[...] "Treaties do not generate or codify customary law because of their binding form but because they either influence state practice and provide evidence of *opinio juris* for new or emerging rules, or because they are good evidence of what the existing law is.

In many cases this is no different from the potential effect of non-binding soft law instruments. Both treaties and soft law instruments can be vehicles for focusing

⁹⁶ See, Art. 3 of the UNFCCC 1992.

⁹⁷ See the debate between Sands and Mann in W. Lang (ed.) *Sustainable Development and International Law* (London, 1995), 53-74. 35. The so-called "Berlin mandate": Decision 1/CP.1, in Report of the Conference of the Parties on its 1st Session, UN Doc.FCCC/CP/1995/7/Add. Indeed, given how weak the rest of the treaty is, the principles found in Article 3 are arguably the most important "law" in the whole agreement because they prescribe how the regime should operate.

⁹⁸ See, Dupuy, "Soft Law and the International Law of the Environment" (1991) 12 Michigan J.I.L 42

⁹⁹ Constancy and generality being two essential conditions for precedents to contribute to the formation of state practice. 54 See The Case of the SS 'Lotus', 1927 PCIJ Series A, No. 10, at 21.

61 See H.L.A. Hart, *The Concept of Law* (2nd edn, 1994), at ch.V.

consensus on rules and principles, and for mobilising a consistent, general response on the part of states.]”¹⁰⁰

It is thus reasonable to concede that treaties could be more effective than soft law instruments where a stronger commitment to the objectives of an agreement is sought to impose obligations on the parties, or to drive harder forms of enforcement or compliance. However, to presume that treaties are necessarily more authoritative is erroneous.¹⁰¹ The Rio Declaration for instance, could harness speedier consensus and support from states mostly due to its soft nature. It is indeed arguable that a treaty with similar provisions on the other hand would have gained as much momentum or been as effective in securing such expedited global cooperation or participation.

Moreover, sustainable development in terms of Art. 38(1)(d) of the ICJ Statute, relating to scholarly contributions,¹⁰² judicial assertions and ICJ decisions indicates a progression beyond mere conceptualization into a substantive principle of international law. However, divergent views propose that, sustainable development can only properly claim a normative status as an element of the process of judicial reasoning.¹⁰³ Inferring that sustainable development retains “interstitial normativity”,¹⁰⁴ only capable of clarifying or balancing conflicting norms in specific cases.¹⁰⁵

In as much as, credence for sustainable development’s integration and reconciling function is reposed in cases like the *Gabcikovo-Nagymaros Project Case between (Hungary v. Slovakia)*

¹⁰⁰ See, A. E. Boyle, “Some Reflections on the Relationship of Treaties and Soft Law” (1999) 48 International and Comparative Law Quarterly 901.

¹⁰¹ See A. E. Boyle and D. Freestone (eds), International Law and Sustainable Development: Past Achievements and Future Prospects (Oxford, 1999), Ch.1; Sands (ed.), Greening International Law (London, 1993), Chs.1 and 3

¹⁰² See, P. Sands, Principles of International Environmental Law, 2nd edition (Cambridge: Cambridge University Press) .254

¹⁰³ See, Vaughan Lowe, "Sustainable development and unsustainable arguments." International Law and Sustainable Development: Past Achievements and Future Challenges 19 (1999): 36-37.

¹⁰⁴ Ibid.

¹⁰⁵ See, Vaughan Lowe, "Sustainable development and unsustainable arguments." International Law and Sustainable Development: Past Achievements and Future Challenges 19 (1999): 36-37.

¹⁰⁶, where a dispute arose in relation to a development project previously concluded by the imposition of treaty obligations between the state parties, of Hungary and the defunct Czechoslovakia. The court concluded that, “this need to reconcile economic development with protection of the environment is aptly expressed in the concept of sustainable development”¹⁰⁷. Moreover, Judge Weeramantry in his separate opinion, regarding sustainable development, asserted that it is more than a concept, but a rule and principle of international law with normative value, which is fundamental to the determination of competing considerations. Indeed, he further contends that, “it is an integral principle of modern international law”.¹⁰⁸

Likewise, in the *Pulp Mills Case*¹⁰⁹ where the ICJ adjudicated over the dispute between Argentina and Uruguay concerning the latter’s use of the River Uruguay for the construction of pulp mills. The Court stated that the integration principle was relevant in reconciling the economic development objectives of Uruguay without neglecting Argentina’s environmental concerns and tourism interests. That the integration principle is crucial in striking the balance between economic development and environmental protection which forms the defining core of sustainable development.¹¹⁰

Notwithstanding, in “*The Iron Rhine*” case¹¹¹ the arbitral tribunal’s efforts to clarify the contemporary position of sustainable development went further and beyond the Gabčíkovo and Pulp Mills cases to maintain that sustainable development is a “rule and general duty”¹¹² at

¹⁰⁶ See *Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)*, Judgment ICJ Reports (1997) 7, at para. 140.

¹⁰⁷ Ibid

^{108 108} See *Gabčíkovo-Nagymaros Project (Hungary v. Slovakia)*, Judgment ICJ Reports (1997) 7, Available at; <http://www.icj-cij.org/files/case-related/92/092-19970925-JUD-01-03-EN.pdf>

¹⁰⁹ Pulp Mills on the River Uruguay (*Argentina v. Uruguay*), I.C.J. Reports 2006, p. 133, para. 80) and, Case Concerning Pulp Mills On The River Uruguay (*Argentina v. Uruguay*), 2010 I.C.J. 60 (April 20). See also, McCaffrey, Stephen. “Chapter 2: The UN Convention on the Law of Non-Navigational Uses of International Watercourses”. United Nations Economic Commission for Europe. p. 17. And, Alan, Boyle. “Pulp Mills Case: A Commentary” University of Edinburgh. (2010)

¹¹⁰ Lending support to Argentina’s further assertion that the substantive obligations under the 1975 Statute included Uruguay’s obligation not to cause environmental pollution or consequential economic losses....

¹¹¹ Award in the Arbitration regarding the Iron Rhine (‘Ijzeren Rijn’) Railway between the Kingdom of Belgium and the Kingdom of the Netherlands, 27 RIAA (2005) 35, at para. 59.

¹¹² Ibid.

international law. Although the tribunal emphasized on Principle 4 of the Rio Declaration and stressed its significance as a component of sustainable development, it however considered sustainable development as more than a concept and rightly denoted it as ‘a principle of general international law’.¹¹³ These foregoing cases are thus illustrative of the normative status of sustainable development at international law. They substantiate its relevance as a principle of international law with remarkable potential to guide state conduct in development planning and policy towards ensuring a green economy and poverty eradication.

Accordingly, it is thus posited that contrary to Lowe’s proposition, sustainable development constitutes far more than a judicial accessory, with a strictly jurisprudential or hermeneutical relevance.¹¹⁴ Sustainable development is certainly proving relevant on a multi-lateral scale with considerable capacity to influence policy and regulate state conduct. More so, it’s Principles are directed at States and not to judges, even though multi-level collaboration and participation with specialized state and non-state actors or organisations is sought for its realization. Even though sustainable development’s unique capacity in reconciling economic growth with environmental protection or indeed, international economic law with international environmental law remains a defining attribute as evident in case law, that however remains one of its other uncontested elements or attributes at international law.

Undoubtedly, sustainable development, despite its limitations in terms of Art. 38(1) (a-d) of the ICJ Statute and its lack of a peremptory status at international law still remains an all-encompassing principle with substantive and procedural elements. These are articulated by Principles 3-8, including Principles, 10, 16 and 17 of the Rio Declaration.¹¹⁵ These principles which are further analysed in other sections, range from sustainable use of resources,

¹¹³Award in the Arbitration regarding the Iron Rhine (‘IJzeren Rijn’) Railway between the Kingdom of Belgium and the Kingdom of the Netherlands, 27 RIAA (2005) 35, at para. 59.

¹¹⁴Hermeneutics refers to the theory and methodology of interpretation in relation to law.

¹¹⁵ See, Principles 3-8 of the Rio Declaration, relating to: Sustainable Use of Resources, Integration, Inter and Intra-Generational Equity, Precautionary Principle and Right to Development.

environmental protection, economic growth, including equity, EIAs, access rights and participation. Although these elements require integration, contextualization and operationalization via realistic standards, they ultimately serve to optimize efforts of the sustainability agenda in guiding state conduct for development devoid of environmental impairment.¹¹⁶

1.2.1. Conceptualizing Sustainable Development: The Role of Principles, Goals, Tools and Indicators

In consonance with prior deliberations regarding the role and significance of sustainable development at international law, this subsection considers the conceptual approaches to operationalizing sustainable development at international law and on a national scale. The subsection thus appraises the relevance, if any, of the various denotations relating to “Principles”, “Goals”, “tools” or “indicators”, in the sustainable development discourse.

Undoubtedly, the concept of Sustainable development combines a complex, yet fluid or multi-faceted character which makes it rather difficult to measure or assess in terms of securing its practical implementation. Despite its global appeal and political relevance on a multi-lateral scale, stake-holders comprising state and non-state actors grapple with its implementation challenges. Operationalizing sustainable development or translating the concept into realistic actions thus becomes problematic. Weaving the vital strands of the global agenda, “Transforming Our World: Agenda 2030” via relatable terms into decision making frameworks would therefore prove crucial to its objectives being met. This has necessitated the use of SD Principles and Goal identifiers or measurement criteria, such as, indicators or tools to

¹¹⁶ S.1.4 of this Chapter discusses the Integration principle, S.1.5.1. deliberates on EIAs, S.1.5.3.1. tackles Public Participation, S.1.6 addresses Sustainable Use and S.1.7 of the Chapter, elaborates on Equity.

realistically and objectively drive the sustainable development agenda, especially if it is to be relevant as a decision-making tool.

Whereas a tool has been described as a: device, instrument, contrivance, including an ability that aids the performance of a task or goal,¹¹⁷ an indicator on the other hand, has been defined as something related to a reference, as the term stems from the Latin “indicare” which means pointing towards something.¹¹⁸ Thus, sustainability tools and indicators are largely relevant in the context of the sustainable development discourse as they ultimately influence changes in perceptions of the relevant stakeholders or decision makers on what constitutes sustainable development. In this vein, Pintér concludes that, “Changing the way society measures progress represents a key leverage point in tackling the root causes of unsustainable development”.¹¹⁹ These tools and indicators therefore serve as entities that clarify the SD concept in a practical way.

In this vein, pertinent, applicable reference terms relating to the sustainable development discourse comprise of: “Principles” as in the 27 Principles of the Rio Declaration or 7 Principles of the New Delhi Guiding Principles of sustainable development,¹²⁰ “goals”, as in the 17 sustainable development goals (SDGs), a target, for instance the 169 targets articulated by “Agenda 2030”, “indicators” such as the 230 indicators of the Global Indicator Framework for Sustainable development,¹²¹ a norm, includes as in this case sustainable development principles

¹¹⁷ See, Oxford English Dictionary, Oxford University Press, Oxford, 2018

¹¹⁸ S. Bell, S. Morse, *Sustainability Indicators: Measuring the Immeasurable*; Earthscan: London, UK, 2005.

¹¹⁹ Pintér, L.; Hardi, P.; Martinuzzi, A.; Hall, J. Bellagio STAMP: Principles for sustainability assessment and measurement. *Ecol. Indic.* 2012, 17, 20–28.

¹²⁰ ILA New Delhi Declaration of Principles of International Law Relating to Sustainable Development, Netherlands International Law Review, XLIX: 299-305, 2002

¹²¹ See, Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2016/2/Rev.1), Annex IV.

which have normative implications at international law¹²² (integration principle,¹²³ preventive principle,¹²⁴ polluter pays principle,¹²⁵ EIAs,¹²⁶) etc.

Furthermore, sustainability tools elucidated in this research via the elements and principles of sustainable development, towards actualizing the SDGs, readily accommodate methodological applications which may be “top-down” or “bottom-up”. Top-down approaches are usually expert driven and adopt quantitative criteria. For instance, while environmental assessments like the EIAs and SEAs remain environmental protection tools, they also accommodate specific expert-driven, technical approaches such as the [Best Applicable Technique (BAT) or Best Environmental Practice (BEP) or Best Practicable Environmental Option (BEPO)]¹²⁷ as applicable standards to preserve benchmarks in the oil industry towards optimizing environmental goals. However, “bottom up” approaches are more qualitative inclined and could for instance include, social development tools like the co-opting of local stakeholders through public participation or local consultations to generate consensus approval of oil and gas development projects.

Notwithstanding, for sustainable development of the oil and gas industry, an integration of both top-down and bottom-up approaches is needful to propel the sustainable development goals. It is however clarified that, an overly simplistic use of sustainability tools or indicators, may render them susceptible to both interpretive and measurement challenges. This is because the integration of the varied or divergent elements in the concept of sustainable development makes

¹²² See, The Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion) [1996] ICJ Rep 226,9 Sands, P. (2003) *Principles of International Environmental Law*, (2nd edn, Cambridge, pp. 4). See the dissenting opinion of Judge Weeramantry in the ICJ ruling in Gabčíkovo-Nagymaros case (supra) at 90 And see, D. French, *International Law and the Policy of Sustainable Development*, (Manchester, Manchester University Press, 2005) 47 at 51

¹²³ Principle 4, Rio Declaration. Arbitration Regarding “The Iron Rhine (“jzeren Rin”)” Railway between the Kingdom of Belgium and the Kingdom of The Netherlands, Award of the Arbitral Tribunal, The Hague, 24 May 2005. Accessible at www.pca-cpa.org/

¹²⁴ See, Principle 2 Rio Declaration, Principle 21 Stockholm Declaration.

¹²⁵ See, Principle 16 Rio Declaration, 1992.

¹²⁶ See, Principle 17 Rio Declaration, 1992.

¹²⁷ These are further addressed under Environmental Protections Regulations in S.1.5.3.

it fluid and responsive to multiple purposes and contexts, and likewise subject to the diverse perceptions of the users or interpreters.¹²⁸

Nevertheless, the articulation of the concept of sustainable development via principles at international law has effectively served to embody a compact or more definitive framework of sustainable development. For instance, the 27 Principles of the Rio Declaration and indeed the 7 Guiding Principles of the New Delhi Declaration on Sustainable development elucidate on the substantive and procedural aspects of sustainable development.

Moreover, Principles 3-8 of the Rio Declaration illuminate the substantive elements of sustainable development which define the overall scope of the concept, whilst highlighting its integral components, viz: Sustainable use of natural resources,¹²⁹ the integration of environmental protection and economic development, Inter and intra-generational equity¹³⁰, Common But Differentiated Responsibility (CBDR), the precautionary principle,¹³¹ and the right to development.¹³² These substantive elements of sustainable development find expression in various conventions and environmental treaties such as the UNFCCC,¹³³ the Kyoto Protocol, the Desertification Convention, OSPAR Convention¹³⁴, Biodiversity

¹²⁸ P. Sands, *Principles of International Environmental Law*, 2nd edition (Cambridge: Cambridge University Press) p. 260

¹²⁹ P. R. Emas, 'The Concept of Sustainable Development: Definition and Defining Principles', https://sustainabledevelopment.un.org/content/documents/5839GSDR%202015_SD_concept_definiton_rev.pdf accessed on 22/03/2017

¹³⁰ See, Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (Cambridge University Press, 2012), 207. The Secretary-General asserts that 'fairness between generations is embedded in the concept of sustainable development'. Report of the Secretary-General, UN Doc A/68/322, [9]. UNESCO, Declaration on the Responsibilities of the Present Generations Towards Future Generations, 29th Session (12 November 1997) ('UNESCO Declaration'). *Pacific Fur Seals Arbitrations (USA v. Great Britain)* [1893], Moore's International Arbitration Awards.

¹³¹ See, Principle 15 Rio Declaration.

¹³² See, Principles 3-8, Rio Declaration 1992. To be addressed in greater detail in subsequent sections. See also, P. Birnie, A. Boyle & C. Redgwell, *International Law & the Environment*, 3rd Edition, (Oxford, New York: Oxford University Press, 2008)

¹³³ See, The United Nations Framework Convention on Climate Change (UNFCCC) 1992

¹³⁴ See, The Convention for the Protection of the Marine Environment of the North-East Atlantic (the 'OSPAR Convention') 1992.

Convention¹³⁵ etc. and mostly convey distinct, albeit relative standards to engender the aims of sustainable development.

Furthermore, the procedural elements of sustainable development are clarified in Principles 10, 13, 16 and 17 of the Rio Declaration. Principle 10 relating to access to environmental information, justice and public participation, has served to concretize core aspects of implementing sustainable development principles, to make access and participatory rights enforceable at law. These rights have also gained considerable momentum as human rights and are represented in case law.¹³⁶ Principle 10 of the Rio Declaration is also reflected in numerous regional agreements and national laws. One such notable regional instrument is the Arhus Convention.¹³⁷ Principles 13 and 16 incorporate the polluter pays principle, while principle 17 clarifies the relevance of environmental impacts assessments. These specific principles are important as procedural elements that serve as the tools of operationalizing or facilitating the implementation of the integrated themes of sustainable development at the national or regional levels.

1.2.2. Conceptualization of Sustainable Development: Applying Goals, Targets and Indicators.

As earlier argued, the need to manage and operationalize the concept of sustainable development to expedite its implementation at international law and national levels remains crucial for achieving the SDGs. The UN's designation of sustainable development into goals, targets and indicators has served to broaden the ambit of the concept whilst retaining its integral elements denoted in the three-pillar paradigm. These are evident in the Millennium

¹³⁵ The Convention on Biological Diversity. (CBD) 1992.

¹³⁶ See, *Öneryildiz v. Turkey* [GC], no. 48939/99, 62, ECHR 2004-XII. Also, 8 Claude Reyes v. Chile Case, 2006 Inter-Am. Ct. H.R. (ser. C) No. 151 (Sept. 19, 2006),

¹³⁷ See, Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, (Arhus Convention) June 25, 1998, 2161 U.N.T.S. 447

Development Goals (MDGs)¹³⁸ and subsequent adoption of the Sustainable Development Goals (SDGs).¹³⁹ The MDGs comprised a framework of 8 goals, 18 targets and 48 indicators to measure progress towards the Millennium Development goals. These Goals include: 1. Eradicate extreme poverty and hunger, 2. Achieve universal primary education, 3. Promote gender equality and empower women, 4. Reduce child mortality, 5. Improve maternal health, 6. Combat HIV/AIDS, malaria, and other diseases, 7. Ensure environmental sustainability and 8. Develop a global partnership for development.

Notwithstanding that each goal of the MDGs had stated targets and stipulated dates for their achievements, the MDGs were however criticized for an alleged lack of analysis or failure to validate the criteria for selected objectives.¹⁴⁰ More so, the heavy reliance on states for their achievement, the difficulty or lack of measurements for some goals and uneven progress amongst other goals were considered detracting factors.¹⁴¹ For instance, Goal 7 relating to ensuring environmental sustainability, comprised of 4 targets and 8 indicators. These targets ranged from integrating the principles of sustainable development into country policies and programs, its indicators denoted as 7A (1-3) include: reverse loss of environmental resources, reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss proportion of land area covered by forest, tackling CO2 emissions, Consumption of ozone-depleting substances etc.

¹³⁸See, United Nations Millennium Development Goals, (2000) Available at: <http://www.un.org/millenniumgoals/> accessed at, 18 January 2018.

¹³⁹ See, Goals 1-17 Transforming Our World: The 2030 Agenda For Sustainable Development sustainabledevelopment.un.org A/RES/70/1. See also, Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2) Available at:

<https://sustainabledevelopment.un.org/post2015/transformingourworld/publication> Accessed at 15 March 2018.

¹⁴⁰ J. Vandemoortele, "The Mdg Conundrum: Meeting the Targets Without Missing The Point." Development Policy Review27, No. 4 (2009): 355-371.

¹⁴¹ A. Attaran, "An immeasurable crisis? A criticism of the Millennium Development Goals and why they cannot be measured." PLoS medicine 2, no. 10 (2005): 318.

In as much as the MDG's environmental sustainability targets and indicators were useful in defining or assessing how readily or effectively states were progressing towards achieving the environmental goals of the MDGs, they were however criticized as porous, inadequate markers, difficult to measure and lacking country specific contexts.¹⁴² Moreover, goal 7 of the MDGs crucially fails to mention agriculture which has inter-linkages with environmental sustainability, social development and also has implications for a majority of the world's poor who are farmers. The MDGs thus failed in this instance at reconciling key aspects of the sustainable development agenda, relating to the environment and social pillars. These amongst other factors, like failure to generate consensus, inadequate consultations with relevant stakeholders especially the poor,¹⁴³ ultimately resulted in the MDGs replacement in 2016 by the sustainable development goals (SDGs). The SDGs, certainly embodied a more expansive and quantitative framework of goals, targets and indicators, albeit with some goals considered by some as tenuous and capable of triggering tensions or complications that undermine environmental sustainability.¹⁴⁴

Consequently, the SDGs which are designed to build on the MDGs and “complete what they did not achieve”¹⁴⁵ were adopted by 193 states of the UN in 2015 as a means of articulating a global consensus spanning 15 years, to advance the aims of sustainable development. The UN essentially targets pervasive, global, environmental, economic and social challenges by these SDGs to dissociate growth and development aspirations of states and private actors from deleterious environmental and social impacts. These 17 goals and accompanying 169 targets and 230 indicators serve to incorporate the substantive and procedural elements of sustainable

¹⁴² A. Attaran, "An immeasurable crisis? A criticism of the Millennium Development Goals and why they cannot be measured." *PLoS medicine* 2, no. 10 (2005): 318.

¹⁴³ J. Vandemoortele, "The MDG Conundrum: Meeting the Targets Without Missing The Point." *Development Policy Review* 27, No. 4 (2009): 355-371.

¹⁴⁴ See, Louis J. Kotze, "The Sustainable Development Goals: An Existential Critique Alongside Three New-Millennial Analytical Paradigms" in *Sustainable Development Goals: Law, Theory and Implementation*, edited by Duncan French, and Louis J. Kotzé, Edward Elgar, (2018).

¹⁴⁵ See, "Transforming Our World: The 2030 Agenda for Sustainable Development". At, p.9

development articulated in the Rio declaration and Agenda 21, albeit with modifications, by expanding the concept to accommodate the dynamics of change in environmental protection or economic and social considerations over time. Arguably, the SDGs more or less strive to articulate greater detail without obfuscating the purpose of sustainable development ingrained in Agenda 21, the Rio declaration and accompanying principles.

A summation of the Sustainable Development Goals include: 1. Ending poverty in all its forms everywhere, 2. Ending hunger, achieving food security, improved nutrition and sustainable agriculture, 3. Ensuring healthy lives and well-being, 4. Inclusive, equitable, quality education and lifelong learning opportunities, 5. Gender equality and women empowerment, 6. Sustainable management of water and sanitation, 7. Affordable, reliable, sustainable and modern energy, 8. Sustained, inclusive and sustainable economic growth, Productive employment and decent work, 9. Building resilient infrastructure, sustainable industrialization and fostering innovation, 10. Reducing inequality within and among countries, 11. Sustainable cities and human settlements, 12. Sustainable consumption and production patterns, 13. Combating climate change and its impacts, 14. Sustainable use of the oceans, seas and marine resources for sustainable development, 15. Sustainable use of terrestrial ecosystems, forests management, halt biodiversity loss, 16. Promote peaceful and inclusive societies for sustainable development, access to justice, effective, accountable and inclusive institutions at all levels, 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development.¹⁴⁶ Thus, UN member states are prompted to collaborate in applying the 2030 Agenda, to development plans to achieve holistic sustainable development.

See also, SDG Indicators Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2).

As evident from the preceding stated goals and targets, the 17 SDGs thus mirror the core principles of sustainable development encompassing: The Integration principle, preventive/precautionary principle, sustainable use and consumption of resources, the polluter pays principle as well as equity.¹⁴⁷ These SDGs are closely interconnected with the intent that they potentially impact on each other. Thus, positive contributions and progress in a sphere or set of goals improves on other goals. Hence, efforts to achieve goals 1-6, comprising: poverty eradication, sustainable agriculture, food security, sanitation, sustainable cities, including sustainable industrialization and energy are those that ultimately trigger sustainable economic growth.¹⁴⁸ Moreover, whilst the MDGs thrived on average percentiles, for instance most of its goals included the catch phrase ...”to reduce by half or by two-thirds” as evident across targets 1A-1C on the poverty eradication goal, including health and environmental goals. The SDGs clearly targets all people, with the maxim, “leave no one behind”.¹⁴⁹

Nevertheless, these preceding glowing attributes of the SDGs raise presumptions or obvious questions. Are the SDGs so all-encompassing, or so formidable and full-proof that they are effectively capable of obliterating contemporary global problems affecting the environment, people and business, especially oil and gas business or its peculiar challenges? In as much as these questions may yield positive or negative answers as indeed sustainable development is an all-embracing concept represented in the SDGs, with probable keys or submissions towards tackling virtually all spheres of global endeavor. However, as innovative as this vehicle of engendering global sustainable development is, it is regrettably, not flawless. The SDGs have

¹⁴⁷ See, P.W. Birnie, A.E. Boyle and C. Redgwell, *International law and the environment* (3rd ed. edn, Oxford: Oxford University Press 2009). Ulrich. Beyerlin and T. Marauhn, *International environmental law*, Oxford: Hart. (2011).

¹⁴⁸ Sustainable Economic Growth is covered by Goal 8 of the SDGs.

¹⁴⁹The Sustainable Development Goals Report 2016, Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2). Available at: <https://unstats.un.org/sdgs/report/2016/leaving-no-one-behind> Accessed 10 May 2018.

indeed been criticized as merely aspirational goals like its predecessors,¹⁵⁰ articulating excessively broad expanse of goals,¹⁵¹ a voluntary agreement rather than a binding treaty and ultimately, states might fail to perform or achieve all of the goals expectations.¹⁵²

In all probability, this flexibility of the SDGs could prove to be an attenuating factor as much of the responsibility for securing the SDGs is reliant on political actors, institutions or civil society. Nonetheless, the SDG framework creates opportunities for states in adopting more ambitious plans or targets due to their non-binding nature. However, a truly challenging area, remains that same “integrative” component inalienable to the concept of sustainable development, upholding the unification of divergent goals. This integration often poses practical application or implementation challenges. For instance, positive efforts to achieve goals 1, 2 and 8, relating to poverty eradication, food security, improved nutrition, sustainable agriculture and sustainable economic growth, may impose challenging demands on Goals 6 and 15, relating to the sustainable use of water, including management of terrestrial spaces.

Moreover, other potentially contradictory or criticized areas include: Goal 12 which advocates sustainable consumption, though laudable, is yet discordant with Goal 8, which targets increased inclusive and sustained economic growth, GDP growth and increased economic productivity everywhere else.¹⁵³ Arguably, this demand for increased or sustained economic growth everywhere, comprising developing and least developed states without a corresponding articulation of how developed countries may rein-in development ambitions or over-consumption appears counter-productive in optimizing climate action targets articulated in

¹⁵⁰ J.H. Spangenberg, ‘Hot Air or Comprehensive Progress? A Critical Assessment of the SDGs’ (2016) *Sustainable Development* 25(4), 311–321.

¹⁵¹ Sam Adelman, “The Sustainable Development Goals, Anthropocentrism and Neoliberalism” in *Sustainable Development Goals: Law, Theory and Implementation*, edited by Duncan French, and Louis J. Kotzé, Edward Elgar Publishing, Incorporated, 2018. ProQuest Ebook Central, <http://ebookcentral.proquest.com>

¹⁵² Ibid.

¹⁵³ See, Louis J. Kotze, “The Sustainable Development Goals: An Existential Critique Alongside Three New-Millennial Analytical Paradigms” in *Sustainable Development Goals: Law, Theory and Implementation*, edited by Duncan French, and Louis J. Kotzé, Edward Elgar, (2018).

Goal 13. Apparently, such an omission to differentiate apposite growth objectives between developing and developed states smacks of incoherence or discordance with scientific realities and could be detrimental to the actualization of the SDGs climate action and environmental protection goals.¹⁵⁴

The challenges of integrating the SDGs notwithstanding, the 17 goals and 169 targets remain so closely interlinked that it is inconceivable in practical terms to accomplish them on a stand-alone basis. Presumably, the SDGs seek to circumvent its implementation challenges via anchoring heavily on a broad-based participation, in co-opting local and international partnerships for sustainable development articulated by goals 16-17.¹⁵⁵ Nonetheless, this possible reliance on international partnerships articulated by Goal 17 is equally controversial. Goal 17 which targets broad-based partnerships, international cooperation and collaboration, more trade liberalisation, also alludes to the need to ‘enhance global macroeconomic stability’ through ‘policy coordination’.¹⁵⁶ It is however decried for lacking specific targets towards providing such macro-economic stability, policy coordination, including the means towards achieving these aims.¹⁵⁷

Moreover, the SDGs have incurred scathing criticisms on neglecting the issue of tax avoidance, tax evasion or debt service, which as posited by the United Nations Conference on Trade and Development (UNCTAD), drain developing, resource dependent countries of massive sums of national incomes that could better optimize poverty eradication.¹⁵⁸ Another diminishing factor

¹⁵⁴ R. Fletcher and C. Rammelt, ‘Decoupling: A Key Fantasy of the Post-2015 Sustainable Development Agenda’ (2016) Globalizations.

¹⁵⁵ To be discussed in subsequent sections.

¹⁵⁶ See, Goal 17.13 of the SDGs.

¹⁵⁷ See, Louis J. Kotze, “The Sustainable Development Goals: An Existential Critique Alongside Three New-Millennial Analytical Paradigms” in *Sustainable Development Goals: Law, Theory and Implementation*, edited by Duncan French, and Louis J. Kotzé, Edward Elgar Publishing, Incorporated, 2018. ProQuest Ebook Central, <http://ebookcentral.proquest.com/lib/lancaster/>

¹⁵⁸ Developing countries lose about \$100 billion annually due to tax avoidance by transnational corporations: Tax Justice Network, ‘UNCTAD: multinational tax avoidance costs developing countries \$100 billion+’, 26 March 2015 <http://www.taxjustice.net/2015/03/26/unctad-multinational-tax-avoidance-costsdeveloping-countries-100-billion/> accessed 5

of the SDGs is that, whereas they articulate ‘debt financing, debt relief and debt restructuring, as may be appropriate’ the SDGs are curiously silent on debt cancellation, which remains a negating feature as it weighs heavily on developing states incomes and is thus inimical to their sustainable development.¹⁵⁹

However, it may also be argued that, Goal 17 and its targets as expressed in 17.4 to “assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress” presents a platform for a downwards review, re-negotiation and possible cancellation of external debts to reduce debt distress of poor countries. Such a debt relief or restructuring feature, could also operate as a safety catch to discourage waste or arbitrary use of development funds, as indeed mismanagement of development funds, presents real challenges in developing countries with weak institutions that foment corruption.

Arguably, the most criticized feature of the SDGs includes the absence of a hierarchy or goals prioritization. Kotze argues that the SDGs, “...Being fragmented, silo-ist and non-hierarchical merely reinforces the potential of the SDGs to be used by states as a legitimating and justificatory foundation to prioritise socio-economic growth over environmental protection”.¹⁶⁰

Undoubtedly, the SDGs could have been more proactive or incisive if it had clarified some hierarchical formulation for accomplishing the goals. This could better optimize its efficiency as a targeted governance tool for actualizing eco-systems sustainability. More so, as particularly prioritizing environmental goals over other goals ultimately engenders the over-

July 2018. See also C. Fuest and N. Riedel, ‘Tax Evasion and Tax Avoidance in Developing Countries: The Role of International Profit Shifting’ (Oxford University Centre for Business Taxation, 2010).

¹⁵⁹The World Bank estimates that developing countries have paid more than \$4.2tn in interest payments since 1980.

<http://data.worldbank.org/indicator/> accessed 5 July 2018.

¹⁶⁰ See, Louis J. Kotze, “The Sustainable Development Goals: An Existential Critique Alongside Three New-Millennial Analytical Paradigms” in *Sustainable Development Goals: Law, Theory and Implementation*, edited by Duncan French, and Louis J.- Kotzé, Edward Elgar, (2018).

arching aims of sustainable development. This is because, development invariably remains sustainable when actuated within the confines of the earth's ecological capacity.

Nevertheless, it is herein argued that, although the SDGs may not be considered as the “new global Grundnorm for achieving global governance”,¹⁶¹ towards catalysing the earth's system integrity or ecological sustainability, the SDGs, at least from the developing country perspective, presents a viable launch-pad, albeit rudimentary, towards accessing pathways to sustainable development. Indeed, as argued in this research, the SDGs present a relatable compass to navigate towards oil industry sustainability that need not result in the impairment of both environmental and social pillars of the sustainable development paradigm during oil and gas exploitation.

¹⁶¹ Ibid.

PART B

1.3. International Cooperation and Partnerships: Enhancing Governance for Sustainable Development?

To advance ongoing discussions on the relevance of tools and indicators for operationalizing sustainable development, this section expatiates on international cooperation which is used broadly, in a general sense and interchangeably with international collaboration or partnerships for sustainable development as articulated by the SDGs. This section examines the extent, if any, to which international cooperation and partnerships can contribute to oil industry governance to engender sustainable development.

International cooperation or collaboration towards development has been recognised as “a sine qua non of any meaningful international development strategy”.¹⁶² In other words, international cooperation connotes a vital or tactical approach towards achieving development goals. International cooperation can also infer a feasible means by which development assistance, financial, technical or human resources, may be transferred to the global South, and thus forms an essential part of development.¹⁶³ International collaboration likewise accommodates: voluntary or mandatory, including, bilateral, multi-lateral, trade or aid oriented approaches. In fact, international collaboration can co-opt varied participation strategies, ranging from inter/intra state, or private and public actors, as a means of coordination or implementation to drive accountability and sustainability in development agendas.

Certainly, international partnerships for sustainable development as articulated in goal 17 of the SDGs which posits, ‘Strengthen the means of implementation and revitalise the global

¹⁶² See, Nathan Cooper and Duncan French, “SDG 17: Partnerships for The Goals – Cooperation Within The Context Of A Voluntarist Framework”, in *Sustainable Development Goals: Law, Theory and Implementation*, edited by Duncan French, and Louis J. Kotzé, Edward Elgar, (2018).

¹⁶³ Ibid.

partnership for sustainable development,¹⁶⁴ is not an entirely novel feature of international instrumentation towards development. Earlier documents such as goal 8 of the MDGs also provides for instituting a global partnership for sustainable development.¹⁶⁵ Similarly, the UN Charter in its Art. 55 provides, ‘[a]ll Members pledge themselves to take joint and separate action in co-operation with the Organization for the achievement of the purposes set forth in Article 55’.¹⁶⁶ These include, ‘higher standards of living, full employment, and conditions of economic and social progress and development’ and ‘solutions of international economic, social, health, and related problems; and international cultural and educational cooperation’.¹⁶⁷

The foregoing indeed constitutes aspects of sustainable development requiring cooperation as articulated by the SDGs, and before them the Rio Declaration via Principle 5. Apparently, Principle 5 of the Rio Declaration is suggestive of a duty to Cooperate towards achieving sustainable development, as it provides that, “All States and all people shall co-operate in the essential task of eradicating poverty as an indispensable requirement for sustainable development....¹⁶⁸

Notwithstanding these provisions which appear very inclined towards vigorous mobilization of states towards international cooperation, even inferring a putative duty on states to endeavour international cooperation for sustainable development, the issue of any such incumbent duty to cooperate at international law to achieve developmental goals remains controversial. Whereas, developing states often attribute normativity towards international cooperation and deem it an essential element of sustainable development, this perceived

¹⁶⁴ See, Goal 17 of the SDGs, UN Res. 70/1. Transforming our world: the 2030 Agenda for Sustainable Development.

¹⁶⁵ See, Goal 8 Millennium Development Goals.

¹⁶⁶ See, Charter of the United Nations, (1945) Chapter IX, International Economic and Social Co-operation, *Article 55 (a)-(c)* Available at: <http://legal.un.org/repository/art55.shtml>

¹⁶⁷ Ibid.

¹⁶⁸ See, Principle 5 of the Rio Declaration.

normativity is all too often refuted by the developed states which consider cooperation as mostly flexible, or voluntarist.¹⁶⁹

Arguably, a firmer or obligatory stance, denoted by French as a “rights-based approach or legally binding solidarity”¹⁷⁰ towards international cooperation and international partnerships for fulfilling the SDGs could be more efficacious in the SDGs attainment. Such legally binding solidarity no doubt, could do more to expedite the achievement of the designated targets of Goal 17. Nevertheless, this research posits that, despite the limitations of goal 17 and the inherent or corresponding difficulty created by the absence of an obligation to cooperate, the indorsing of international cooperation as a substantive goal of the SDGs reiterates its significance. Better still, Goal 17 presents the possibility of arrangements or affiliations capable of accommodating top-down and bottom-up approaches for driving sustainable governance in developing petro-states.

Furthermore, Goal 17, does indeed draw parallels from Principle 5 of the Rio Declaration and presents, relevant and applicable mustering points towards international collaboration for sustainable development, which prove instructive and implementable in an oil industry context. Moreover, Goal 17 targets the focal points relating to the instituting of international partnerships to strengthen: Finance, technology, capacity building and trade. Goal 17 further acknowledges the realistic challenges posed by systemic issues which circumscribe: policy and institutional coherence, multi-stakeholder partnerships for mobilizing and sharing knowledge, expertise, technology and financial resources to support the attainment of the SDGs.

¹⁶⁹ See, Nathan Cooper and Duncan French, “SDG 17: Partnerships for The Goals – Cooperation Within The Context Of A Voluntarist Framework”, in *Sustainable Development Goals: Law, Theory and Implementation*, edited by Duncan French, and Louis J. Kotzé, Edward Elgar, (2018).

¹⁷⁰ Ibid.

Undoubtedly, the broad-ranging targets of Goal 17 remain vital towards harnessing oil-industry efficiency and constitute game-changers in actualizing sustainable development in petro-states. It is for precisely these reasons that this research argues for the maximizing of such international cooperation, partnerships and engagement to engender effective governance for driving the sustainable development agenda in oil producing states.

1.3.1. Sustainable Governance and Oil Exploitation: Identifying Tools and Partnerships for Sustainable Development

Progressing from the foregoing, this sub-section considers vital aspects of sustainable development relating to the strengthening of governance institutions within national governments to achieve the SDGs. The sub-section therefore hinges on identifying relevant tools and indicators in line with Goals 16-17 for sustainable governance, especially in petroleum producing states. This is because the issues of governance and international partnerships are stressed as requiring re-enforcements to achieve the SDGs. Rosenau defines governance at all levels as ‘encompassing the activities of governments, but it also includes the many other channels through which “commands” flow in the form of goals framed, directives issued, and policies pursued’.¹⁷¹

It is further posited that governance in the context of sustainable development connotes a means towards deciphering the ways by which countries manage political and social systems including the exercise of power and authority that ultimately affect the achievement of environmental goals, social development, and economic growth in a polity. This eventually translates into the ways and means of distribution of national wealth or services to eliminate inequities whilst achieving poverty eradication. Indeed, power dynamics thrive in petro-states whilst imposing lucrative platforms for the powerful political elite, IOCs and other formidable

¹⁷¹ James N Rosenau, ‘Governance in the Twenty-First Century’, *Global Governance*, 1, (1995), p 14.

economic groups such as financial institutions. These powerful actors all too often, ignore the interests of the poor and marginalized, thus necessitating governance reforms to curtail corruption and rent capture of petroleum resources, including culling an existent or parasitic structure that fosters inequality.¹⁷²

It is thus argued that, the SDGs cannot be achieved in vacuo or in an apolitical environment. Acknowledging the influence of governance factors or its consequential and corresponding effects on oil exploitation is therefore essential. Reason being that, power relations and dynamics are far too real in the oil industry, whether from a global or national context. To assume otherwise is overly simplistic and does little to advance environmental or social, including equity goals in oil producing states.

Achieving sustainable development in developing oil producing states therefore becomes crucially dependent on the integration of sustainable governance. Sustainable governance as proffered by SDG 16, recommends international partnerships for its realization. It is an emerging concept embracing good governance. Good governance denotes accountable, transparent, equitable and participatory governance which readily conforms to the rule of law.¹⁷³ Sustainable governance thus predicates the need for corruption prevention which is interlinked with transparency, strong institutions and accountable governance structures. Evidently, the SDGs drastically improve on Agenda 21 and the MDGs by clarifying in goals 16-17, the targets and indicators of sustainable governance, including areas for effective collaboration and international partnerships to achieve the SDGs.¹⁷⁴ Moreover, Goal 16

¹⁷² See, Emmanuel Kumi, Albert A. Arhin, Thomas Yeboah, “Can Post-2015 Sustainable Development Goals Survive Neoliberalism? A Critical Examination Of The Sustainable Development–Neoliberalism Nexus In Developing Countries” *Environ Dev Sustain* (2014) 16:539–554 DOI 10.1007/s10668-013-9492-7

¹⁷³ M.S. Grindle, Good Enough Governance: Poverty Reduction and Reform in Developing Countries. *Governance*, (2004) 17: 525–548. doi:10.1111/j.0952-1895.2004.00256.x

¹⁷⁴ See, Goals 16-17, SDG Indicators Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2).

specifically articulates the promotion of peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels. Its associated targets entail substantially reducing corruption and bribery in all their forms whilst developing effective, accountable and transparent institutions, including capacity strengthening at all levels through international cooperation, especially in developing countries.¹⁷⁵ In other words, assessing or measuring sustainable governance indicators within national governments would involve the levels of participation, inclusiveness, access to justice, level of regulatory enforcement, strength of national institutions, the degree or level of public sector transparency, presence or absence of bribery or corruption and level of national government's accountability in terms of public revenues administration and public procurements evident within its oil-sector.

More so, the UN in specifically advocating international partnerships to engender transparency and tackle corruption for effective, accountable and sustainable governance provides in Chapter, 1. Art.1. (a-b) of the UN Corruption Convention, the inevitability of international partnerships to combat corruption.¹⁷⁶ The Convention further asserts that, “corruption is no longer a local matter but a transnational phenomenon that affects all societies and economies, making international cooperation to prevent and control it essential.”¹⁷⁷ Sustainable governance therefore predicates the exigency of corruption prevention which is interlinked with transparency, strong institutions and accountable governance structures.¹⁷⁸ Indeed, in describing the considerable menace posed by corruption, including the threats to sustainable

¹⁷⁵ Ibid

¹⁷⁶ See, Art. 1. (b) of the UN General Assembly resolution 58/4 of 31 October 2003, United Nations Convention against Corruption (UNCAC).

¹⁷⁷ See, Preamble, the UN General Assembly resolution 58/4 of 31 October 2003, United Nations Convention against Corruption (UNCAC).

¹⁷⁸ M.S. Grindle, Good Enough Governance: Poverty Reduction and Reform in Developing Countries. Governance, (2004) 17: 525–548. doi:10.1111/j.0952-1895.2004.00256.x

development and thus necessitating international partnerships for the control. The UN asserts that;

“Corruption is an insidious plague that has a wide range of corrosive effects on societies. It undermines democracy and the rule of law, leads to violations of human rights, distorts markets, erodes the quality of life and allows organized crime, terrorism and other threats to human security to flourish”.¹⁷⁹

Thus, in a bid to project these aims of sustainable governance and corruption control in national governments and the petroleum industry, the Extractive Industries Transparency Initiative (EITI) was launched in 2002 at the WSSD in Johannesburg.¹⁸⁰ EITI aims to tackle governance challenges, including the “resource curse”¹⁸¹ syndrome associated with poor governance in resource rich developing states.¹⁸² Undoubtedly, the EITI is proving relevant as an international partnership to engender the means of achieving goals 16-17 relating to transparency and accountability for sustainable governance of the petroleum industry in oil producing states.

Essentially, the EITI operates a global standard for the good governance of oil and gas resources. EITI also identifies and tackles the key governance problems relating to transparency, accountability and corruption in the extractive sectors of member states. The essence of such tracking is to regulate member states’ behaviour for institutional and capacity strengthening, by engendering procurements and process transparency in the oil industry. The EITI secures these aims via compulsory reporting to assess member states’ performance in

¹⁷⁹ See, the UN General Assembly Resolution 58/4 of 31 October 2003 United Nations Convention against Corruption (UNCAC). This Convention encompasses 5 principal areas articulating: preventive measures, criminalization and law enforcement, international cooperation, asset recovery and technical assistance including information exchange. Whilst stipulating both mandatory and non-mandatory provisions.

¹⁸⁰ See, ["History of the EITI". www.eiti.org.](http://www.eiti.org) EITI. Retrieved 1 May 2018. "The EITI Oslo Conference: Making transparency a global norm".

¹⁸¹ To be discussed in later sections.

¹⁸² See, The global standard for the good governance of oil, gas and mineral resources. The Extractive Industries Transparency Initiative. Available at: <https://eiti.org/>

governing petroleum resources to foster sustainable development in mineral and petro-economies.¹⁸³

Arguably, the global significance of the EITI is predicated on the fact that corporations engaged in oil and gas production, likewise minerals extraction are largely plagued with: financial malpractices, oblique or opaque deals, illicit cash flows and other irregularities which have resulted in tarnished reputations in terms of corruption's perception.¹⁸⁴ In buttressing this view, the Transparency International's (TI) Corruption Perception Index (CPI), identifies oil and gas as the fourth most corrupt international commercial sector, with mining in fifth place.¹⁸⁵

Likewise, in the Organisation for Economic Cooperation and Development (OECD) Anti-bribery Convention (2014 report) targeting transnational corruption which relied on data from over 427 case procedures from 1999, it was quite evident that one in five cases or (19%) of transnational corruption took place in the oil or extractives sector. This is indicative of the fact that, the oil industry realistically poses a global and intransigent challenge in terms of corruption, even surpassing arms dealing.¹⁸⁶ The OECD Anti-Bribery Convention is herein relevant, as it has extra-territorial implications against the bulk of IOCs which have their registered headquarters in OECD states.

Evidently, the key reasons why the oil and gas industry remains susceptible to a substantial risk of corruption can be attributable to the fact of its high liquidity and mammoth cash or financial flows. Also, Petro-business or oil trade itself necessitates extensive or considerable interactions with numerous public officials and government agents, especially in cases of government

¹⁸³ Dawson, Stella (March 1, 2013). "[EITI board raises bar on global standards to report natural resource revenues](#)". Thompson Reuters Foundation. Retrieved 1 May 2018.

¹⁸⁴ Longchamp, Olivier, and Nathalie Perrot. "Trading in corruption: Evidence and mitigation measures for corruption in the trading of oil and minerals." U4 Issue (2017).

¹⁸⁵ Rogers, Simon, and Claire Provost. "Corruption index 2011 from Transparency International: find out how countries compare." The Guardian 1 (2011).

¹⁸⁶ Spahn, Elizabeth K. "Implementing global anti-bribery norms: from the foreign corrupt practices act to the OECD anti-bribery convention to the UN convention against corruption." Ind. Int'l & Comp. L. Rev. 23 (2013): 1.

owned or national oil companies (NOCs). All too often, opportunities abound for public officers to abuse their office. More so, crude sales or transactions along the petroleum industry value chain comprising, licencing, revenues, procurement, production, expenditure, etc. and corresponding actors can be extremely opaque.¹⁸⁷ Indeed, in many cases, sales transactions are not clearly subjected to specific regulations or international standards.¹⁸⁸

Thus, for targeted efforts at oil industry management aimed at corruption prevention, there should be transparency along the petroleum industry value chain.¹⁸⁹ This includes: transparency in the allocation and registration of petroleum contracts and leases, the beneficiaries of those contracts should be known, as well as the overall impacts of petroleum sales, revenue in-flows and expenditure in the oil producing state's economy to ascertain irregularities in the sector whilst prompting accountability and accurate reporting to EITI, as an international partner for sustainable development.

Certainly, it is quite possible to undermine the EITI's relevance as a tool or catalyst for sustainable development in petro-states as it is a voluntary initiative which has even been considered "toothless".¹⁹⁰ It is however pointed out that, oil producing states comply with these monitoring, or reporting criteria and transparency assessments as they generate global rankings, positive reviews, whilst improving a petro-state's credibility regarding multi-lateral funding or technical assistance arrangements, including, boosting investor confidence in the oil sector.¹⁹¹

¹⁸⁷ Bergen: Chr. Michelsen Institute. Chêne, Marie. Linkages between Corruption and Commodity Trading. U4 Expert Answer April 2016.

¹⁸⁸ Longchamp, Olivier, and Nathalie Perrot. "Trading in corruption: Evidence and Mitigation Measures for Corruption in the Trading of Oil and Minerals." U4 Issue (2017).

¹⁸⁹ The EITI Standard requires countries and companies to disclose information on the key steps in the governance of oil, gas and mining revenues: Petroleum Contracts and Licensing, Exploration and Production, Revenue Collection and Allocation and Petroleum Budgeting and Accounts affecting Expenditure on social goods. Available at: <https://eiti.org/eiti-value-chain>

¹⁹⁰ See, Eddie Rich, "The Voluntary Dimension of the EITI", 2010 Available at: <https://eiti.org/blog/voluntary-dimension-of-eiti> Accessed: 11 January 2018.

¹⁹¹ See, The EITI, NOCs and the first trade. The EITI as a tool for improving the trading climate with National Oil companies (NOCs). Brief March 2015. Oslo: EITI. EITI (Extractive Industries Transparency Initiative). 2016.

These contribute as constructive and measurable steps of petro-states towards achieving the SDGs, including exhibiting economic growth, and relevant governance indicators.¹⁹²

1.3.2. Sustainable Governance: Regulatory Controls as Tools of Transparency and Accountability for Oil Industry Governance

In furtherance of earlier discussions advocating governance tools and indicators for sustainable development, this subsection considers the extent to which Regulatory controls can foster transparency and accountability within the oil industry. Basically, Regulatory controls can operate as considerable tools to engender transparency in the petroleum sector when the regulations and policies are clearly defined. Moreover, securing compliance with stipulated guidelines is less complicated where the rules are accessible, assessable and unambiguous. This subsection thus posits the efficacy of regulatory controls as useful tools to optimize transparency and accountability in the petroleum sector.

The petroleum industry requires positive regulations, policies and management initiatives to drive sustainable development goals. These are crucial for ensuring that the positive gains or benefits from hydrocarbons exploitation are not altogether eroded by an extractive process that undermines environmental protection, social or community development, and which fosters irreparable damage. Thus, where the roles and responsibilities of regulators, oil producers, government or its agencies articulate adequate guidelines accommodating all pillars of the sustainable development paradigm it becomes easier to identify non-compliance with the petroleum regulations or guidelines and apportion responsibility to enhance their enforcement.

¹⁹² See, SDG Indicators of Goal 8, 16 and 17. SDG Indicators Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development, Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2).

Notwithstanding, it is however clarified that, developing or other oil-rich countries are beset with environmental, economic and social problems not entirely from a lack of regulatory frameworks which articulate environmental provisions, but from complex reasons which could range from corruption,¹⁹³ lack of political will to enforce the rules,¹⁹⁴ or even malicious intent.¹⁹⁵ Oftentimes, environmental and social issues during oil exploitation are either inconsistently invoked, ignored or relegated and in some instances wielded as a weapon of sorts for purposes unrelated to rectifying environmental damage.¹⁹⁶ The foregoing therefore typifies the obvious gaps created between the laws on paper and the reality wherein they are ineffectual in oil producing states. This could be indicative of a manifest failure in harnessing or maximising regulatory potential as tools for capacity and institutional strengthening to drive sustainable development goals in the industry. This forms a focal point argued in this thesis as to how the written laws or rules can be influential and instrumental to achieving sustainable development goals. The essence of this argument is that, enforcement of environmental regulations and social policies during petroleum exploitation remain bulwarks to making laws and programmes work.

Nonetheless, securing compliance with petroleum regulations and its enforcement is significantly contingent upon the apparent levels of petroleum process transparency. These processes include: contractual phase to pre-exploration and post-production procedures and accommodate: petroleum revenue transparency, procurement accounting and audit. Thus,

¹⁹³ See, George, Barbara Crutchfield, and Kathleen A. Lacey. "Investigation of Halliburton Co./TSKJ's Nigerian business practices: model for analysis of the current anti-corruption environment on Foreign Corrupt Practices Act enforcement." *J. Crim. L. & Criminology* 96 (2005): 503.

¹⁹⁴ See K. Alexander and S. Gilbert, *Oil and Governance Report – A Case Study of Chad, Angola, Gabon and Sao Tome é Principe* (Institute for Democracy in South Africa, 2008), at 35.

¹⁹⁵ See, Tom Parfitt and Terry Macalister, "The End Comes for Yukos: Oil firm Declared Bankrupt and Auction Ordered" Available at: <https://www.theguardian.com/business/2006/aug/02/oilandpetrol.russia> Accessed at 12 March 2018.

¹⁹⁶ An example is the case of Russia's acquisition of Shell BP assets as reported by The Guardian. Russian authorities threatened BP over alleged environmental violations on a Siberian field 'in what is considered a wider attempt at state expropriation of assets and private resources in the oil sector, handed over to foreign companies when energy prices were low. Available at: <https://www.theguardian.com/environment/2006/sep/26/energy.russia> Accessed on 12 March 2018. and Parfitt (2006). See also Partlett (2012).

petroleum contracts awards should be publicised and competitive, to secure the best bids anchoring all pillars of the sustainable development paradigm. Similarly, discretionary contract awards should be avoided as they undermine transparency and accountability, inevitably institutionalizing corruption in the oil industry.¹⁹⁷ Moreover, bidding processes should be openly advertised to prevent bribery, corruption or favouritism from marring the process. Evidently, the adequacy of independent, impartial and transparent review processes to make defaulters accountable, is suggestive of more sustainable oil industry governance procedures advocated by SDG16, as they engender regulatory compliance and institutional strengthening.

Likewise, petroleum rules and policies should clearly delineate roles and responsibilities among the oil sector's actors, as opaque or oblique rules attenuate transparency and accountability.¹⁹⁸ Hence, the existence of paper laws and environmental agencies cannot be sufficient guarantees or proofs that preventive and adequate environmental safeguards, mitigations, pollution controls and social protection measures will be undertaken during oil production. The existing petroleum legal framework must thus anchor on clarity, avoid granting covert powers or excessive discretionary authority to top industry officials as these also foment corruption, abuse of powers, whilst impinging on transparency and accountability in the industry, to render petroleum regulations bereft of influence or incompetent as governance tools.

1.3.3. Sustainable Governance: International Partnerships as Governance Tools in Petrostates

In advancing discussions on identifying tools and international partnerships for the sustainable governance of the petroleum industry, this subsection elaborates on Goal 17 of the SDGs, with

¹⁹⁷ See, Edward Fokuoh Ampratwum, "The fight against corruption and its implications for development in developing and transition economies" *Journal of Money Laundering Control*; London Vol. 11, Iss. 1, (2008): 76-87.

¹⁹⁸ M. Humphreys, et al. *Escaping the Resource Curse* New York: Columbia University Press (2007)

particular reference to international finance institutions. Goal 17 as earlier appraised, provides for strengthening the means of implementation and revitalize the Global Partnership for Sustainable Development. Goal 17 also targets domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection, as well as enabling partnerships for social development.¹⁹⁹ This subsection therefore posits the utility of international finance institutions as tools for strengthening the means of implementing sustainable development in developing petro-states via the instrumentality of development funding, provision of technical assistance and reporting of progress made towards the SDGs.

The UN in promoting strategies to foster international partnerships and cooperation established various multilateral entities such as the World Bank, international programmes such as the UN Environmental Programme (UNEP) including regimes such as the Organisation for Economic Cooperation and Development (OECD) to engender cooperation and partnerships towards achieving development goals. These international agencies have been accountable for policy instruments that directly impact the oil and gas industry to advance the aims of sustainable development. Some of these instruments include: the UNEP/IE Guidelines for the oil industry, the World Bank Guidelines for the oil industry which is closely identical to the UNEP/IE guidelines²⁰⁰, including the OECD Guidelines for Multinational Enterprises. The OECD Guidelines, clarifies principles and standards for the responsible conduct of international oil and gas corporations (IOCs), in developing countries. The guidelines apply extra-territorially, to IOCs operational in both OECD adhering and non-adhering countries. Essentially, these

¹⁹⁹ See, Goal 17 of the SDGs. Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2)

²⁰⁰ These are discussed in greater detail in following subsections.

guidelines provide guidance on: environmental protection, social development, human rights and industrial relations in oil producing areas.

Moreover, the targets and indicators of Goal 17 altogether highlight multi-level partnerships to include state and non-state actors, non-governmental organizations, international development or international finance organizations to collaborate in the funding, monitoring, capacity and institutional strengthening, including performance and reporting of the progress made towards the SDGs. This is because, co-opting and efficiently coordinating the appropriate mix of top-bottom and bottom-up approaches via multi-stakeholder collaboration reinforces the means of implementing sustainable development and remains decisive in the achievement of the framework of goals. The proceeding subsections will therefore, address international organizations like the World Bank and Equator Finance Institutions as relevant international partnerships for instigating and reporting progress towards the achievement of sustainable development in developing petro-states.

1.3.4. Sustainable Governance: The World Bank as a Global Partner for Sustainable Development in Petro-States

This subsection propels the on-going discussions regarding sustainable governance for engendering the sustainable development agenda, by clarifying the position of the World Bank as a strategic international partner towards sustainable development. The World Bank is herein considered a tactical or strategic partner as it further aligns with the aims of Goal 17 of the SDGs, because it partners with states, private sector, civil society or IGOs towards progressively achieving sustainable development.²⁰¹ This it does via providing essential

²⁰¹ The World Bank is the world's largest development institution and a major stake holder in global development financing. It has funding partnerships with over 180 countries about a 100 of these comprise of developing states.

<http://pubdocs.worldbank.org/en/842861463605615468/Global-Economic-Prospects-June-2016-Divergences-and-risks.pdf>

development funding or finance, technical assistance, including capacity strengthening, especially in developing states.²⁰² More importantly, the World Bank also sets and implements crucial environmental and social standards in an oil industry specific context.²⁰³ These standards which will be further elaborated serve to engender eco-system sustainability and social welfare during petroleum exploitation. It was founded in Bretton Woods, USA as the International Bank for Reconstruction and Development in 1944, with its headquarters in Washington DC. Although initially established to tackle reconstructing in Europe,²⁰⁴ its portfolio has since burgeoned to address the environment, climate change, food and energy security, finance, trade and virtually all spheres of development financing and assistance.²⁰⁵

Moreover, the World Bank's policy relating to sustainable governance evolved from a 1989 World Bank report on Sub-Saharan Africa, tagging the governance situation as a "crises of governance".²⁰⁶ This report was mostly due to a review of the World Bank's corporate policies regarding the ineffectiveness of aid to the region, the apathy or non-commitment of recipient governments to reforms and the pervasive corruption in minerals or petro-rich developing countries.²⁰⁷ This prompted the Bank's imposition of good governance conditionality within funding agreements to engender transparency, accountability, including responsible development financing. It is however clarified that the World Bank's imposition of "good governance" criteria before developing states can access requisite bilateral and multilateral

²⁰²G.H. Uriz, To Lend or Not to Lend: Oil, Human Rights and the World Bank's Internal Contradictions, 14 Harvard Human Rights Journal (2001), 197-230, at 21. See K. Alexander and S. Gilbert, Oil and Governance Report – A Case Study of Chad, Angola, Gabon and Sao Tome é Principe (Institute for Democracy in South Africa, 2008), at 35.

²⁰³ See, The uniform 3 European Commission (EC) Joint Research Center (JRC), Best Available Techniques Reference (BREF) Document for the Refining of Mineral Oil and Gas (2015). Environmental, Health, And Safety Guidelines Petroleum Refining November 17, 2016

²⁰⁴ See, the World Bank, World Bank Group Strategy, October 2013 (Washington, DC: The World Bank Group, 2014), p. 6, available at: https://openknowledge.worldbank.org/bitstream/handle/10986/16095/32824_ebook.pdf accessed 2 February 2018. Also Available at: <http://www.worldbank.org/en/about/history> accessed 19 March 2018

²⁰⁵ <http://www.worldbank.org/>

²⁰⁶ World Bank, *Sub-Saharan Africa: From Crisis to Sustainable Growth*, Washington, DC: World Bank, 1989. For African responses, see Goran Hyden, Dele Oluwu & Hastings Oketh Ogendo, *African Perspectives on Governance*, Trenton, NJ: Africa World Press, 2000

²⁰⁷ Ibid.

financing for development projects has however been subject to controversy.²⁰⁸ Indeed, governance conditionality has faced considerable criticism as verging on the confines of states' sovereignty,²⁰⁹ and disparaged as an ineffective measure.²¹⁰ Albeit, this evokes a query concerning whether, acceding to a World Bank funding treaty is not perhaps sufficient exercise of a state's prerogative or sovereignty? Arguably, it is within the State's discretion to accept or reject the agreement on basis of the imposed or "disagreeable" conditions. Undoubtedly, such governance, environmental and social conditionality in the World Bank's funding arrangements constitute major leverages towards sustainable development as it fosters platforms for institutional or capacity strengthening, including implementing the means of securing the targets of Goal 17.

The World Bank (hereinafter the Bank) further proposed its own contribution to the sustainable development agenda by advocating a strategy that targets all three pillars of the sustainable development paradigm: environment, economic growth and social development in conjunction with intergenerational well-being during petroleum exploitation.²¹¹ Even though the Bank may perhaps be criticized on account of a general underperformance in the area of human rights,²¹² it does however articulate specific safeguard policies and compliance procedures towards actualizing sustainable development in the oil and gas industry.²¹³

²⁰⁸ Thomas G Weiss, "Governance, good governance and global governance: Conceptual and actual challenges", (2000) Third World Quarterly, 21:5, 795-814, DOI:10.1080/713701075. Available at: <https://doi.org/10.1080/713701075> Accessed at: 15th March 2018

²⁰⁹ Ruth Berins Collier, *Paths Toward Democracy: The Working Class and Elites in Western Europe and South America* Cambridge, (Cambridge University Press,) 1999, at 319. Collier warns against the abuse of conditionality: "The extension of the practice of conditionality from the occasional circumstances of crisis management to the continuous process of general economic policy-making has implied a transfer of sovereignty which is not only unprecedented but is often dysfunctional".

²¹⁰ Catherine Gwin, J.M. Nelson, "Perspectives on aid and development" *Overseas Development Council*, (1997) ISBN:1565170075, 9781565170070

²¹¹ See World Bank, "Operations Manual", OP 8.40, available at: http://siteresources.worldbank.org/OPSMANUAL/Resources/EntireOM_External.pdf, accessed 20 February 2018; S.E.

²¹² See, the 2015 Report of the Special Rapporteur on extreme poverty and human rights (4 August 2015) UN Doc. A/70/274, para 68.

²¹³ The uniform 3 European Commission (EC) Joint Research Center (JRC), Best Available Techniques Reference (BREF) Document for the Refining of Mineral Oil and Gas (2015). Environmental, Health, And Safety Guidelines Petroleum Refining November 17, 2016

Notwithstanding the Bank's considerable potential as an international partner for sustainable development, it is conceded that its reputation as the so-called "Washington Consensus"²¹⁴ or Bretton Woods Institutions (BWIs) raises concerns as to its suitability for securing environmental goals via development financing in developing states with weak institutions.²¹⁵ Reason being that, the BWIs neo-liberal or fundamental market-based ideologies, including strict economic policies targeting deregulation and privatization of nationalized industries to enhance GDP growth and trade liberalization are condemned as inimical to social development and poverty eradication in developing states.²¹⁶

Indeed, it has been argued that these BWI policies constitute hurdles to sustainable development by their pursuit of macro-economic policies in uneven market situations in developing states and as such, the Bank cannot be expected to present viable solutions while they remain proponents of an approach that promotes aggressive GDP growth and unsustainable consumption.²¹⁷ Indeed, this is a broad area which exceeds the scope of this research. It is however proffered that, the World Bank has over-time progressed in line with dynamic shifts towards environmental sustainability, influenced by international environmental law and policy, from its erstwhile mandate which imposed strict commitments to purely "economic considerations".²¹⁸

²¹⁴ The Washington Consensus comprises 10 economic policy recommendations regarded as reforms "standards" for crises-ridden developing countries by Washington, D.C. based institutions. These include: The International Monetary Fund (IMF), World Bank and the United States Department of the Treasury. The denotation as Bretton Woods Institutions (BWIs) refers to the establishment of these institutions in Bretton Woods New Hampshire in 1944, to tackle post-war economic restructuring.

²¹⁵ See, E. Kumi, A.A. Arhin and T. Yeboah, 'Can Post-2015 Sustainable Development Goals Survive Neoliberalism? A Critical Examination of the Sustainable Development-Nexus in Developing Countries' (2014) Environment Development and Sustainability 16, 539–554 at 544.

²¹⁶ See, E. Gudynas, 'Buen Vivir: Today's Tomorrow' (2011) Development 54(4), 441. K. Raworth, Doughnut Economics: Seven Ways to Think Like a 21st Century Economist (Random House, 2017). Raworth rehearses the overwhelming arguments against using GDP as the primary measure of development, not least because of the danger this poses to the Earth system. She advocates a form of economics that addresses impoverishment within planetary limits.

²¹⁷ Ibid.

²¹⁸ See, e.g., Articles of Agreement Of The International Bank For Reconstruction And Development, July 22, 1944, Art. V, ?10, 60 Stat. 1440, 2 Unts 134, As Amended, 16 Ust 1942, 606 Unts 294; Agreement Establishing The Aslan Development Bank, Dec. 4, 1965, Art. 36, Para. 2, 17 Ust 1418, 571 Unts 123; And Agreement Establishing The African Development Bank, Aug. 4, 1963, Art. 38, Para. 2, 510 Unts 3.

Evidently, the Bank's contemporary multilateral funding arrangements do incorporate specific guidelines known as the World Bank Safeguard Policies.²¹⁹ The Safeguard policies are binding instruments articulating the Bank's lending guidelines or processes, with clearly stated rules or obligations accruing to the borrowing state as funding pre-requisites.²²⁰ The Safeguard policies encompass a broad range of requirements essential for the oil and gas industry. These range from: technical assistance, environmental protection guidelines,²²¹ to institutional reforms, human and institutional capacity strengthening, etc. The safeguards also entrench social development guidelines relating to public participation and consultations on case specific projects, including the disclosure of relevant environmental information.²²²

To a substantial extent, the Bank's mandate purports a responsibility and duty to be more than just a passive spectator in funding and development partnerships. Certainly, the Bank has an incumbent duty to engender sustainable development as expressly posited in the Bank's operational guidelines.²²³ Thus, the Bank is *prima facie* constrained to refrain from projects or acts which are at cross-purposes to environmental sustainability and social development objectives. In as much as an affirmative obligation to act towards securing core environmental objectives in development funding, may not be expressly construed as absolute from the

²¹⁹ World Bank, World Bank Group Strategy, October 2013 (Washington, DC: The World Bank Group, 2014), p. 6, available at: https://openknowledge.worldbank.org/bitstream/handle/10986/16095/32824_ebook.pdf, accessed 2 February 2015.

²²⁰ C. Cordonier Segger, M.W. Gehring and A. Newcombe (eds.), *Sustainable Development in World Investment Law* (The Netherlands: Kluwer Law International BV, 2011), p. 6. See, A.P. Thirlwall, *Growth and Development with Special Reference to Developing Economies* (8th ed., Palgrave Macmillan, 2006), p. 362. 22 World Bank (2003), p. 14. L. Boisson de Chazournes, M.A. Bekhechi, Some Observations regarding Environmental Covenants and Conditionalities in World Bank Lending Activities, 3 *Max Planck Yearbook of UN Law* (1999), 287;

²²¹ The uniform 3 European Commission (EC) Joint Research Center (JRC), Best Available Techniques Reference (BREF) Document for the Refining of Mineral Oil and Gas (2015). Environmental, Health, And Safety Guidelines Petroleum Refining November 17, 2016

²²² See, Stéphanie de Moerloose "The World Bank's Sustainable Development Approach and the Need for a Unified Field of Law and Development Studies in Argentina". *Law and Development Review* 2015; 8(2): 361–388 DOI 10.1515/ldr-2015-0017

²²³ See, Smyth, "Agency and Accountability in Multilateral Development Finance: An Agenda for Change", 4 *The Law and Development Review*, no. 1 (2011), 64–140, at 116. 25 World Bank, "Operations Manual", see L. Boisson de Chazournes, "Policy Guidance and Compliance: The World Bank Operational Standards", in D. Shelton (ed.), *Commitment and Compliance: The Role of Non-binding Norms in the International Legal System* (Oxford: Oxford University Press, 2000), pp. 286–287. 26

rules,²²⁴ the Bank's guidelines however normatively seek to address and engender positive steps towards environmental and social sustainability during oil and gas exploitation via the signing of the funding instrument to reinforce it as a binding treaty between the Bank and recipient state.²²⁵ It is further stressed that, the Bank is indeed uniquely positioned and imbedded with a distinct responsibility to trigger enormous positive difference in the actualization of environmental protection and social development objectives in developing petro-states. In this regard, the Bank currently provides funding of social welfare projects also known as "World Bank bottom-up projects"²²⁶ and incorporates Compliance as well as carbon reporting mechanisms.²²⁷

As a matter of fact, the Bank's considerable exposure to media or NGO pressures towards a more environmentally friendly stance is necessitating a proposed shift from the funding of on-shore oil and gas projects to solely off-shore gas projects to re-align climate-action objectives in developing states.²²⁸ This makes the subsequent discussions on Equator banks in the next sub-section essential, in view of the vacuum the World bank's departure would create in terms of development financing for oil and gas projects. The Bank's fiat is thus expansive, legally enforceable and constitutes the Bank's specialized or exclusive contribution to fostering sustainability geared financing in developing states.²²⁹

²²⁴ Gunther Handl, "The Legal Mandate of Multilateral Development Banks as Agents for Change Toward Sustainable Development". *The American Journal of International Law*, Vol. 92, No. 4 (Oct., 1998), pp. 642-665.

²²⁵ Ibid.

²²⁶ See, Dayo Adetiloye, "World Bank Bottom-up projects in Nigeria and how to Apply" Available at: <https://dayoade tiloye.com/apply-2018-world-bank-n3million-n10million-grant-grassroot-businesses-nigeria-coordinated-3-major-ngos/>

²²⁷ These mechanisms include, the World Bank Inspection Panel and the Compliance Advisor Ombudsman to secure the borrowing state's compliance with the sustainable development policies of the Bank. See also, Valentina Ruiz Leotard, "World Bank to stop funding oil and gas projects" Mining.com. Available at: <http://www.mining.com/world-bank-stop-funding-oil-gas-projects/>

²²⁸ See. Aggrey Mboki, "World Bank pulls the rug from under oil and gas extraction" The East African, December 2017. Available at: <http://www.theeastfrican.co.ke/business/World-Bank-pulls-the-rug-from-under-oil-and-gas-extraction-/2560-4237450-11nytqfz/index.html>

²²⁹ J.W. Head, Environmental Conditionality in the Operations of International Development Finance Institutions, 1 The Kansas Journal of Law and Public Policy (1991), 15. 34

1.3.5. Sustainable Governance: “Equator Banks” as International Partners for Sustainable Development in Petro-States

In elaborating further on the relevance of international partnerships for sustainable development, this subsection highlights “Equator Banks”²³⁰ as tools of such international and multi-stakeholder partnerships advocated by Goal 17. The Equator Principles (EPs) are a voluntary framework initially designed in 2003 and thereafter modified in 2006 and 2011. The Principles emerged from the coordinated efforts of international lending institutions and the International Finance Corporation (a subsidiary of the World Bank Group).²³¹ It aimed to manage the social and environmental risks associated with international project finance in developing countries.²³² Moreover, the Equator principles comprise a broader theoretical framework articulated in specific versions designated as EP I, EP II, and EP III.²³³ The need for such a framework arose to optimize concerted efforts to boost the sustainability agenda in developing states and to fill the vacuum created by the International Monetary Fund (IMF’s) withdrawal from international project finance due to considerable NGO pressure.²³⁴

Furthermore, NGO pressure led to international finance institutions conceding to voluntary imposition of the IFC’s Performance standards, limitations and guidelines on development projects.²³⁵ These Performance Standards contain a set of ten principles designed to mitigate

²³⁰ Wright, Christopher, and Alexis Rwabizambuga. "Institutional pressures, corporate reputation, and voluntary codes of conduct: An examination of the equator principles." *Business and Society Review* 111.1 (2006): 89-117.

²³¹ The original signatories of the Equator Principles were ABN-AMRO, Barclays, Citigroup, West LB, Credit Lyonnais, etc. As at 16 January 2018, 92 adopting financial institutions in 37 countries have officially adopted the Equator Principles, covering the majority of international Project Finance debt in emerging and developed markets. Some examples of covered projects: "power plants, mines, oil and gas Projects, etc.

²³² See, Joshua A. Lance, Equator Principles III: A Hard Look at Soft Law, 17 N.C. Banking Inst. 175 (2013). Available at: <http://scholarship.law.unc.edu/ncbi/vol17/iss1/8>. See also, History of the Equator Principles, Equator Principles Ass'n, <http://www.equator-principles.com/index.php/about/history-of-the-eps> (last visited 20 March 2018). See Thomas Papadopoulos, The Greening of Project Finance: Is This a Viable Project? 7 ICFAI U. J. OF BANKING L. 8, 9-12 2009).

²³³ Joshua A. Lance, Equator Principles III: A Hard Look at Soft Law, 17 N.C. Banking Inst. 175 (2013). Available at: <http://scholarship.law.unc.edu/ncbi/vol17/iss1/8> 11

²³⁴ The IMF withdrew from project finance due to the high-profile protests that feared that private investment firms would introduce a brand of ruthless capitalism into developing countries' infrastructure projects.

²³⁵ See, Equator Principles III. (2014). Equator principles III: An introduction and practical guide. Available at: <http://www.nortonrosefulbright.com/files/equator-principles-iii-pdf-17mb-111048.pdf>. Accessed, 20 March 2018

the social and environmental risks associated with project financing. They include: 1, Review and Categorisation, 2, Environmental and Social Assessment, 3, Applicable Environmental and Social Standards, 4, Environmental and Social Management System and Equator Principles Action Plan, 5, Stakeholder Engagement, 6, Grievance Mechanism, 7, Independent Review, 8, Covenants, 9, Independent Monitoring and Reporting. and 10, Reporting and Transparency. In considering the Equator Banks standards, it is pertinent to question how these specific terms or conditions imposed on borrowers who in this case are non-state actors, can drive the aims of sustainable development in developing states. In contrast to the World Bank funding agreements with hosts states which are considered treaties, these multilateral funding arrangements with transnational oil companies are not treaties or conventions.²³⁶

Even though, it may be construed that the more flexible EP funding arrangements which do not constitute treaties like the World Bank agreements are disadvantaged on that ground, it is nonetheless clarified, that the EP agreements remain legally binding between the parties. Moreover, as instruments that aspire to regulate and proffer guidance within the context of sustainable development and responsible financing envisaged by SDG17, their relevance at regulating behaviour of their specific partners to optimize sustainable development goals cannot be dismissed,²³⁷

The EPFI's impose their guidelines and standards as conditions on the borrowers in exchange for requisite funding to promote sustainability within the oil industry context for which the funds are sought. In other words, the Equator Banks evidently clarify the limits of their funding partnerships, provide guidance and determine how conflicts between other rules may be

²³⁶ These agreements between EPFIs and TNCs are not formal sources of international law, within the context of such sources under Article 38(1) of the International Court of Justice (ICJ) Statute

²³⁷ D. M. Ong, "From 'International' To 'Transnational' Environmental Law? A Legal Assessment Of The Contribution Of The 'Equator Principles' To International Environmental Law." *Nordic Journal of International Law* 79, no. 1 (2010): 35-74.

resolved.²³⁸ The Equator Principles categorically provide that the Equator banks “will not provide loans directly to projects where the borrower will not or is unable to comply with [their] environmental and social policies and processes”.²³⁹

Ultimately, these Equator banks need to show depth of commitment to the rules and guidelines by foregoing projects that fail the required standards. This is due to envisaged public scrutiny of their lending activities as required by Principles 9-10.²⁴⁰ Moreover, the failure to forego unsustainable projects can attract damaging publicity and compromises corporate reputation, creates negative media attention, as well as NGO pressure as in the earlier cited IMF’s withdrawal from the Chad-Cameroun Pipeline funding scenario.²⁴¹ To this extent, the Equator banks can internalize the Principles within their lending criteria.²⁴² Furthermore, the implications of EP-Principle 10, requires the Banks to publicize annual reports, relating to the EPs implementation processes for respective projects, as in this case oil and gas projects. Thus, giving NGOs or civil society leverages to tackle breaches or non-compliance with the Principles’ stipulations.

Notwithstanding, these Equator Banks have faced various criticisms, ranging from inadequate enforcement mechanisms to absence of delisting mechanisms,²⁴³ recourse to minimal standards

²³⁸ A. Boyle, 'Some Reflections on the Relationship of Treaties and Soft Law', 48:4 International and Comparative Law Quarterly (1999) pp. 901-913, at p. 901.

²³⁹ See, Equator Principles III. (2014). Equator principles III: An introduction and practical guide. Available at: <http://www.nortonrosefulbright.com/files/equator-principles-iii-pdf-17mb-111048.pdf>. Accessed, 20 March 2018

²⁴⁰ Conley, John M., and Cynthia A. Williams. "Global banks as global sustainability regulators? The equator principles." Law & Policy 33, no. 4 (2011): 542-575. See also, Missbach, Andreas. "The Equator Principles: Drawing the line for socially responsible banks? An interim review from an NGO perspective." Development 47, no. 3 (2004): 78-84.

²⁴¹ See I. Gary, and N. Reisch, "Chad's Oil: Miracle or Mirage? Following the Money in Africa's Newest Petro- State", Catholic Relief Services/Bank Information Center, available at: <http://www.bicusa.org/en/Project.7.aspx> , Accessed 20 March 2018. See also, K. Alexander and S. Gilbert, Oil and Governance Report – A Case Study of Chad, Angola, Gabon and Sao Tome é Principe (Institute for Democracy in South Africa, 2008), at 35

²⁴² Wright, Christopher, and Alexis Rwabizambuga. "Institutional pressures, corporate reputation, and voluntary codes of conduct: An examination of the equator principles." Business and Society Review 111, no. 1 (2006): 89-117.

²⁴³ See, Joshua A. Lance, Equator Principles III: A Hard Look at Soft Law, 17 N.C. Banking Inst. 175 (2013). Available at: <http://scholarship.law.unc.edu/ncbi/vol17/iss1/8> 11

in developing states, even avoiding scrutiny for their lending activities on “confidentiality grounds”²⁴⁴, and inclined to protect their fiduciary interests or substantial investments and thus sacrifice environmental or social goals.²⁴⁵ However, the nagging question remains, what better framework is there for achieving or operationalizing sustainable project financing in developing countries? As it is, these Banks/IFCs have, to a significant extent introduced some semblance of order, transparency and accountability in erstwhile uncharted terrains, that of high net worth, multilateral investments in developing nations. Some of these developing countries may even have undemocratic governments in place but require development assistance for poverty eradication. These Banks thus clarify the parameters of sustainable development to permeate project performance in developing countries. Hence filling up a yawning chasm to drive sustainable development goals via state and non-state actors, until it becomes the norm and practice in petroleum projects execution in developing states.

1.4. Sustainable Development and Oil Exploitation: Integrating Viable Synergies and Managing Trade-offs Across the SDGs

Having clarified the importance of operationalizing sustainable development via: principles, goals, targets, indicators or tools, in the previous section as fundamental means of its implementation at international law and on a national scale, this section considers how far it is possible to argue for goals integration across the SDGs to engender feasible synergies in the oil industry context whilst eliminating likely trade-offs. This section further identifies how sustainable development principles and goals can chart a credible pathway towards achieving the SDGs in the oil industry, by addressing the industry’s peculiar challenges. Undoubtedly, the contemporary oil and gas industry is confronted with irrefutable global challenges and is at

²⁴⁴ D. M. Ong, "From 'International' To 'Transnational' Environmental Law? A Legal Assessment Of The Contribution Of The 'Equator Principles' To International Environmental Law." *Nordic Journal of International Law* 79, no. 1 (2010): 35-74.

²⁴⁵ Joshua A. Lance, *Equator Principles III: A Hard Look at Soft Law*, 17 N.C. Banking Inst. 175 (2013). Available at: <http://scholarship.law.unc.edu/ncbi/vol17/iss1/8>

a critical juncture. These challenges cut across environmental, economic, political or technological demands to tailor exploration and production activities in accordance with wide-ranging issues tied to the sustainable development paradigm.

Moreover, the core of these demands includes environmental protection, (expressed via GHG and CO₂ mitigations, including biodiversity preservation), energy security, typified by reliability of products supplies or their affordability and economic growth. Post the Paris Agreement in 2015, which reiterates the imperative of the transition into a low carbon economy, the industry is placed in the peculiar position of bracing up to current signals regarding divestments of funds from the sector. Due to these daunting challenges, creating a nexus between oil exploitation and sustainable development becomes imperative for developing petro-states as they are more reliant on hydrocarbon resources for driving their development agendas.

Certainly, the petroleum industry contributes to sustainable development in multiple ways by creating synergies across goals like poverty eradication via direct and indirect employment generation, energy security, economic growth through the state's generation of substantial tax incomes and other revenues, including prompting technological advancement and innovation from more advanced economies. However, the petroleum industry's massive potential to positively or adversely impact on broad ranging factors articulated by the SDGs, traversing economic growth, ecosystems management and protection including social development makes it a topical aspect of the sustainable development discourse, with the obvious challenge being, how to generate more synergies across the SDGs rather than trade-offs.

Similarly, the pursuit of SDGs such as goal 14, affecting sustainable use of oceans, or goal 15 on terrestrial ecosystems, halting of deforestation and ensuring sustainable consumption directly and positively impacts goal 13, on forestalling climate change and its dire implications.

Nevertheless, the causal links between energy generation via fossil fuels use and climate change makes it a nagging issue requiring the need for targeting its amelioration via the targets and indicators of SDG 13, which stipulates the integration of climate change measures into national policies, strategies and planning.²⁴⁶ More so, the ability of climate change or its effects to severely heighten inequality or aggravate inequities against the poor or disadvantaged cannot be cursorily dismissed as this directly impacts upon the attainment of the SDGs. The world's poor and vulnerable are most susceptible to climate change and have minimal resistance or adaptive capacity to cushion the shocks and harsh effects.²⁴⁷ Some of these harsh effects range from the exacerbation of hunger, poverty, or inequalities between people and across countries to the impairment of health and well-being goals.

Thus, the need to effectively incorporate climate action plans into petroleum development or projects planning as part of national policies will serve to anticipate or put in place adaptive or mitigative measures to counter its debilitating effects whilst impacting positively on several goals. Similarly, a failure of integration or effective management efforts to tackle goals 14-15, affecting the sustainable use of natural resources, aquatic or terrestrial eco-systems and biodiversity during petroleum exploitation not only poses threats to food security but can severely impact SDG16 relating to peaceful societies and regional stability. This is quite evident from examples of oil induced conflict in Nigeria's Niger-Delta²⁴⁸, Angola's Cabinda region, or East and South Yemen.²⁴⁹

²⁴⁶ The burning of fossil fuels produces around 21.3 billion tons of carbon dioxide (CO₂) per year. Carbon dioxide is a greenhouse gas that increases radiative forcing and contributes to global warming.

²⁴⁷ S. Hallegatte, L Bonzanigo, M. Fay, et. al. "Shock Waves: Managing the Impacts of Climate Change on Poverty. Climate Change and Development; Washington, DC: World Bank. Integrate SDG1 into core business Increase access to energy. (2016)

²⁴⁸ Obi, Cyril. "Nigeria's Niger Delta: Understanding the complex drivers of violent oil-related conflict." *Africa Development* 34, no. 2 (2009).

²⁴⁹ Ross, Michael L. *The oil curse: how petroleum wealth shapes the development of nations*. Princeton University Press, 2012.

Also following from previous arguments, countering the challenges regarding the SDGs actualization anchor heavily on local, national and international collaboration, including broad-based expert and NGO participation. More so, this interaction between state, industry and community objectives with the SDGs allows for not just short, but medium to long-term collaboration to foster economic and social sustainability, including a green oil industry.²⁵⁰ The SDGs in this regard, basically improve on the efforts of the MDGs which were heavily dependent on mostly state actors for their implementation. The SDGs tactically modify the erstwhile states-focused approach to sustainability, to act as a value-triggering means of operationalizing sustainable development of the petroleum sector, via a more expansive network of actors, including a wide-range of local and international participants who can contribute to relevant spheres of oil sector growth to trigger a multi-stakeholder involvement which leaves no one behind.²⁵¹

Notwithstanding the considerable benefits or synergies derivable across the SDGs during oil exploitation, the issue of trade-offs in the sustainability discourse or in the oil industry remains inevitable. Trade-offs therefore come into play in the sustainability discourse when a juxtaposition of positives or negatives is required in a selection amongst competing options and outcomes. Invariably, positive gains with respect to some goals will be preferred at the expense of other SDGs preceding the implementation of a development decision.²⁵² Undoubtedly, the oil industry has been the precursor of negative externalities and trade-offs.²⁵³

²⁵⁰ "Getting Started with the Sustainable Development Goals: A Guide for Stakeholders," UN Sustainable Development Solutions Network (December 2015). 5 "Insurance 2030: Harnessing Insurance for Sustainable Development," Inquiry-PSI Working Paper 15/01 (June 2015); "SDG Industry Matrix," UN Global Compact and KPMG International (September 2015).

²⁵¹ See, UNDP and International Finance Corporation, "Mapping the Oil and Gas industry to the Sustainable Development Goals: An Atlas" Available at: <http://www.ipieca.org/media/3093/mappingogtosdgatlaslr2017.pdf> Accessed at 15th March 2018.

²⁵² Morrison-Saunders, Angus, and Jenny Pope. "Conceptualising and managing trade-offs in sustainability assessment." Environmental Impact Assessment Review 38 (2013): 54-63.

²⁵³ See, Ross, Michael L. *The oil curse: how petroleum wealth shapes the development of nations*. Princeton University Press, 2012.

Evidently, the trade-offs and sustainability dilemmas from oil industry operations, range from adverse environmental footprint, carbon trails or contrary climate impacts and social challenges. Although these problems have triggered calls for decarbonization, the need to maintain global energy security, as advocated by SDG 7, intensifies the necessity of more impactful solutions in the industry to forestall global or regional energy crises and unsustainable development.²⁵⁴ A case of multiple trade-offs is even more glaring where petro-rich developing states are concerned. This is because petro-states grapple with the prospect of extensive climate change adaptation and mitigations challenges or costs in tandem with urgent development needs.²⁵⁵ This creates a dilemma as to what priority actions to execute with limited funds; continued petroleum exploitation for: poverty eradication, energy security which in turn impacts food security, health, sustainable cities, economic growth or moderate and progressive steps towards climate change mitigations? This tricky issue is subsequently considered, as it weighs heavily on petroleum reliant developing states in their quest for sustainable development.

1.4.1. Sustainable Development and Petroleum Exploitation: Synergies with Climate Action Indicators

In furtherance of the preceding issues relating to integration of synergies and trade-offs during petroleum exploitation, especially as it impacts on developing states, this subsection considers steps towards achieving goal 13 relating to climate action. Indeed, a core aspect of operationalizing and reconciling sustainable development with petroleum exploitation relates to the area of climate action as articulated by goal 13 of the SDGs. Moreover, the global

²⁵⁴ Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all Also target, 7.1 By 2030, ensure universal access to affordable, reliable and modern energy services.

²⁵⁵ See, Okereke, Chukwumerije, Bettina Wittneben, and Frances Bowen. "Climate change: Challenging business, transforming politics." *Business & Society* 51, no. 1 (2012): 7-30. See also, Pachauri, Rajendra K., and Andy Reisinger. "IPCC fourth assessment report." *IPCC*, Geneva (2007).

indicator framework for sustainable development stresses the need to “Integrate climate change measures into national policies, strategies and planning”.²⁵⁶ It further clarifies that countries should communicate the establishment or operationalization of integrated policies, strategies or plans which increase their ability to adapt to the adverse impacts of climate change, foster climate resilience, low emissions, albeit in a manner that does not threaten food production.²⁵⁷ Thus, concrete steps towards goal 13 envisages that states, especially petroleum producers, in view of the propensity for CO₂ emissions from the oil industry should have specific national plans and strategies towards climate action and mitigations.

Moreover, Climate action comprises: climate mitigation, climate adaptation, carbon neutrality or decarbonization. Also, Climate mitigation is considered any action taken to permanently eliminate or reduce the long-term risk and hazards of climate change to human life or property.²⁵⁸ Whereas, climate adaptation refers to the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damage, to take advantage of opportunities, or to cope with the consequences.²⁵⁹ On the other hand, Carbon neutrality entails the eradication of carbon or CO₂ emitting energy sources. It also means eliminating the annual zero net anthropogenic (human caused or influenced) CO₂ emissions by stated timelines or dates. Thus, implying that every ton of anthropogenic CO₂ emitted is compensated with an equivalent amount of CO₂ removed (e.g. via carbon sequestration), or decarbonization. These possible steps towards climate action thus rely heavily on states’

²⁵⁶ See Goal 13 of the SDGs, Targets 13.2 Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2)

²⁵⁷ See, Goal 13, Indicator, 13.2.1. Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2)

²⁵⁸ See, Intergovernmental Panel on Climate Change (IPCC), 4th. Report. Available at: <http://www.global-greenhousewarming.com/IPCC-4th-Report-Mitigation-of-Climate-Change.html> Accessed, March 20, 2018.

²⁵⁹ See, Intergovernmental Panel on Climate Change (IPCC), 4th. Report. A successful adaptation can reduce vulnerability by building on and strengthening existing coping strategies. Available at: <http://www.global-greenhouse-warming.com/IPCC-4th-Report-Mitigation-of-Climate-Change.html> Accessed, March 20, 2018.

adaptive capacity which is indicative of the potential to adjust in order to minimize negative impacts and maximize any benefits from changes in climate.²⁶⁰

Even though it might appear puzzling that a discussion regarding a sustainable oil industry accommodates the issue of decarbonization, as they may be considered antithetical terms. However, as earlier clarified, the SDGs are interconnected. The positive achievements in a green oil industry ultimately impacts climate change adaptation and mitigations holistically, whilst tackling inequality across states, especially in the interests of developing states, small island states and of course oil dependent developing states, cumbered with the task of poverty eradication, food security, or other significant development challenges. Furthermore, the significance of the UNFCCC and accompanying Protocols such as the Paris Agreement has likewise been to target departures from fossil fuel usage by 2050.²⁶¹

Following from these objectives, the Paris Agreement thus sets out a universal framework to ‘strengthen global response to the threat of climate change’²⁶² whilst proposing measures towards climate change mitigation and adaptation. Undeniably, these scenarios tending towards decarbonization raise obvious implications regarding the long-term sustainability of petroleum exploitation in oil producing states.²⁶³ These actions automatically imply more risks of trade-offs between climate responses and broader SD goals.²⁶⁴ Reason being that, such climate responses which include a departure from carbon emitting fuels or energy sources to

²⁶⁰ See, Intergovernmental Panel on Climate Change (IPCC), 4th. Report. A successful adaptation can reduce vulnerability by building on and strengthening existing coping strategies. Available at: <http://www.global-greenhouse-warming.com/IPCC-4th-Report-Mitigation-of-Climate-Change.html> Accessed, March 20, 2018.

²⁶¹ See, Khan, Sabaa Ahmad. "Aligning Transnational Climate Action with International Climate Governance: The Road from Paris." *Review Of European Comparative & International Environmental Law* 25, no. 2 (2016): 248-260. See also, European Commission Energy Roadmap 2050, available at: <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2050-energy-strategy> Accessed at 10 June 2017

²⁶² See Article 2 of the Paris Agreement (COP 21, Paris, 30 November – 11 December 2015). Available at: <https://sustainabledevelopment.un.org/frameworks/parisagreement> Accessed at; 10 June 2017.

²⁶³ See, Address of OPEC Secretary General, HE Abdalla Salem El-Badri, at the UN Climate Change Conference (COP19/CMP9), Warsaw, Poland, 22 November 2013.

²⁶⁴ “SDG Compass: The guide for business action on the SDGs,” GRI, UN Global Compact and World Business Council for Sustainable Development (2016).

expedite peaking of global emissions,²⁶⁵ can adversely affect energy security, ultimately attenuating goal 7 regarding access to affordable energy, with its accompanying distributional effects. More so, the prohibitive costs of extensive climate responses, especially for developing states, entail diverting scarce resources from poverty eradication, health, social welfare and indeed other developmental priorities like employment creation, resilient infrastructure and sustainable cities.²⁶⁶

Similarly, on the extreme side, deep decarbonization climate responses could become antithetical to growth whilst imposing development limitations on under-developed states as these countries currently lack the political, economic, technological and other platforms for handling carbon departure without exacerbating poverty or impairing food and energy security, which unfortunately is contrary to the aims of Goal 13 and its accompanying indicators.²⁶⁷ In order to forestall such a scenario of food and energy poverty and its attendant challenges in developing states, Articles 2.2 and 4.4 of the Paris Agreement propose the implementation of the Agreement in accordance with the ‘principle of common but differentiated responsibilities’ which applies to states ‘in the light of different national circumstances’ and respective capabilities.²⁶⁸

²⁶⁵ Peaking Emissions refers to when global emissions reach a specific maximum level by a specific date before subsequently declining. “Pathways to deep decarbonization,” Deep Decarbonization Pathways Project (September 2015); “More energy, lower emissions: Catalyzing practical action on climate change,” Oil and Gas Climate Initiative (October 2015); “A post-Paris overview and analysis of BP’s climate reporting,” Share-Action (April 2016); “The Heat is On,” Critical Resource (November 2015). 133 “Paris Agreement,” FCCC/CP/2015/L.9/Rev.1, Art. 7.9. 134 “Paris Agreement,” FCCC/CP/2015/L.9/Rev.1, Art. 4.

²⁶⁶ Fleurbae M., S. Kartha, S. Bolwig, Y. L. Chee, et.al, “Sustainable Development and Equity. In: Climate Change 2014: Mitigation of Climate Change”. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Edenhofer, O., R. Pichs-Madruga, and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

²⁶⁷ See, Goal 13, Indicator, 13.2.1. Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2).

²⁶⁸ See Paris Agreement (COP 21, Paris, 30 November – 11 December 2015). Available at: <https://sustainabledevelopment.un.org/frameworks/parisagreement> Accessed at; 10 June 2017. Also see, the later section on Equity for more information on the CBDR principle.

The Common but Differentiated Responsibility (CBDR) principle interlinks or equates higher levels of development to global environmental challenges and increased contribution to the dilapidation of global environmental resources which encompass: atmosphere, water or land. CBDR proposes appropriate distribution of responsibility. It demands that developed states which enjoyed the liberty of developing with scant environmental restrictions over time, be accorded a greater share of the remedial responsibility.²⁶⁹ Similarly, the UNFCCC provides, ‘parties should act to protect the climate system “on the basis of equality and in accordance with their common but differentiated responsibilities and respective capabilities”’.²⁷⁰ Likewise, differential responsibility in climate action which is articulated by the Kyoto Protocol and recognized by SDG 13 on climate action, essentially maintains substantive equality between developing and developed States, to optimize efforts at securing the gradual compliance of developing state parties.

Thus “grace periods” or delayed or less stringent implementation of treaty commitments are allowed in favour of developing states.²⁷¹ The Kyoto Protocol also makes a distinction between proposed goals for developed and developing states by requiring “developed countries to reduce their emissions while developing countries only need to report their emissions.”²⁷²

²⁶⁹ See, Principle 7, Rio Declaration 1992.

²⁷⁰ UNFCCC, *supra* note 7, art. 3.1 (“The Parties should protect the climate system . . . on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead. . .”).

²⁷¹ See UNFCCC, *supra* note 7, arts. 4.4, 4.5 (emphasizing that developed country Parties shall assist “developing country Parties . . . in meeting costs of adaptation” to the adverse effects of climate change, and that developed countries will “take all practicable steps to promote, facilitate and finance . . . the transfer of, or access to, environmentally sound technologies and know-how to . . . developing country Parties”).

²⁷¹ See United Nations Framework Convention on Climate Change, Kyoto Protocol, http://unfccc.int/kyoto_protocol/items/3145.php (last visited Mar. 19, 2016) (noting that while the UNFCCC encourages developed countries to reduce GHG emissions, the Kyoto Protocol actually committed them to reduction targets). 37 See United Nations Framework Convention on Climate Change, Kyoto Protocol Status of Ratification, http://unfccc.int/files/kyoto_protocol/status_of_ratification/application/pdf/kp_ratification_20091203.pdf

²⁷² See, distinction between Annex 1 and non- Annex1 or Annex II parties. Kyoto Protocol to the United Nations Framework Convention on Climate Change, art. 3, Dec. 11, 1997, 37 I.L.M. 22 (1998) (requiring that only the “Parties included in Annex I shall . . . ensure that their aggregate [GHG] emissions . . . do not exceed their assigned amounts,”

Notwithstanding CBDR's attractiveness to developing states it has been criticized on grounds of being an “outdated principle”²⁷³ which fails to address contemporary challenges or changing realities of parties.²⁷⁴ It is however argued that, CBDR remains a lifeline for developing petro-states to plan and optimize poverty eradication efforts, including the ability to recoup the considerable expertise, technology or funds required to drive a low carbon economy and optimize mitigation or adaptation efforts. Whilst concurring with Kopela that “differentiation” or differential treatment of states should not be self-serving,²⁷⁵ it is further advocated that, CBDR yet provides a platform for achieving fairer and equitable solutions to climate change problems as it pursues and indorses synergies, collaboration and reconciliation of principles to optimize the sustainable development goals in petro-states.

Likewise, a commitment to urgent oil sector reforms predicates the need to holistically tackle goal 8 relating to economic growth in the oil industry simultaneously with goal 13 relating to climate action. This is because, the significant environmental risks posed by Green House Gas (GHG) emissions and the need to mitigate climate change by stabilizing atmospheric temperatures to pre-industrial levels of 1.5°-2°C, has raised considerable support towards a carbon neutral future or a low carbon economy. As a result, petro-states in the long-run must promote awareness of climate risks, invest in alternatives and take practical steps towards policy and national planning to diversify their economies and emerge from petro-dependence as part of adaptation efforts envisaged by Goal 13 and its targets. However, in the interim, it is re-iterated that for developing states or non-Annex 1 countries²⁷⁶ to the Kyoto protocol,

²⁷³ See, US Submission on Elements of the 2015 Agreement at ADP <http://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/u.s._submission_on_elements_of_the_2105_agreement.pdf>.

²⁷⁴ See, Mary J. Bortscheller, “Equitable But Ineffective: How The Principle Of Common But Differentiated Responsibilities Hobbles The Global Fight Against Climate Change.” Sustainable Development Law & Policy, Spring 2010, 49-53, 65-68.

²⁷⁵ See, Sophia Kopela, "Climate Change, Regime Interaction, and the Principle of Common but Differentiated Responsibility: The Experience of the International Maritime Organization." Yearbook of International Environmental Law 24, no. 1 (2014): 70-101.

²⁷⁶ See, Kyoto Protocol (list of non-Annex 1 countries) available at: http://unfccc.int/parties_and_observers/parties/non_annex_1/items/2833.php . See also Art. 2 Paris Agreement 1/COP/21;

especially those particularly vulnerable to the severe economic costs and implications of decarbonization²⁷⁷, the over-riding priorities as echoed by the Paris Agreement and the SDGs remain poverty eradication, food security and provision of basic needs to citizens.²⁷⁸

Moreover, as much as it is one thing to speak of synergies between goals 8, affecting economic growth in the oil industry and environmental protection in terms of climate action (goal 13), it is another matter altogether to achieve workable synergies that can inter-link climate responses to other SD goals to achieve sustainable development.²⁷⁹ However, such examples are becoming more evident through innovation in the oil industry. One example of such effective synergy within the oil industry and its impact on multiple goals was that of the Lead Campaign Initiative.²⁸⁰ This initiative sought to eliminate the use of lead in petroleum products in over 100 developing countries. The campaign involved a collaboration between governments and oil producers. Its positive impacts ranged from diminished atmospheric pollution levels, lowered GHG emissions or ozone impairing substances, which minimized climate impacts, increased respiratory or health benefits from reduced urban air pollution and ultimately ensured the elimination of lead-related health expenses on household incomes.

However, certain unavoidable trade-offs relating to the implementation of this initiative included, the phasing out of vehicles or equipment reliant on leaded fuels. This phasing-out

See, Paris Agreement 1/CP/21. Nigeria signed the Paris Agreement on 22 September 2016, ratification and acceptance of the treaty was on 16 May 2017 and entry into force of the treaty occurred on 15 June 2017. Available at: http://unfccc.int/paris_agreement/items/9444.php, Accessed on 10 June 2017

²⁷⁷ See, Alexandra S Wawryk “Adoption of International Environmental Standards by Transnational Oil Companies: Reducing the Impact of Oil Operations in Emerging Economies”, Journal of Energy & Natural Resources Law, (2002) 20:4, 402-434, DOI: 10.1080/02646811.2002.11433308 Available at: <https://doi.org/10.1080/02646811.2002.11433308>
‘Emerging market systems’ hold the majority of the world’s proved oil reserves, and account for the majority of the world’s production of crude oil.

²⁷⁸ See, UNGA. Res. A/70/L. “Transforming our world: the 2030 Agenda for Sustainable Development” Available at: <http://www.un.org/sustainabledevelopment/development-agenda/> Accessed at: 17 June 2017. See also, Article 2 (1) (a) of the Paris Agreement (COP 21, Paris, 30 November – 11 December 2015). Available at: <https://sustainabledevelopment.un.org/frameworks/parisagreement> Accessed at: 10 June 2017.

²⁷⁹ See, UNDP and International Finance Corporation, “Mapping the Oil and Gas industry to the Sustainable Development Goals: An Atlas” Available at: <http://www.ipieca.org/media/3093/mappingoftosdgatlaslr2017.pdf> Accessed at 15th March 2018

²⁸⁰ Lead phase-out: Eliminating lead through partnership,” IPIECA and OGP. 10 Peter Tsai and Thomas Hatfield, “Global Benefits From the Phaseout of Leaded Fuel,” Journal of Environmental Health Vol. 74, No. 5 (5 December 2011) 11.

process of lead reliant machinery of course impacted heavily on the poor. Even though in the short term, the initiative appeared to exacerbate poverty, the medium or long-term environmental and social benefits of the initiative far outweighed the initial drawbacks to engender sustainable development.

1.4.2. Oil Industry Sustainability: Integrating the Environmental Protection Pillar

Following from earlier sections regarding the indivisibility of the mutually re-enforcing pillars of sustainable development, entrenched in the integration principle and the exigency of synergies across the SDGs during oil exploitation, this section appraises the utility of environmental protection regulations for operationalizing sustainable development in the oil industry. Basically, environmentally protective regulations as advocated by Agenda 21, the SDGs, including the UNEP/IE Guidelines for petroleum exploitation are vital for a sustainable petroleum industry.²⁸¹ This is because they more clearly delineate areas that enhance eco-systems protection during oil exploitation in developing countries, which tend to have less comprehensive and up to date environmentally friendly regulations.

More so, these environmental regulations effectively pose the parameters that should be adhered to by petroleum producing states to specifically impact the environment media comprising land, air, water and biodiversity during oil and gas exploitation. The core of these environmental regulations for the oil industry encompass substantive rules and prohibitive measures against hazardous waste accumulation, atmospheric, land and water pollution to procedural measures comprised of regulations protecting biodiversity, conducting of

²⁸¹ See, Parts IV-V, Regulatory Framework and Environmental Management, (23-29), Joint E & P Forum /UNEP “Environmental Management In Oil And Gas Exploration And Production” Available at: <http://wedocs.unep.org/bitstream/handle/20.500.11822/8275-Environmental%20Management%20in%20Oil%20%26%20Gas%20Exploration%20%26%20Production-19972123.pdf?sequence=2&isAllowed=y> Accessed 06 April 2016

environmental impacts assessments (SEAs and EIAs)²⁸² before, during petroleum exploitation and at its concluding stages.²⁸³

1.4.2.1. Environmental Assessment Regulations: Tools of Environmental Protection for Oil Industry Sustainability?

In harmonizing with the earlier section regarding the utility of environmental regulations for operationalizing sustainable development in the petroleum industry, this sub-section extends the argument by highlighting the relevance of environmental impacts assessments (EIAs) as international law obligations²⁸⁴ and Strategic Environmental Assessments (SEAs) which remain crucial tools of environmental protection in the oil industry context. An impact assessment can be defined as, “the process of identifying the future consequences of a current or proposed action”.²⁸⁵ Indeed, the International Association of Impact Assessment identifies the objectives of an impact assessment as a means of providing information for decision-making, promoting transparency and participation of affected populations in decision-making. An EIA is thus a credible governance and regulatory tool that involves identifying procedures for mitigation of, or compensation for negative consequences arising from a proposed activity, as well as contributing to sound sustainable development.²⁸⁶ An environmental impact assessment accordingly relates to the need to identify and predict the effect on the environment and on human health or well-being, the impacts of legislative proposals, policies, programmes,

²⁸² To be discussed in the following sub-section.

²⁸³ Principle 17, Rio Declaration,

²⁸⁴ See, *Pulp Mills Case (Provisional Measures) (Argentina v. Uruguay)* ICJ Reports 2006. See also, ILC, 2001 Articles on Transboundary Harm, Arts. 1, 2(a), 7; 1987 UNEP Goals and Principles of Environmental Impact Assessment, Art. 206; 1991 Convention on Transboundary EIA, Art. 2(3); 1992

²⁸⁵ International Association of Impact Assessment. What is Impact Assessment? (coordinated by Júlio de Jesus, 2009). Available at <http://www.iaia.org/publications-resources/downloadable-publications.aspx>. See also, Gillian MacNaughton, Human Rights Impact Assessment: A Method for Healthy Policymaking Health and Human Rights 17/1 June 11, 2015

²⁸⁶ Ibid

projects and operational procedures and to interpret and communicate such information.²⁸⁷ An EIA is thus stressed as fundamental to any regulatory system which seeks to identify environmental risk, integrate environmental concerns into development projects and expedite sustainable development.²⁸⁸

To further drive the point of EIAs as relevant environmental protection tools for oil industry sustainability, Principle 17 of the Rio Declaration articulates the necessity of the EIA, as a national instrument, to be undertaken for proposed activities that are likely to have significant adverse impact on the environment.²⁸⁹ Similarly, other international albeit regional instruments like the Espoo Convention stipulate the need for EIAs for development projects with associated environmental risks.²⁹⁰ Likewise, oil industry specific guidelines such as the UNEP/IE Guidelines for the Oil and Gas industry mandates the need for EIAs in respect of all oil and gas development projects.²⁹¹ At this juncture, it is worth mentioning that there are EIA variations. These include: "procedural EIAs" or EIAs which pre-suppose that the findings will influence decisions, but are not binding on decision-makers, while others such as the "substantive EIAs" require decision-makers to adopt measures consistent with the findings and recommendations of the EIA concluded.²⁹²

Moreover, there are EIAs designated as "mitigation EIAs", which focus on ascertaining mitigation measures to minimize environmental damage, and "prevention or sustainability

²⁸⁷J. Holder, "Environmental Assessment: The Regulation of Decision Making", (2004), Oxford University Press, New York; For a comparative discussion of the elements of various domestic EIA systems, see Christopher Wood *Environmental Impact Assessment: A Comparative Review* (2 ed, Prentice Hall, Harlow, 2002).

²⁸⁸ Alan Boyle, Developments in International Law of EIA and their Relation to the Espoo Convention,

²⁸⁹ See, Principle 17 of the Rio Declaration.

²⁹⁰ The Convention on Environmental Impact Assessment in a Transboundary Context (aka the Espoo Convention) is a United Nations Economic Commission for Europe (UNECE) convention signed in 1991, it entered into force in 1997.

²⁹¹ See, Part 2, Section iv, at 23-25, Joint E & P Forum /UNEP "Environmental Management In Oil And Gas Exploration And Production, the UNEP Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach. ISBN: 92-807-2429-0. Available at: <https://unep.ch/etu/publications/textonubr.pdf>

²⁹²Theo Hacking and Peter Guthrie, A Framework for Clarifying The Meaning Of Triple Bottom-Line, Integrated, And Sustainability Assessment, 28:2-3 Envtl. Impact Assess Rev. 73 (2008). Dinah Shelton, The Environmental Jurisprudence of the European Court of Human Rights, 2003-2004, in The Global Community: Yearbook of International Law and Jurisprudence 293-303. Dobbs Ferry, NY: Oceania, 2004.

EIA's", which focus on prohibiting projects involving environmental harm.²⁹³ Also of relevance is the Strategic Environmental Assessments (SEAs) which assess the environmental impacts of policies or programs, rather than specific development projects.²⁹⁴ Clearly, the essence of identifying these different EIAs is to highlight their significance as viable preventive or precautionary measures and how they can be integrated in a holistic fashion to achieve a green petroleum industry and sustainable development.

More importantly, the EIA is now considered a tool which aids informed decision making.²⁹⁵ It is also expected to span though the lifetime of proposed activities, as was stated in the celebrated *Pulp Mills Case*.²⁹⁶ where the Court held that, "once operations have started and, where necessary, throughout the life of the project, continuous monitoring of its effects on the environment shall be undertaken."²⁹⁷ This ICJ decision has been hailed for comprehensively dealing with the issue of EIA as a procedural aspect of sustainable development as well as for its significance in a trans-boundary context.²⁹⁸

Furthermore, noteworthy progress has been made regarding the design, scope and governance of EIAs in developing countries towards oil and gas projects, as part of international collaboration advocated by SDG 17 for strengthening national institutions and means of the implementation of sustainable development in states. Thus, multi-stakeholder partnerships as earlier identified, comprising funding institutions like the World Bank, Equator Banks, including the UNEP impose environmental protection conditionality in multi-lateral

²⁹³ Ibid

²⁹⁴ P. Hunt and G. MacNaughton, Impact assessments, poverty and human rights: A case study using the right to the highest attainable standard of health, Health and Human Rights Working Paper Series No. 6 (Geneva: World Health Organization and UNESCO, 2006), p. 31

²⁹⁵ Christopher Wood Environmental Impact Assessment: A Comparative Review (2 ed, Prentice Hall, Harlow, 2002).

²⁹⁶ *Pulp Mills Case (Provisional Measures) (Argentina v. Uruguay)* ICJ Reports 2006. See also, ILC, 2001 Articles on Transboundary Harm, Arts. 1, 2(a), 7; 1987 UNEP Goals and Principles of Environmental Impact Assessment, Art. 206; 1991 Convention on Transboundary EIA, Art. 2(3); 1992

²⁹⁷ See, *Case Concerning Pulp Mills on The River Uruguay (Argentina v. Uruguay)*, 2010 I.C.J. 60 (April 20). And, Alan, Boyle. "Pulp Mills Case: A Commentary" University of Edinburgh. (2010)

²⁹⁸ *Pulp Mills Case* (supra)

agreements as part of funding or development arrangements to intensify and optimize EIAs and environmental protection in petro-states.²⁹⁹ The environmental guidelines of these international institutions reflect international best practices and UNEP/IE standards.³⁰⁰ They share similar patterns of project classification to ensure that EIAs remain systemized as orderly and efficient tools for securing environmental protection in the oil industry. Thus, projects are classified to identify high to medium risk projects as a means of ascertaining the level of screening required for such projects to trigger precautionary or mitigating measures.³⁰¹

Accordingly, Category “A” projects are those with potentially high magnitude, adverse environmental and/or social impacts with diverse, irreversible or unprecedented impacts and are distinguished from Category “B” projects with limited adverse environmental and/or social impacts that may be few or generally site specific but largely irreversible and addressed via mitigation measures. There are also the Category “C” projects with minimal or no environmental impacts. The above categorisations allow for adequate planning efforts to ensure that the high-risk projects typified by Categories A and B require a Social and Environmental Assessment.³⁰² Similarly, the World Bank, Equator Banks and UNEP further promote the sustainable development agenda in developing oil producing states by means of environmental and social policies through ensuring that projects are designed and executed in a manner that evades or mitigates adverse environmental and social impacts via the Environmental, Health, and Safety (EHS) Guidelines which are technical reference documents with general and

²⁹⁹ See World Bank Best Available Techniques Reference (BREF) Document for the Refining of Mineral Oil and Gas (2015). Environmental, Health, And Safety Guidelines Petroleum Refining November 17, 2016 See also, F.I. Shihata, *Issues of "Governance" in Borrowing Members-The Extent of Their Relevance Under the Bank's Articles of Agreements, in WORLD BANK: LEGAL PAPERS*, Martinus Nijhoff eds. ch. 10, 280, 2000.

³⁰⁰ See, the UNEP Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach. ISBN: 92-807-2429-0. Available at: <https://unep.ch/etu/publications/textonubr.pdf>

³⁰¹ See, S.2 Part iv, 23-25, Joint E & P Forum /UNEP “Environmental Management In Oil And Gas Exploration And Production, the UNEP Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach. ISBN: 92-807-2429-0.

³⁰² See, the UNEP Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach. ISBN: 92-807-2429-0. Available at: <https://unep.ch/etu/publications/textonubr.pdf> See also, O'Sullivan, Niamh, and Brendan O'Dwyer. "Stakeholder perspectives on a financial sector legitimization process: The case of NGOs and the Equator Principles." *Accounting, Auditing & Accountability Journal* 22, no. 4 (2009): 553-587.

industry-specific examples of Good International Industry Practice (GIIP).³⁰³ Any application of the EHS guidelines to existing oil and gas facilities often requires the establishment of site-specific targets, with appropriate timelines for completion.

In a nutshell, these finance/development institutions including the UNEP guidelines are customized to the hazards or risks for each project based on expert advice in relation to environmental assessments reports. These reports accommodate site-specific variables covering: host country context and the assimilative capacity of the environment. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less strict levels or measures than those provided in these EHS Guidelines are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is required as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment. The EHS Guidelines for Petroleum Refining also tackle environmental issues related to petroleum refining, emissions, handling and disposal of hazardous materials and wastes. The guidelines likewise provide venting and flaring rules, greenhouse gases emissions limitations, including community health and safety.³⁰⁴

Consequently, the EIA for the petroleum industry as stressed by these international partnerships and UNEP/IE guidelines clarify specific rules relating to public participation of the relevant petroleum producing communities.³⁰⁵ This is supported by the ICJ in the Pulp Mills Case, where the court recommended that EIAs should involve public input.³⁰⁶ And similarly

³⁰³ See World Bank Best Available Techniques Reference (BREF) Document for the Refining of Mineral Oil and Gas (2015). Environmental, Health, And Safety Guidelines Petroleum Refining November 17, 2016

³⁰⁴ See, Parts IV-V, Section 2, Joint E & P Forum /UNEP “Environmental Management In Oil And Gas Exploration And Production. At, 23-25 and 27-29.

³⁰⁵ Public participation to be discussed in later subsections

³⁰⁶ *Pulp Mills Case* (supra) paras. 215-9

buttressed by the Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) which specifically recognises public participation as an aspect of the EIA.³⁰⁷ Also, a documentation of the conclusions or results of the impact assessment or findings which can be subject to judicial review must be presented to the administrative or petroleum regulatory agency. These reports may also propose measures to adjust the anticipated impacts from the petroleum exploitation process to acceptable levels or to investigate new technological solutions that would be less disruptive to the environment and local communities.³⁰⁸

Ultimately, the environmental assessments policies promoted by the UNEP/IE guidelines and the World Bank standards drive environmental protection goals by stipulations requiring oil producers to establish and maintain a collection and evaluation of adequate and prompt information systems or data bank towards the environmental, health and safety impacts of oil and gas activities while utilizing measurable objectives and where necessary, aim at improved environmental performance, including prudent petroleum resource use.³⁰⁹ These are advocated as essential aspects of environmental protection which must be targeted, while working closely with national policies and international environmental commitments towards sustainable development. These guidelines altogether drive environmental goals by directly co-opting IOCs participation as at the end of the day, the IOCs remain the key players in the oil and gas terrain, who must practicalize the core industry actions that engender eco-system sustainability or endanger the environment and society. Oil producers are thus prompted to ensure that EIAs

³⁰⁷ Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus, 1998) hereinafter denoted as the Arhus Convention.

³⁰⁸ See, the UNEP Environmental Impact Assessment and Strategic Environmental Assessment: Towards an Integrated Approach. ISBN: 92-807-2429-0. UNEP/IE Guidelines for the Oil and Gas Industry.

³⁰⁹ See, Part V. S.1 – S.6 “Environment” in OECD Guidelines for Multinational Enterprises. Available at: <http://www.oecd.org/investment/mne/1922428.pdf>

and SEAs reflect regular monitoring and verification of progress towards the environment, health and safety targets proposed in the SDGs.

Moreover, the OECD Guidelines are also instructive because the bulk of the IOCs operational in developing states like Nigeria, have their parent companies registered in OECD states or OECD adhering countries. The OECD Guidelines goes further to advocate the precautionary approach towards environmental protection in IOCs operational locations. Thus, IOCs are directed to avoid or mitigate the foreseeable environmental, health, and safety-related impacts of their activities; observe the precautionary principle by proactively evading serious or irreversible environmental damage resulting from their activities, whilst maintaining contingency plans for preventing, mitigating, and controlling serious environmental and health damage from their activities.³¹⁰ It is however clarified that, whereas the World Bank, Equator Banks or development agencies rely on environmental conditionality clauses within funding agreements to drive environmental protection aims, the OECD Guidelines, rely on the National Contact Points (NCPs) and an Investment Committee.³¹¹ These entities are responsible for effective implementation of the OECD Guidelines.

Each member-country of the OECD is mandated to establish an NCP comprised of experts, whose function is to undertake promotional activities and manage queries or investigations affecting the OECD Guidelines. The NCPs also play a conciliatory role by extending opportunities for discussing and dealing with the issues raised “in specific instances in a manner that is impartial, predictable, equitable and compatible with the principles and

³¹⁰See, Part V, of the OECD Guidelines for Multinational Enterprises. 2011, Available at: <http://www.oecd.org/daf/inv/mne/49744860.pdf>. See, also, Evaristus Oshionebo, The OECD Guidelines for Multinational Enterprises as Mechanisms for Sustainable Development of Natural Resources: Real Solutions or Window Dressing, 17 Lewis & Clark L. Rev. 545 (2013)

³¹¹ OECD Due Diligence Guidance For Responsible Supply Chains Of Minerals From Conflict-Affected And High-Risk Areas (2nd Ed. 2012). Available At: <Http://Www.Oecd.Org/Daf/Inv/Mne/Guidanceedition2.Pdf>. 'OECD GUIDELINES.

standards of the Guidelines".³¹² Thus, the OECD guidelines afford a comprehensive means of tackling environmental goals in the oil industry by co-opting the IOCs and their supply chains including, setting up operational due diligence guidelines for operating in developing states with weak institutions or even in conflict areas. The OECD guidelines therefore strive to ensure that IOCs prioritize environmental sustainability despite oil and gas activity, with or without the host country's commitment to environmental goals. Otherwise, such IOCs are deemed in contravention of the Guidelines, and held accountable based on international standards, the OECD's or indeed their home State's and not the developing country's standards, in a bid to upscale positive efforts towards sustainable development.

1.4.2.2. Atmospheric and Climate Protection Rules as Environmental tools in the Oil Industry

Following from earlier sections on operationalizing the SDGs via environmental protection tools, this sub-section considers the merits of atmospheric and climate protection regulations as vital tools and safeguards of environmental protection in the oil industry. Atmospheric protection regulations are covered by SDG 13 affecting climate action. Moreover, the integration and adoption of environmental regulations against atmospheric pollution as a means of combating climate change from oil exploitation is evidently supported by energy treaties,³¹³ and indeed the OPEC guidelines for member countries.³¹⁴ OPEC members include signatories to treaties aimed at environmental protection as well as international treaties targeted at limiting

³¹² See, Lahra Liberti, "OECD 50th Anniversary: The Updated OECD Guidelines for Multinational Enterprises and the New OECD Recommendation on Due Diligence Guidance for Conflict-Free Mineral Supply Chains, 13 Bus. L. INT'L 35, 36 (2012). 4 OECD Due Diligence Guidance, OECD Guidelines, *supra* note 1, at 68. 2013]

³¹³ For instance, the 1991 Energy Charter Treaty (ECT) is an international agreement which establishes a multilateral framework for cross-border co-operations in the energy industry. Article 19 of the Treaty (Although Nigeria is not a signatory, its provisions are quite instructive.)

³¹⁴ Organisation of Petroleum Exporting Countries, (OPEC) Nigeria is a member of the OPEC. OPEC is a permanent intergovernmental organization of 12 oil-exporting developing nations that coordinates and unifies the petroleum policies of its Member Countries.

harmful emissions.³¹⁵ Signatories and / or members to these instruments are thus expected to comply with their obligations for minimising CO₂ emissions and combatting climate change.³¹⁶

Some atmospheric protective actions entail highly restrictive measures against petroleum exploitation activities that harm or deplete the ozone layer.³¹⁷ These areas thus constitute rallying points requiring regulations and policy coordination for the achievement of a green petroleum industry. Such environmental regulations to curb atmospheric pollution in the oil industry should therefore stipulate specific equipment requirements for the re-use or re-injection of associated gas or atmospheric pollutants, rather than tacitly accepting the release of harmful ozone depleting gases by default in the absence of specific or practical guidelines. This is a more targeted approach to curb emissions from gas flares during oil exploitation as it allows for evaluation and identifies a transparent or verifiable way to optimize compliance with the rules. Moreover, this approach engenders synergies between ecosystem protection and climate action goals whilst interlinking with the aims of sustainable production and consumption articulated by goal 12 of the SDGs.

1.4.3. Sustainable Development in the Oil Industry: Integrating the Economic Growth Pillar

The integration of economic measures with environmental protection and social development strategies by a state in the exploitation of petroleum resources is essential for attaining sustainable development. This is because economic growth tactics accelerate the attainment of sustainable development goals whilst engendering a green economy. The evidence of economic

³¹⁵ OPEC member countries are signatories to The United Nations Framework Convention on Climate Change (1992) Other treaties include; [Copenhagen] Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, Copenhagen, 1992, The 1997 Kyoto Protocol, International Convention on Civil Liability for Oil Pollution Damage, Brussels, 1969 (and the 1976 Protocol) 112

³¹⁶ See, Address of OPEC Secretary General, HE Abdalla Salem El-Badri, at the UN Climate Change Conference (COP19/CMP9), Warsaw, Poland, 22 November 2013.

³¹⁷ Ibid.

growth in relation to petroleum resource use often accompany factors like the level of a state's dependence on petroleum resource incomes or rents for economic development. It also involves the question of how such dependence affects other sectors of the national economy.³¹⁸ Similarly, the Petro-state's growth objectives invariably underscore the extent of economic growth or relapse generated by the petroleum resource income and the proportion of the Gross domestic product (GDP) contribution of such petroleum resources to its National income.

Another economic issue for consideration in petroleum producing states is the level and impact of sectorial imbalances the use of petroleum resources triggers on the state's economic scale.³¹⁹

Tackling the above issues remain vital to achieving sustainable development. Specific regulations and policies to integrate economic objectives in petroleum exploitation to achieve sustainable development comprise budgeting and National Income accounting measures.³²⁰

National income accounting actions entail integrating the value of petroleum resources produced into the Gross Domestic Product (GDP)³²¹ to eliminate wasteful spending of the funds derived from the exploitation of finite petroleum resources. Further measures should incorporate the appropriate taxation systems for state revenue generation³²² and the elimination of rent-seeking policies.³²³ Essentially, rent seeking is denoted by the level of a state's dependence on resource rents and is described as the "rentier state theory"³²⁴. It specifically

³¹⁸ Hossein Mahdavy, "The Pattern and Problems of Economic Development in Rentier States: The Case of Iran", in *Studies in the Economic History of the Middle East*, ed. M.A. Cook (Oxford University Press, Oxford 1970) p. 436

³¹⁹ G. Wurtherman, "Ways of Using the African Oil Boom for Sustainable Development" African Development Bank, Economic Research Working Paper Series, No.84, March 2006.

³²⁰ Jeffrey Davis, Roland Ossowski, James Daniel and Steven Barnett, Stabilisation and Savings Funds for Non-Renewable Resources: Experience and Fiscal Policy Implications (2001), 6.

³²¹ Gross domestic product (GDP) is defined by the Organisation for Economic Co-operation and Development (OECD) as "an aggregate measure of production equal to the sum of the gross values added of all resident, institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the value of their outputs)."

<http://stats.oecd.org/glossary/detail.asp?ID=1163> (retrieved 08/03/2015)

³²² Partha Dasgupta and Geoffrey Heal, Economic Theory and Taxable Resources (1979) 153, 153.

³²³ See, Scott R. Pearson, "Petroleum and the Nigerian Economy" Stanford University Press, Stanford, California (1970), 31, See also, H. Mahdavy, "The Pattern and Problems of Economic Development in Rentier States: The Case of Iran", in *Studies in the Economic History of the Middle East*, ed. M.A. Cook (Oxford University Press, Oxford 1970) p. 436

³²⁴ Anne Krueger, "The Political Economy of the Rent-Seeking Society" (American Economic Review, 1974) 64 (3): 291–303.

involves seeking to increase the State's share of existing economic wealth or economic gains without creating new sources of wealth. Rent-seeking in the oil industry ultimately results in reduced economic efficiency through poor allocation of petroleum resource wealth, reduced actual wealth creation, lost government revenues through inappropriate taxation regulations, increased income inequality and corresponding national decline.³²⁵

Moreover, rent seeking in oil producing states ultimately culminates in a situation where petroleum or mineral rents reduce the necessity of the government to levy domestic taxes, rendering leaders less accountable to citizens and more prone to corruption and patronage politics.³²⁶ Ultimately, sustainable development and integration of economic growth parameters in the petroleum industry advocates, tackling of the salient areas indicative of rent-seeking via, prudent tax and budget mechanisms, whilst maintaining government transparency and accountability to ensure that the optimum benefits from oil exploitation can be harnessed to boost the GDP indicator and sustain economic growth. There is also the proposition to encourage local investors to participate in the oil industry and serve as viable competition to the oil multinationals to eliminate capital flight to other economies.³²⁷

1.4.4. Sustainable Development and Oil Exploitation: Integrating the Social Development Pillar

Petroleum resource exploitation and the associated benefits can only optimize sustainable development goals if the necessary integration of economic growth and environmental protection accommodates social development. The provisions of the Rio Declaration are

³²⁵ C. K. Rowley, "The Political Economy of Rent-Seeking". (Kluwer Academic Publishers, Boston, 1988) at 226.

³²⁶ Beblawi, Hazem Al and Luciani, Giacomo, 1990, *The Rentier State in the Arab World*, in Luciani, G., The Arab State, London, Routledge, p.87-88. See also, Hossein Mahdavy, "The Pattern and Problems of Economic Development in Rentier States: The Case of Iran", in Studies in the Economic History of the Middle East, ed. M.A. Cook (Oxford University Press, Oxford 1970) p. 436

³²⁷ Ole Andreas H Engen, The Development of the Norwegian Petroleum Innovation System: A Historical Overview (2007) TIK Working Paper on Innovation Studies No. 20070605, 45.

illustrative of how social development can be implemented in the exploitation of petroleum resources for sustainable development.³²⁸

1.4.4.1. Access to information, Justice and Public Participation as Social Development Tools

Public consultations and participation are crucial aspects of the social development pillar of sustainable development. Their integration into petroleum regulations are essential for a sustainable oil industry. By direct implication, principle 10, sets out the fundamentals of: access to information, access to justice and public participation as crucial to achieving environmentally benign, sustainable and socially beneficial, policy outcomes.³²⁹

Moreover, goal 16 of the SDGs, reiterates the relevance of public participation, access to information and justice as crucial for institutional and capacity strengthening for sustainable development. In furtherance of this approach, the Aarhus Convention specifically sets out subject areas and other considerations for participation in both national and transnational contexts by virtue of articles: 6, 7 and 8 with elaborations in its annex 1. The convention targets “energy production” which comprises all spheres of hydrocarbon exploitation and production, refining, industry installations, waste management, extraction of petroleum, natural gas and pipelines transportation of petroleum products as requiring participation.³³⁰

Furthermore, the Arhus convention proposes that national laws should also ensure participation during the preparation of plans and programmes with likely impacts on the environment as well as during the preparation, by public authorities, of executive regulations and other generally

³²⁸Principle 10 of the Rio Declaration provides; “Environmental issues are best handled with participation of all concerned citizens, at the relevant level...including public awareness...redress and remedy, shall be provided”.

³²⁹ David Banisar, Sejal Parmar, Lalanath de Silva, and Carole Excell “Moving from Principles To Rights: Rio 2012 And Access to Information, Public Participation, And Justice”

³³⁰ See, Aarhus Convention, Art 6(1)(a). Art 6(1)(b).

applicable legally binding rules that may significantly affect the environment in relation to any proposed activity.³³¹ Likewise, in expediting access rights, it has been recommended that, public access and participation in petroleum matters concerning affected communities be enhanced by discarding undue and prolonged formalities.³³² Other hindrances to public participation like complicated bureaucratic procedures which delay or restrict public access to environmental information should be avoided.³³³ Similarly, the needs of local people who generally lack the financial resources and access to “technical information” to enable meaningful participation should be effectively addressed.³³⁴ Another way of improving public participation in petroleum matters is to avoid the use of culturally alien forms of inquiries, which often include the use of formalistic language, and technical public hearings.³³⁵

Moreover, regarding access to justice for social development, Linn Hambergren, previously of the World Bank Poverty Reduction Group, argues for a broader conception of access. That access to justice should extend beyond random cases to encompass both individual and collective benefits accruing from society’s provision of the best and most equitably delivered justice service it can render.³³⁶ Thus, the social development theme of access to justice straddles: court reforms, legal services, legal aid, information dissemination and education, alternative dispute resolution and public-sector accountability.³³⁷ Likewise, these areas require

³³¹ Although the term “proposed activity” is not defined in the convention according parties the discretion to determine the relevant activity. However, they are bound by the rules and principles of international environmental law and, where relevant, European Community environmental law: V Rodenhoft “The Aarhus Convention and its implications for the ‘institutions’ of the European Community” (2002) 11/3 Review of European Community & International Environmental Law 343 at 347. Aarhus Convention, art 7.

³³² Rune S. Fjellheim “Oil and Gas Exploitation on Arctic Indigenous Peoples’ Territories Human Rights, International Law and Corporate Social Responsibility” 1

³³³ David Ban isar, Sejal Parmar, Lalanath de Silva, and Carole Excell “Moving From Principles To Rights: Rio 2012 And Access to Information, Public Participation, And Justice”

³³⁴ Rune S. Fjellheim “Oil and Gas Exploitation on Arctic Indigenous Peoples’ Territories Human Rights, International Law and Corporate Social Responsibility” 1

³³⁵ O’Faircheallaigh, Making Social Impact Assessment Count: A Negotiation-Based Approach for Indigenous Peoples, Society & Natural Resources, 12: 63 80, 1999, Copyright ©1999 Taylor & Francis.

³³⁶ Linn Hambergren, Envisioning Reform, 2007, p. 289. 6 ‘The use of legal services and related development activities to increase disadvantaged populations’ control over their lives.’ Stephen Golub, ‘Beyond Rule of Law Orthodoxy: The Legal Empowerment Alternative’, 41 Rule of Law Series, Democracy and Rule of Law Project, Carnegie Endowment for International Peace (2003), p. 15..

³³⁷ See, Vivek Maru, “Access to Justice and Legal Empowerment: A Review of World Bank Practice”.

sustainability and continual funding to optimize the aims of sustainable development in the oil industry.

Furthermore, the UN Commission on Legal Empowerment of the Poor identifies justice as a component of legal empowerment which is ‘a process of systemic change through which the poor and excluded become able to use the law, the legal system, and legal services to protect and advance their rights and interests as citizens and economic actors.’³³⁸ Similarly, strategic engagements with governments to challenge poor social policies and environmental choices during petroleum exploitation and the ability to hold both producers and regulators accountable for unsustainable actions, empowers oil-producing communities. These become decisive in achieving the SDGs whilst greening the oil industry.

However, the justice needs of host communities might be varied. They could range from: educational improvements, awareness and sensitization regarding environmental and socially harmful activity like illegal bunkering, access to courts to seek re-dress for environmental harm or losses due to oil pollution, legal aid, etc. Thus, generalizations in the area of justice requirements of oil producing regions could prove inimical to the interests of the poor. Such assumptions can be avoided through strategic and regular engagement with the local oil producing communities to foster the social pillar of sustainable development.

1.4.4.2. Human Rights Impact Assessments as Tools of Social Development for Oil Industry Sustainability

Progressing with discussions on operationalizing sustainable development of the oil industry via requisite social development tools, this sub-section focuses on the efficacy of Human rights impacts assessment (HRIA) as a social development tool. HRIA is herein considered as a social

³³⁸ UN Commission on Legal Empowerment of the Poor, *Making the Law Work for Everyone*, 2008, Vol. 1, p. 3

development tool, and not necessarily under other elements of sustainable development like equity, because human rights encompass: Social, political, cultural, economic, including, environmental rights, hosting the spectrum of rights that are broadly targeted by the social development pillar of sustainable development. Indeed, the integration and performance of HRAs during petroleum exploitation could be more suggestive of a functional approach to enhance social development in oil producing states.

Equally, a scrutiny of HRIA indicates its relevance for fostering not just social rights, but economic, cultural and environmental rights which are inextricably linked to the norms of sustainable development. Ultimately, issues relating to the rights to a healthy and adequate environment, non-discriminatory enjoyment of rights, right to property, right to health, family rights, rights of peoples to freely dispose of their wealth and natural resources, rights of peoples to a satisfactory environment, standard of living, etc.³³⁹ as much as they form core human rights principles, also serve as the interests which engender social development, including equity in the context of sustainable development.³⁴⁰ Accordingly, an assessment of how these human and social rights may be impacted upon, either positively or negatively during petroleum exploitation remains relevant for achieving sustainable development goals in resource rich states.³⁴¹

HRIA, has been defined as “the process of predicting the potential consequences of a proposed policy, programme or project on the enjoyment of human rights.”³⁴² It, is essentially to advise

³³⁹ See Articles 2-24 African Charter on Human Peoples' Rights. See also, the African Commission on Human and Peoples' Rights. *The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria, A, Comm. No. 155/96, 2001. (Ogoniland Case)*

³⁴⁰ See, the Universal Declaration of Human Rights (UDHR)1948, See also, Weiss, Edith Brown, ‘In fairness to future generations’, Environment, (1990) vol. 32, no. 3, Apr., p. 9

³⁴¹ See the, African Commission on Human and Peoples' Rights. *The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria, A, Comm. No. 155/96, 2001. (Ogoniland Case)* See also, Judgment No. ECW/CCJ/JUD/18/12, (December 14, 2012) at paras 15- 121.

³⁴² There is no consensus definition of HRIA presently, but see, Paul Hunt, UN Special Rapporteur on the right to the enjoyment of the highest attainable standard of health, Interim Report to the General Assembly, UN Doc. No. A/62/214 (2007), para. 37.

decision makers and the people likely to be affected by any proposed action, to ensure improvements are made on the proposal and ease potential negative effects whilst increasing positive ones.³⁴³ Essentially, the proposition for the employment of human rights impact assessments (HRIA) to foster social development during petroleum exploitation is predicated on the fact that human rights are not only fostered by state actors but can also be impacted on by non-state actors such as oil producing corporations. Certainly, the oil industry has significant capacity to positively or adversely impact on human rights which directly raises a need for measuring the industry's footprint relating to human rights.

Moreover, the UN Guiding Principles on Business and Human Rights ("Guiding Principles")³⁴⁴ affirm that business enterprises have a responsibility to respect human rights, and that States have a duty to ensure that they do so. The Guiding Principles describe the duty of States as including "appropriate steps to prevent, investigate, punish and redress" human rights abuse "through effective policies, legislation, regulations and adjudication."³⁴⁵ It thus behoves oil producing states to amend and upscale oil industry regulatory framework and policies to engender human rights protection during oil exploitation in accordance with the UN Guiding Principles. Arguably, the HRAs presents such an appropriate forum to prevent or investigate and accordingly redress potential areas that trigger human rights violations, especially as it more directly targets the well-being and concerns of persons or indigenes of oil producing areas.³⁴⁶

³⁴³ Ibid.

³⁴⁴ Special Representative on Business and Human Rights, Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework, unanimously adopted by the United Nations Human Rights Council, Principle 1 U.N. Doc. A/HRC17/31 (June 2011) (by John Ruggie) [hereinafter the "Guiding Principles"].

³⁴⁵ Ibid.

³⁴⁶ See, Paul Hunt, UN Special Rapporteur on the right to the enjoyment of the highest attainable standard of health, Interim Report to the General Assembly, UN Doc. No. A/62/214 (2007), para. 37, paras. 40-41; S. Walker, *The future of human rights impact assessments of trade agreements* (Utrecht: Intersentia, 2009), pp. 30-34; Olivier De Schutter, Report of the Special Rapporteur on the Right to Food: Guiding Principles on Human Rights Impact Assessments of Trade and Investment Agreements, UN Doc. No. A/HRC/19/59/Add.5 (2011), pp. 9-11; EU-UNICEF (NY: UNICEF, 2014), pp. 39-41.

Likewise, an HRIA is required to comply with the Rio Declaration, human rights principles and international human rights standards. HRAs are therefore based on the framework of international human rights law as set out in the Universal Declaration of Human Rights (UDHR),³⁴⁷ the international Covenants on Civil and Political Rights,³⁴⁸ including, International Covenants on Economic, Social and Cultural Rights.³⁴⁹ Similarly, international standards such as the ILO Conventions and Declarations,³⁵⁰ and the OECD Guidelines for Multinational Enterprises,³⁵¹ are instructive in terms of guidance for effective HRAs in the oil industry.

More importantly, these human rights instruments, especially the OECD Guidelines, which as earlier clarified are crucial in terms of the direct application to IOCs which in most cases have their registered headquarters in OECD states or OECD adhering countries. Such a scenario obliges the Home Governments to ensure that the IOC subsidiaries engage in oil exploitation in accordance with international human rights instruments and standards without contravening the Guidelines. Thus, the OECD Guidelines articulate revolutionary steps towards holding businesses accountable for human rights abuses, via extra-territorial application of the Guidelines, whilst ensuring that states are compliant with their due diligence obligations.³⁵² Home States of the IOCs essentially optimize efforts to ensure that these IOCs subsidiaries do

³⁴⁷ Universal Declaration of Human Rights (adopted 10 December 1948 UNGA Res 217 A(III) (UDHR) art 5 of Human Rights.

³⁴⁸ See, International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR).

³⁴⁹ See, The International Covenant on Economic, Social and Cultural Rights which entered into force on 3 January 1976. As at 30 September 1995, the Covenant had been ratified by 132 States.

³⁵⁰ See, International Labour Organization, Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy, Nov. 16, 1977, 17 ILM 422, para. 6 (1978), available at:

<http://www.ilo.org/public/english/employment/multi/tridecl/index.htm> [hereinafter ILO Tripartite Declaration].

³⁵¹ See, Organisation for Economic Co-operation and Development, Guidelines for Multinational Enterprises. June 21, 1976, 15 ILM 969 (1976). The OECD updated these Guidelines in 2000. For the current version, see OECD Guidelines for Multinational Enterprises (Oct. 31, 2001), available at: <http://www.oecd.org/> [hereinafter OECD Guidelines].

³⁵² Special Representative on Business and Human Rights, Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework, unanimously adopted by the United Nations Human Rights Council, Principle 1 U.N. Doc. A/HRC17/31 (June 2011) (by John Ruggie) [hereinafter the “Guiding Principles”].

not violate principles of conduct that have already been established as laws in their home countries. Consequently, Home Governments could be deemed complicit in the unlawful acts of IOCs which infringe human rights, when they do not take counteractive measures against the perpetrators of human rights abuses, as the applicable standards are not those of the developing host country or petro-state, but international standards, the parent-state's or the OECD Guidelines.³⁵³

These instruments are therefore foundations for state and corporate institutionalization of HRIAs to safe-guard the rights of persons against state or corporate violations of human rights.³⁵⁴ More so as, the Guidelines posit, “actual and potential adverse human rights impacts consist of taking adequate measures for their identification, prevention, where possible, and mitigation of potential human rights impacts....”³⁵⁵ Accordingly, HRIAs can effectively constitute such aspects of taking adequate measures required by the Guidelines to properly bolster corporate and state efforts towards adhering to both national and international human rights standards to prevent abuses or adverse impacts from oil industry activity. This is especially as, competent HRIAs advance the implementation of human rights at not just the project levels but also at the management levels by improving transparency, accountability and effective integration of human rights into policy-making and management processes. Eventually, HRIAs competently serve as tools for identifying, avoiding and managing potentially adversative human rights impacts from oil and gas projects.

The foregoing issues regarding state and corporate human rights violations, including poor management of adverse impacts of oil industry operations which were detrimental to human

³⁵³ See, Part iv, Paragraphs.1-6, Paragraphs. 36-39, OECD Guidelines for Multinational Enterprises, 2011 Updates. Available at: <http://www.oecd.org/daf/inv/mne/49744860.pdf>

³⁵⁴ D. Weissbrodt, and Muria Kruger. "Norms on the responsibilities of transnational corporations and other business enterprises with regard to human rights." *American journal of international law* 97, no. 4 (2003): 901-922.

³⁵⁵ See, Part iv, Paragraph 41 of the OECD Guidelines for Multinational Enterprises. 2011, Available at: <http://www.oecd.org/daf/inv/mne/49744860.pdf>

rights, formed the thrust of the argument in *the Ogoni-land Case*.³⁵⁶ The African Human Rights Commission systematically considered the purport of the Nigerian government's failure to monitor oil industry operations or multinational companies, including, the failure to enforce safety measures as well as the concealment of information relating to the dangers created by the oil activities carried out within the Ogoni communities.³⁵⁷ The African Commission thereafter concluded that the Nigerian government was in clear violation of Article 21 of the African Charter³⁵⁸. That the conduct of the government, through its action and policy, directly violated the rights of the Ogoni population.³⁵⁹

Furthermore, the African Commission referred to the Judgment of the Inter-American Court of Human Rights in *the Velásquez Rodríguez Case*.³⁶⁰ In the case, the Court ruled that, "a State violates human rights when the State allows private persons or groups to act freely and with impunity to the detriment of the rights recognised by the Convention. In addition, "an illegal act which violates human rights and which is initially not directly imputable to a State (for example, because it is an act of a private person or because the person responsible has not been identified) can lead to international responsibility of the State, not because of the act itself, but because of the breach of the obligation to protect and prevent the violation or to respond to it as required by the Convention.³⁶¹ Thus, the Commission found that the government had failed

³⁵⁶ See, S.I. Skogly, Complexities in Human rights Protection: Actors and Rights Involved in the Ogoni Conflict in Nigeria, in: 15 Netherlands Quarterly of Human Rights (1997), 47-60.

³⁵⁷ See Chidi Anselm Odinkalu, Analysis of Paralysis or Paralysis by Analysis? Implementing Economic, Social and Cultural Rights under the African Charter on Human and Peoples' Rights, 23 Human Rights Quarterly (2001) 327-369 at 346-347

³⁵⁸ See for example, A. Chapman & S. Russell, *Core Obligations: Building a Framework for Economic, Social and Cultural Rights*, (Intersentia: Antwerp-Oxford-New York) 2002. This book contains chapters on the core content and core obligations emanating from separate economic, social and cultural rights.

³⁵⁹ See, Fons Coomans, Centre for Human Rights, Maastricht University, on The Ogoni Case before the African Commission on Human and Peoples' Rights. See also, African [Banjul] Charter on Human and Peoples' Rights, adopted June 27, 1981, OAU Doc. CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982), entered into force Oct. 21, 1986

<http://www1.umn.edu/humanrts/instree/z1afchar.htm>

³⁶⁰ *Velásquez Rodríguez v. Honduras*, Inter-American Court of Human Rights, Judgment of 19 July 1988, Series C, No. 4, and 166, 172.

³⁶¹ See Articles; 10, 11, 12 of the Additional Protocol to the American Convention on Human Rights in Economic, Social and Cultural Rights "Protocol of San Salvador" Adopted in San Salvador on November 17, 1988.

to perform its due diligence obligations as required at international law by failing to ensure the conducting of environmental monitoring and social impacts assessments in all relevant aspects during petroleum exploitation. Also, by denying access to environmental information as well as withholding information regarding the debilitating impacts of oil exploitation on the environment and failing to provide feasible alternatives or adequate compensation the government aggravated the problem.³⁶²

Moreover, HRIAs can engender community participation, whilst operating as a basis to empower marginalized and local community stake-holders, by minimizing areas where government security forces coerce acquiescence to petroleum development projects as evident from the *Ogoniland Case*.³⁶³ Thus, HRIAs for the oil industry can positively optimize assessment of the direct results and impacts of the petroleum operations whilst tracking the implementation of strategies, policies and procedures for oil development projects. Altogether, HRIAs can determine the efficiency of the management process, including influencing policy co-ordination to clarify challenges and opportunities for improvements in industry operations, whilst properly articulating areas for corrective measures. HRIAs for the oil industry are thus posited as core tools of engendering the social development pillar, in concert with the aims of the UDHR, as they basically optimize states' collaborative efforts towards positive actions and obligations of due diligence to preserve human rights during oil exploitation.

³⁶² See, Okonta, Ike, and Oronto Douglas. *Where vultures feast: Shell, human rights, and oil in the Niger Delta*. (Verso) 2003. See also, Ibeano, Okechukwu. "Oiling the friction: Environmental conflict management in the Niger Delta, Nigeria." Environmental change and security project report 6, no. 6 (2000): 19-32.

³⁶³ See, S.I. Skogly, Complexities in Human rights Protection: Actors and Rights Involved in the Ogoni Conflict in Nigeria, in: 15 Netherlands Quarterly of Human Rights (1997), 47-60.

1.5. Sustainable Use of Petroleum Resources as a Prerequisite for Green Economic Growth

The tenets of sustainable utilization of natural resources entail that, natural resources are not to be used in excess of their capacity for regeneration and an irreversible damage to nature must be prevented.³⁶⁴ Further elucidation of sustainable use of resources is afforded by, Principle 8 of the Rio declaration which validates the sustainable use of natural resources for sustainable development, reiterated in goal 12 of the SDGs which urges the “reduction of unsustainable patterns of production and consumption, including preserving the natural resource base as being fundamental to the achievement of sustainable development. In this regard, the SDGs proffer in the goal indicator, the necessity of clarifying sustainable consumption and production (SCP) national action plans and for it to be mainstreamed into national policies.³⁶⁵

Although the principle of “sustainable use” has been typically associated with living natural resources as in the Biological Diversity Convention,³⁶⁶ its scope has however broadened to accommodate all areas of the earth as denoted in the definition of the World Charter for Nature in 1982.³⁶⁷ This notion also serves to regulate state conduct by securing alignment with international instruments which emphasize on the sustainable use of natural resources. These resources include non-renewable natural resources,³⁶⁸ especially finite petroleum resources.³⁶⁹ By implication petroleum resources come within the confines of “all areas of the earth” and therefore demand the application of the tenets of conservation and sustainable use of natural

³⁶⁴Patricia Birnie, Alan Boyle, and Catherine Redgwell, “*International Law and the Environment*” Oxford, (2009)

³⁶⁵ See, Goal 12, Indicator 12.1.1 Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2).

³⁶⁶ For example, Article 6. Of the Biological-diversity Convention (1992) provides general measures for Conservation and Sustainable Use of living natural resources...”

³⁶⁷ 23 ILM (1983) 455

³⁶⁸ Jonathon E Snow, ‘Theory of Exhaustible Natural Resources: Surprises for the Geologist’ (2000) Inaugural Lecture for the Habilitation degree, University of Mainz, Germany, 21 June 2000 Extraction of Exhaustible Resources: Economic Theory.

³⁶⁹ D.M. Ong, Towards an International Law for the Conservation of Offshore Hydrocarbon Resources within the Continental Shelf?

resources. More importantly, the United Nations emphasises that protecting and managing the natural resources base for economic and social development are overarching objectives of, and essential requirements for sustainable development.³⁷⁰

The purport of the UN's reference to "overarching objectives" of sustainable development clearly suggests that the paramount aim of sustainable development remains the protection and management of natural resources for economic and social development. This position validates development aspirations of states or even specifically highlights the relevance of development goals which are ultimately reliant on the natural resources base. Despite on-going global challenges in the sustenance and management of the natural resources base, especially of finite natural resources, sustaining the natural resources base is certainly not a futile goal.³⁷¹

The incumbent duty on states to ensure sustainable or prudent use of natural wealth and resources within their jurisdiction³⁷² envisages that in the exercise of their responsibilities to manage and utilize petroleum resources, the states must adopt policies and regulations which can engender positive changes to petroleum exploitation to actualize sustainable development goals. Consequently, adhering to the need to sustainably manage finite petroleum resources to prevent their depletion requires specific strategies. These strategies can be grouped within the confines of technical approaches like effective and prudent extraction techniques³⁷³ and waste minimisation schemes.³⁷⁴

³⁷⁰ See, "the Future We Want" (UNCSD) 2012; 2002 Plan of Implementation WSSD (UN Doc.A/CONF/199/20(2002)

³⁷¹ As denoted by Principle 7 of the Rio declaration, "states shall ... conserve, protect, and restore the health and integrity of the Earth's eco-system".

³⁷² Nico Schrijver, 'Searching for the Contours of International Law on the Field of Sustainable Development', in *Reflections on Emerging International Law, Essays in Memory of the Late Subrata Roy Chowdhury*, International Law Association, Calcutta Centre (India), Calcutta: Law Research Institute and Bangalore: National Law School of India University (2004) 179-199, at 188. P. Birnie et al. *International Law and the Environment* (3 ed) (Oxford, Oxford University Press, 2009)190 Also, Handl, 1 YbIEL (1990)25 Munro and Lammers, Environmental Protection and Sustainable Development

³⁷³ Abdullah M Hasna, 'Dimensions of Sustainability' (2007) 2 (1) Journal of Engineering for Sustainable Development 47, 49. This is actually supported by the adoption of modified or innovative technology as earlier discussed.

³⁷⁴ California Laws for Conservation of Petroleum and Gas, California Department of Conservation Division of Oil, Gas, and Geothermal Resources. (January 2014).

1.5.1. Regulating Petroleum Extraction Rates: A Tool of Sustainable Use?

The sustainable consumption or use of petroleum resources demands that the rate of extraction of the resources be monitored to prevent petroleum resource exhaustion. Thus, it relies on regulatory controls as a tool to engender sustainable consumption. Moreover, such regulatory controls facilitates the tracking and reporting of petroleum resource consumption and its footprint which is an indicator of sustainable consumption of natural resources.³⁷⁵ Sustainable use of petroleum resources also requires adoption of efficient technologies to optimize prudent extraction, efficient recovery of marginal or inaccessible fields to avoid field sterilization and waste due to premature field abandonment.³⁷⁶ By implication, petroleum conservation emphasizes the regulation of petroleum extraction to minimise the depletion rate of reserves³⁷⁷ and maximise the life span of the petroleum resources without damage to the environment both for the benefit of present and future generations.³⁷⁸ It is however pertinent to admit that many petroleum resource endowed countries fail to prudently manage petroleum resources or optimize this tool of sustainable utilization and consumption of resources. The major challenges to the achievement of this sustainable development target is mostly due to the high reliance on petroleum resources for foreign direct investment and more often the lack of political will or technological limitations of the state regulators.³⁷⁹

³⁷⁵ See, Goal 12, Sustainable Consumption and Production Indicator, 12.2.1 Material footprint, material footprint per capita, and material footprint per GDP. Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2).

³⁷⁶ Hunter, T. (2009). "Australian Productivity Commission: Regulatory Burden in Australia's Offshore Petroleum Sector."

³⁷⁷ Stanley Nwabuishi Onuosa, 'Sustainable Development of Petroleum Resources: The Rumpus and Resolution', in Zhiguo Gao (ed.), Environmental Regulation of Oil and Gas, London: Kluwer Law International (1998) 433-450 at 436. Also, T. Hunter, Legal Regulatory Framework for the Sustainable Extraction of, Australian Offshore Petroleum Resources A Critical Functional Analysis

³⁷⁸ Abdullah M Hasna, 'Dimensions of Sustainability' (2007) 2 (1) Journal of Engineering for Sustainable Development 47, 49.

³⁷⁹ T. W. Walde, *Investment Policies in the International Petroleum Industry – Responses to the Current Crisis*, in N. Beredjick and T. Walde (eds.) *Petroleum Investment Policies in Developing Countries*, London: Graham & Trotman (1988) 7-28.

1.5.2. Waste Minimisation Strategies in Petroleum Exploitation as vital tools of sustainable utilization

Waste minimisation strategies are essential aspects of the sustainable use of petroleum resources requiring regulatory and policy input. This is because petroleum resources are valuable natural resources with high commercial value and incapable of regeneration. This imposes a heavy burden to prolong their reserves and maximize their utility. Thus, petroleum conserving measures to mitigate waste includes regulations encompassing, oil-wells and oil-fields development plans. Essentially, such regulations stipulating the number of oil wells in specific fields are indispensable in the management of petroleum resources. This is because they serve to reduce competitive drilling which facilitates wastage of petroleum resources.³⁸⁰ The sustainable use of petroleum resources also requires the regulation of production facilities with clear rules on equipment stipulations to ensure that they comply with the UNEP/IE operating guidelines and international best practice.³⁸¹ This serves to manage the petroleum resources and the environment by preventing petroleum wastage due to: leakages, blow outs, explosions and fires, which may likely arise from drilling in districts where the pressure of gas or oil is high or unknown.³⁸²

Furthermore, waste minimisation through the control or cessation of gas flaring activities during oil exploitation constitutes an integral part of sustainable and prudent use of petroleum resources because it encourages the reinjection of the associated gas which serves as a viable alternative to petrol and gasoline³⁸³. This measure serves to reduce the demand on the stock of

³⁸⁰ United Nations Environment Programme for the Oil and Gas Industry and Environment (UNEP-IE) Forum. See also, T. Hunter

³⁸¹

³⁸² Art. 3219. California Laws for Conservation of Petroleum and Gas, California Department of Conservation Division of Oil, Gas, and Geothermal Resources. (January 2014) See also UNEP/IE guidelines

³⁸³ Alternative Fuels and Advanced Vehicles Data Center. "Natural Gas Vehicles". US Department of Energy. Bi-fuel vehicles or otherwise known as dual fuel are vehicles with multi-fuel engines capable of running on two fuels. The most common technology and alternate fuel available in the market for bi-fuel gasoline cars is Autogas (LPG), followed by natural gas (CNG).

petroleum resources or reserves to meet the supply for petrol, gasoline or other domestic fuels.

Another area requiring regulations to optimize the stock of petroleum resources and natural reserves is through the process of well-stimulation treatments and the use of enhanced petroleum recovery methods to retrieve petroleum residues trapped in inaccessible wells and enhance optimum recovery of petroleum, especially from unconventional hydrocarbon sources.³⁸⁴ This is a useful means of conservation as it delays the depletion rates of petroleum resources and prolongs the life-span of oil wells. However, if the process is not carefully monitored and regulated it can pose environmental risks.³⁸⁵

1.6. Sustainable Development and Oil Exploitation: Operationalizing Equity

Equity is a core ingredient of sustainable development articulated by Principle 3 of the Rio Declaration. It provides, “The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.”³⁸⁶ This provision reveals an integral element of equity as a moderating factor of development which must be subject to environmental constraints for the benefit of present and successive generations. Essentially, equity is about fairness. Within the context of sustainable development, equity targets elimination of inequalities and forms the rationale for poverty eradication, preservation of the global environment and resource conservation for both present and future generations.³⁸⁷ These topical issues also sum up the 17 sustainable development goals (SDGs) echoed in “Transforming our world: the 2030 Agenda for Sustainable Development”.³⁸⁸

³⁸⁴ Hillard Huntington et al. EMF 26: Changing the Game? Emissions and Market Implications of New Natural Gas Supplies Report. Stanford University. Energy Modeling Forum, 2013.

³⁸⁵ Nolon, John R.; Polidoro, Victoria. "Hydro-fracking: Disturbances Both Geological and Political: Who Decides?" (PDF). The Urban Lawyer 44 (3): 1–14. Retrieved 1st April 2015. Negro, Sorrell E. "Fracking Wars: Federal, State, and Local Conflicts over the Regulation of Natural Gas Activities" (PDF). Zoning and Planning Law Report. Retrieved 1st April 2015.

³⁸⁶ See Principle 3 of the Rio Declaration, UNCED 1992.

³⁸⁷ The United Nations Framework Convention on Climate Change (“UNFCCC”) refers in article 3.(1) to intergenerational equity, as well as the preamble of the CBD, the 1992 UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes, and a host of other international agreements often refer to equity.

³⁸⁸ See, UN A/RES/70/1 “Transforming Our World: The 2030 Agenda For Sustainable Development” Available at: <https://sustainabledevelopment.un.org/post2015/transformingourworld/publication> Accessed at: 15 June 2017

Evidently, an introspection of the SDGs reveals a broad articulation of goals serving to optimize the equity elements of sustainable development. Admittedly, of the 17 goals, 11 address forms of equity, inequality, and inclusiveness.³⁸⁹ The SDGs thus address the inter-linkages between, development, poverty and inequity in the stated targets of SDG 10 to ‘Reduce inequality within and among countries’, progressively achieve and sustain income growth of the bottom 40% of the population at a rate higher than the national average. Goal 10 also seeks to empower and promote the social, economic and political inclusion of all, ensure equal opportunity and reduce inequalities of outcome from discriminatory laws, policies and practices. Also, the SDGs, specifically adopt a multi-dimensional approach in tackling equity. Gender equality for instance, is broadly targeted and it spans across women in education, health, work or paid employment.³⁹⁰

Furthermore, equity in the sustainable development debate accounts for concepts like: intra and inter-generational equity, responsibility for transboundary harm, public participation, access to information and justice, common but differentiated responsibilities and the polluter pays principle. Specific references to equity and poverty eradication are further addressed by the Brundtland report which provides that “overriding priority” should be given to the “concept of ‘needs’, in particular, the essential needs of the world’s poor” as a key component of sustainable development.³⁹¹ Additionally, equity comprises interspecies equity, relating to environmental stewardship that accommodates the survival of other species on an equal basis to human survival,³⁹² distributive equity affecting distribution of resources in contexts such as

³⁸⁹ See, Goals, 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 16 and 17 of the Sustainable Development Goals, Agenda 2030.

³⁹⁰ See Goal 5, on Gender Equality. Sustainable Development Goals, Agenda 2030. (Women are also disproportionately vulnerable to the environmental impacts of oil and gas operations which are addressed in SDGs 6, 14, and 15).

³⁹¹ See “Institutional Framework for Sustainable Development” Rio+20 Outcome Document sets out guidelines for achieving sustainable development and poverty eradication. And, WCED, Our Common Future (Oxford: Oxford University Press, 1987).

³⁹² Katja Freistein & Bettina Mahlert “The potential for tackling inequality in the Sustainable Development Goals”, Third World Quarterly, (2016), DOI:10.1080/01436597.2016.1166945. Available at: <https://doi.org/10.1080/01436597.2016.1166945> Accessed 18 February 2018.

burden sharing or distribution of well-being in the broader context of social justice, including a spirit of shared but differentiated responsibility also known as the principle of “Common but Differentiated Responsibility”, and procedural equity which reinforces democratic and participatory governance or participation in decision making.³⁹³

1.6.1. Intra-Generational Equity in Petroleum Exploitation

Following from the above issues on operationalizing equity in the context of oil exploitation and sustainable development, this sub-section considers equity in its intra-general dimension. Intra-generational equity aptly connotes “the right of all people within the current generation to a fair access of the current generation’s entitlement to the earth’s natural resources”.³⁹⁴ Thus, the present generation has a right to use and enjoy the resources of the earth but is under an obligation to consider the long-term impact of its activities. Intra-generational equity is thus differentiated from inter-generational equity in that it relates to fairness in the distribution of natural resources and accompanying benefits amongst those of present generations.

Moreover, the Rio+20 instruments purport that, intra-generational equity should offer everyone the necessities of life, food, shelter, health care, education, and the essential infrastructure for social organization. Thus, intra-generational equity accounts for sustainable development indicators like the extent or level to which gender equality is evident in a polity, the share of women in wage employment,³⁹⁵ the employment rate vis-a-vis population growth, the proportion of the population living below the poverty line, etc.³⁹⁶ It also offers social empowerment measures bordering on, access to environmental information, public

³⁹³ Aram, Ziai, “*Development Discourse and Global History: From Colonialism to the Sustainable Development Goals*”. London: Routledge, 2015.

³⁹⁴ Ibid.

³⁹⁵ Principle 20 of the Rio Declaration; See also, Sharon Beder, 'Costing the Earth: Equity, Sustainable Development and Environmental Economics', *New Zealand Journal of Environmental Law*, 4, 2000, pp. 227-243. And, Brown, Valerie & Switzer, Margaret 1991, 'Engendering the Debate: A Discussion Paper for Consideration by the ESD Working Groups'.

³⁹⁶ P.N. Hess, *Economic Growth and Sustainable Development*, (2013; Oxon Routledge,) 316

participation and access to justice which serve to erode “inequities in power³⁹⁷” and expedite public ability to enforce the right to be informed and hold regulators or polluters accountable for environmental harm due to oil production activities.³⁹⁸ More importantly, because the poor considerably lack the power to push their choices or even access opportunities, resources or services that trigger escapes out of poverty, policy and regulatory interventions that empower them to acquire financial resources, information, skills or education and capabilities to exercise more environmentally friendly choices as well as access social welfare benefits become crucial in oil producing areas. These serve to engender accountability and responsiveness, whilst balancing out unfavourable power relations in petro-states to expedite the SDGs.

1.6.2. Equity in Sustainable Development: Relevance of the Polluter Pays Principle (PPP)

This subsection assesses the intra-generational equity element of sustainable development in relation to the polluter pays principle (PPP). The PPP is herein considered as a strategy towards strengthening intra-generational equity during oil exploitation. Reason being that, intra-generational equity effectively advocates fairness in distribution, in this case equity is advocated towards the distribution of responsibility or liability for polluting activity. Likewise, the PPP becomes relevant to balance the burdens for oil induced pollution as it can evaluate environmental costs of oil pollution, project economic remedies, to advance social and environmental objectives. Even though the PPP is potentially functional as an environmental protection measure, its ambit is broader, as will be shown from proceeding deliberations. Consequently, the PPP’s efficacy as a tool for achieving equity and overall, sustainable development in the oil industry is thereafter considered. Thus, core areas of pollution

³⁹⁷ See, Bullard, Robert 1992, the Politics of Race and Pollution: An interview with Robert Bullard, Multinational Monitor, June, pp. 21Ð25. Inequities in power lead to inequities in people’s ability to influence decisions affecting their environment.

³⁹⁸ See, previous discussions on the integration of environmental regulations with pollution controls. D. Banisar, et. al. Ibid at f. note 127. And, Principle 16, of the Rio Declaration which specifically provides that the polluter should be held accountable for pollution.

prevention, emergency preparedness and green accounting in oil and gas regulations to actualize the aims of sustainable development during petroleum exploitation are addressed.

The Polluter Pays Principle (PPP) is articulated by Principle 16 of the Rio Declaration. It posits that, governments should endeavour to promote the internalisation of environmental costs and the use of economic instruments, considering that the polluter should in principle bear the cost of pollution, with due regard to public interest.³⁹⁹ Essentially, the principle operates to shield government funds and the public in general from bearing the environmental and economic costs of pollution. The PPP is posited primarily as a useful tool for sustainable development in the oil industry, not just as a pollution liability measure, but also as a precautionary measure to avert pollution during oil exploitation. Such a precautionary approach can be engineered to target pollution from the source, whilst identifying the polluter to bear responsibility for the extent of pollution or polluting activity.

The PPP primarily integrates measures which enhance environmental goals of the SDGs. In validating the significance of this principle and its utility for optimizing all three pillars of the sustainable development paradigm, several international and regional instruments articulating the Principle include: The 1990 International Convention on Oil Pollution Preparedness, Response and Cooperation, which clearly states in its preamble that the PPP is "a general principle of international environmental law".⁴⁰⁰ Likewise, Agenda 21, the Paris Agreement, the International Convention for the Prevention of Pollution of the Sea by Oil, London 1954, (and its protocols) 1962 and 1969, etc. serve to facilitate the application of the PPP in respect of pollution. Similarly, The International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention) is also relevant as it projects the aims of SDG 17 to

³⁹⁹ UNCED (1992) Principle 16 Rio Declaration.

⁴⁰⁰ See Para. 7, 1990 IMO Convention on Oil Pollution Preparedness, Response and Cooperation, 2003 Protocol on Civil Liability and Compensation for Damage Caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters.

optimize synergies for effective cooperation towards environmental protection. It ensures pollution controls to forestall the dire impacts of oil pollution in the event of oil pollution accidents and emergencies.

The relevance of the polluter pays principle has also been addressed in national instruments and judicial interpretation as in *R. v. Secretary of State for the Environment, Transport and the Regions ex p. Standley*⁴⁰¹, where the High Court ruled that “as regards the polluter pays principle, the directive does not mean that the public must take on burdens for the elimination of pollution to which they have not contributed....”⁴⁰² this ruling was also upheld at the ECJ⁴⁰³. In addition, Advocate General Léger concluded that the polluter pays principle can either be applied as a preventive measure to avoid environmental harm through legislation and policy to assess the impacts of certain public and private projects.⁴⁰⁴

Likewise, case law, international and national instruments validate the PPP as an applicable and relevant means of engendering sustainable development in states, as it addresses the crucial questions relating to: How to control pollution, how to remedy pollution and who pays for pollutions remediation when it occurs. Moreover, the relevance of the PPP as a tool of sustainable development in tackling and remediating pollution by making polluters responsible for the environmental harmful impacts, bear the costs, has been further considered in an oil industry context.⁴⁰⁵ In the *Aguinda v. Chevron case*⁴⁰⁶ the Court observed that the imposition of strict liability is appropriate where a defendant has engaged in high risk/high reward

⁴⁰¹ *Secretary of State for the Environment, Minister of Agriculture, Fisheries and Food, ex parte: H. A. Standley and Others* (Reference for a preliminary ruling from the High Court, Queen's Bench Division) (Directive 91/676/EEC regarding the Protection of waters against pollution caused by nitrates from agricultural sources).

⁴⁰² See *R. v. Sec. of State (ex. P. Standley and Ors. supra)* Judgment of the Court (Fifth Chamber), 29 April (1999) at I - 2626

⁴⁰³ Secretary of State for the Environment, Minister of Agriculture, Fisheries and Food, ex parte: H. A. Standley and Others, Case (C - 293/97 European Court of Justice 1999) ECR I-2603

⁴⁰⁴ Opinion of Advocate General Léger delivered on 8 October (1998) at I - 2606.

⁴⁰⁵ See *Aguinda & Ors. V. Chevron*

⁴⁰⁶ *Aguinda v. Chevron* <https://www.business-humanrights.org/en/texacochevron-lawsuits-re-ecuador>

<http://chevrontoxicocom/assets/docs/complaint-1993.pdf>

<http://chevrontoxicocom/assets/docs/2011-02-14-summary-of-judgment-Aguinda-v-ChevronTexaco.pdf>

behavior, more so, in industrial cases where the burden of proving traditional fault is nearly impossible for the victim. Consequently, the Court concluded that the “production, transport and operation of hydrocarbon substances constitute without a doubt, activities of substantial risk” warranting the application of strict liability for the pollution caused.⁴⁰⁷

In furtherance of these aims affecting pollution prevention and remediation, pollution can thus be remedied through restoration and clean-up programmes and implementation of pollution prevention policies.⁴⁰⁸ Similarly, the principle entails that the polluter bears the expenses of carrying out measures decided by public authorities for ensuring that the environment is in a satisfactory state. The polluter also shoulders the cost of preventing and eliminating nuisances. This is often guaranteed by transferring the projected costs on the goods and services which cause such pollution or unsustainable consumption.⁴⁰⁹ Accordingly, this principle applies in circumstances where people incur charges or sums because of recurrent polluting activity, thus forming the rationalisation for green taxes, green accounting or taxes paid for the use of fossil fuels and the accompanying CO₂ emissions.⁴¹⁰

Green accounting measures therefore involve the adoption of policy modifications in the petroleum industry by the employment of market based instruments to “green” key sectors of the national economy.⁴¹¹ Such accounting policy reforms include the adoption of green taxes which serve to discourage unsustainable patterns of fuel consumption and envisages the

⁴⁰⁷ See, Para. 83-86, in Judgment of Nicolas Zambrano Lozada, the Presiding Judge of the Provincial Court of Justice of Sucumbíos, in Aguinda et al v. Chevron. Available at: <http://chevronxico.com/assets/docs/2011-02-14-summary-of-judgment-Aguinda-v-ChevronTexaco.pdf> Accessed at 2nd February 2017. Chevron was ordered to pay \$8.6 billion in damages and clean-up costs.

⁴⁰⁸ Harding posits that, the general public should not be made to bear the environmental costs of industry.

⁴⁰⁹ See Principle 8 of the Rio Declaration

⁴¹⁰ J. Holder and M. Lee, “*Environmental Protection, Law and Policy*” (2nd Ed. New York, Cambridge University Press, 2007)36-7. See also, Garrett Hardin, “The Tragedy of the Commons” (1968) 162 Science 1243, pp. 1244-5,

⁴¹¹See, Indicators of Sustainable Development: Guidelines and Methodologies. 3rd Edn. October 2007. “More comprehensive aggregated indicators on sustainable development and green accounting include the Adjusted Net Saving and the Genuine Progress Indicator (GPI). The World Bank developed “Adjusted Net Saving”. It is calculated by subtracting monetary values for petroleum resource depletion and damage caused by air pollution from traditional net savings derived from national accounts and adding expenditures on education”.

deductions of the derivable costs of environmental damage arising from petroleum resource use from the Gross domestic product (GDP) or profits of the crude oil sales for environmental remediation purposes.⁴¹² The proportion of such deductions from the GDP essentially constitute equity, bio-diversity and environmental protection indicators for sustainable development, articulated in Goal 15 of the SDGs.⁴¹³ Hence, the environment can be rehabilitated to prevent biodiversity loss, and ensure that social and economic life of indigenes and communities in petroleum producing regions are not adversely affected by petroleum exploitation.

By these measures, governments therefore exercise economic instruments to control environmental behaviour, by transferring the burden on the perpetrators of the polluting act. Useful incentives or deterrents to promote environmental management and sustainable development would therefore comprise: pollution charges (including emission charges, user charges, product charges, administrative charges, and tax differentiation). User charges are fees for direct cost of collective or public treatment of pollution, paying for units, industrial effluents, or even spills discharged in surface water.⁴¹⁴

The Polluter Pays Principle (PPP) is also beneficial in promoting green accounting measures like the elimination of environmentally harmful subsidies.⁴¹⁵ This is because fossil fuel subsidies could accrue to astronomical sums and are a major challenge to governments from both economic and environmental perspectives as they favour the polluter and encourage the

⁴¹² Anand and Sen, in P.N. Hess, *Economic Growth and Sustainable Development*, (Oxon, Routledge, 2016)316

⁴¹³ See, Goal 15 of the SDGs, Indicators 15 (1a) and 15 (1b) Report of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (E/CN.3/2017/2).

⁴¹⁴ See, G. Hardin '*Tragedy of the Commons*' (1968) in, J. Holder and M. Lee "Environmental Protection Law and Policy" (New York, Cambridge University Press 2007) 35 at 37

⁴¹⁵ Fossil fuel subsidies reached \$90 billion in the OECD and over \$500 billion globally in 2011. Renewable energy subsidies reached \$88 billion in 2011. Per Fatih Birol, Chief Economist at the International Energy Agency without a phasing out of fossil fuel subsidies, we will not reach our climate targets.

undesirable polluting activity.⁴¹⁶ Consequently, energy subsidies undermine sustainable development goals, by promoting higher consumption and waste.⁴¹⁷ Similarly, fossil fuel subsidies aggravate the harmful effects of energy use on the environment, and are also the harbinger of heavy burdens on government funds with the capacity to attack economic growth potentials of states.⁴¹⁸ They are often accountable for undermining private and public investment in the energy sector, thereby restricting economic growth and exacerbating poverty.⁴¹⁹

Moreover, most benefits from fossil fuel subsidies go to the richest households thus creating wider disparity between the rich and poor, which is entirely averse to the interests of sustainable development.⁴²⁰ Fossil fuel subsidies also impede the expansion of distribution networks and the development of more environmentally benign energy technologies, and ironically fail to benefit the low-income groups at which it is targeted.⁴²¹ Ultimately, it is essential that for petroleum producing states to sustainably develop their petroleum resources, the cessation of fossil fuel subsidies must be prioritized.⁴²²

1.6.3. Inter-generational Equity and Petroleum Exploitation

Having considered equity in its intra-generational dimension, this sub-section appraises equity in the inter-generational context. Inter-generational equity relates to “the right of future

⁴¹⁶Whitley, Shelagh. "Time to change the game: Fossil fuel subsidies and climate". Overseas Development Institute. <http://www.odi.org.uk/subsidies-change-the-game> Retrieved at 09/03/2015

⁴¹⁷ Principle 8 Rio Declaration.

⁴¹⁸The study conducted by the World Resources Institute finds that energy subsidies often go to capital intensive projects at the expense of smaller or distributed alternatives.

⁴¹⁹ United Nations Environment Programme, Division of Technology, Industry and Economics. (2002). Reforming energy subsidies (PDF). IEA/UNEP. ISBN 92-807-2208

⁴²⁰ Douglas F. Barnes, Jonathan Halpern (2000). "The role of energy subsidies" (PDF). Energy and Development Report (World Bank): 60–66. http://www.worldbank.org/html/fpd/esmap/energy_report2000/ch7.pdf Retrieved at 03/03/2015

⁴²¹ "Energy subsidies in the European Union: A brief overview. Technical report No 1/2004" (PDF). European Environmental Agency. 2004. Retrieved 2012-04-11. http://www.eea.europa.eu/publications/technical_report_2004_1/

⁴²² <http://www.guardian.co.uk/world/2012/jan/11/nigeria-government-warns-anarchy-fuel>

Accessed at 03/03/2015. This is however a major challenge for many governments in developing states, because subsidy removal attempts have been known to face stiff and aggressive resistance.

generations to enjoy a fair level of the common patrimony".⁴²³ Intergenerational equity also presupposes that each generation holds the planet on trust, and is obliged to pass it to all future generations in no worse condition than that which they enjoyed and to provide equal access to its cultural and natural resources.⁴²⁴ Thus, the present generation has a right to use and enjoy the resources of the earth but is under an obligation to consider the long-term impact of its activities including sustaining the resource base and the global environment for the benefit of future generations of humankind. In this context, "benefit" is given its broadest meaning as including, *inter alia*, economic, environmental, social, and intrinsic gain".⁴²⁵

Inter-generational equity in terms of sustainable development has also been considered as a means of development, economic restructuring and fulfilling inter-generational responsibility, whilst typically representing inter-temporal distribution of resources.⁴²⁶ This view is further reiterated by French who posits that, "it is the idea that the present generation owes a debt to previous generations bequeathed to it and consequently has an equal responsibility to ensure that future generations have equal access to the environment and other natural resources".⁴²⁷

The ethical foundations for the commitment to sustainable development is accordingly premised on the futurity concept. This generally devolves from human inability to fathom the future, thereby generating genuine fears of the unknown implications of current development

⁴²³ See, Fifth Report on the Principles of International Law relating to Sustainable Development (London: ILA, 2002), ILA Resolution 3/2002: New Delhi Declaration of Principles Of International Law Relating To Sustainable Development, Available online at: <http://www.ila-hq.org> See also, UNEP "Concepts and Principles in International Law." See Final Report of the Expert Group Workshop on International Environmental Law Aiming at Sustainable Development, at 10-14, UNEP/IEL/WS/3/2, (1996).

⁴²⁴ Edith Brown Weiss, In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity (United Nations University, 1989).

⁴²⁵ Joseph F. Dimento, *The Global Environment and International Environmental Law*, (1st Ed., Austin: University of Texas Press, 2003). See also, Training Manual on International Environmental Law, UNEP, at 26. Principles And Concepts Of International Environmental Law.

⁴²⁶ See the Brundtland Commission's definition. See also, H. Bugge and L. Watters, 'A Perspective on Sustainable Development after Johannesburg on the Fifteenth Anniversary of 'Our Common Future': An Interview with Gro Harlem Brundtland', (2003) 15 Georgetown International Environmental Law Review 359 at 363. Also see, A. Kolo, 'Dispute Settlement and Sustainable Development of Natural Resources in Africa', in F. Botchway (ed.) *Natural Resource Investment and Africa's Development* (Edward Elgar: Cheltenham, 2011) 71

⁴²⁷ 1986 WCED Legal Principles (i) cited by Sands, also, the Legal Experts Group of the World Commission on Environment and Development. D. French Ibid at 29, Dobson (ed.)

activities. Also implicit in the petroleum exploitation context, is that, despite limitations in comprehending the values and interests of future generations there is a need to preserve petroleum resources for the benefit of future generations and the maintenance of access to these petroleum resources for the benefit of future generations should be guaranteed.⁴²⁸

Notwithstanding the vast potential of petroleum resources in guaranteeing benefits for the present and successive generations, they remain prone to depletion as hydrocarbon resources are finite.⁴²⁹ This sums up the obvious need for fairness in the maintenance, allocation or distribution of the petroleum resource revenues to preserve the options and opportunities of future generations.⁴³⁰ Overall, the crux of the inter-generational equity debate considerably infers that, the present generation is in a predominant position, and it is altogether morally justifiable not to exploit this unequal position in maximising our own utility without any concern for the future.⁴³¹ Indeed, the fore-going have been criticized as unclear and entirely impractical formulations, because the distribution of rights, benefits, privileges or burdens amongst generations are not feasible nor guaranteed at international law for future generations.⁴³²

Nonetheless, the provisions of the Rio Declaration and other international instruments consistently emphasize on inter-generational equity for attaining sustainable development.⁴³³ In view of this complexity, engendering inter-generational equity in national policy and planning and as a tool for sustainable development would therefore require ingenious approaches. Exemplifying such innovative measures could include the creation of petroleum-

⁴²⁸ E. Brown Weiss, “Our Rights and Obligations to Future Generations for the Environment” 84 AJIL (1990) 198 at 204

⁴²⁹ See Jonathon E Snow, ‘Theory of Exhaustible Natural Resources: Surprises for the Geologist’ (2000) Inaugural Lecture for the *Habilitation* degree, University of Mainz, Germany, 21 June 2000 *Extraction of Exhaustible Resources: Economic Theory*.

⁴³⁰ M. Fitzmaurice, *Contemporary Issues in International Environmental Law* (Cheltenham, Edward Elgar Publishing 2009) 120-121

⁴³¹ E. Neumayer, *Sustainable Development: Conceptual, Ethical and Paradigmatic Issues* (2nd ed) Edward Elgar, Cheltenham (2003) 7

⁴³² M. Jacobs, *Ibid* 37

⁴³³ Principle 3, Rio Declaration. Also, Article 3 of the United Nations Framework Convention on Climate Change”

based savings or funds especially in developing petro-states. Similarly, such resourceful approaches to safeguard the interests of future generations should remain overriding considerations for petro-states. This is especially as not just petroleum depletion but also decarbonization, poses valid and looming threats to the long-term sustainability of petroleum exploitation.

1.6.4. Sustainable Development, Petro-business and Sovereign Wealth Funds: Any Room for “Equity”?

In continuation of the relevance of equity for operationalizing sustainable development, this sub-section considers inter-generational equity and its input, if any, towards the creation of Sovereign Wealth Funds (SWF). The sub-section also determines the utility of sovereign wealth funds as tools to optimize sustainable development of the petroleum industry. Evidently, equity, has been considered instructive in the creation of sovereign wealth funds (SWFs).⁴³⁴ Despite other reasons ranging from the need to enhance diversification of state funding or national wealth, optimize revenue stabilization or achieve higher returns on investment,⁴³⁵ the need to carry on wealth to future generations remains an underlying factor for establishing sovereign wealth funds.⁴³⁶

Indeed, Wouter et al posit that, Sovereign wealth funds and investments remain significant issues in contemporary debates relating to diversification of national economies and the preservation of inter-generational wealth.⁴³⁷ A notable example is that of the Norwegian

⁴³⁴ Wouter P.F. Schmit Jongbloed, Lisa E. Sachs, and Karl P. Sauvant, “Sovereign Investment: An Introduction” in *The Rise of Sovereign Wealth Funds and State-Owned Enterprises*. Oxford, New York, (2012)

⁴³⁵ See, Shai Bernsteain, Josh Lerner, and Antoinette Schoar, “Investment Strategies of Sovereign Wealth Funds” (Harvard Bus. Sch., Working Paper No. 09-112, 2009), available at <http://www.hbs.edu/research/pdf/09-112.pdf>; Vidhi Bhattachharya and Luc Laeven, The Investment Allocation of Sovereign Wealth Funds (SSRN Working Paper Series, July 2009), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1262383

⁴³⁶ Wouter P.F. Schmit Jongbloed, Lisa E. Sachs, and Karl P. Sauvant, “Sovereign Investment: An Introduction” in *The Rise of Sovereign Wealth Funds and State-Owned Enterprises*. Oxford, New York, (2012)

⁴³⁷ Jongbloed, Wpf Schmit, Lisa E. Sachs, and Karl P. Sauvant. "Sovereign Investment: An Introduction." *Sovereign Investment. Concerns and Policy Reactions*, Oxford (2012): 3.

sovereign wealth fund which is mandated to grow in perpetuity and preserved to benefit future generations.⁴³⁸ Moreover, 34 plus countries have established sovereign wealth funds as tools of resource management to benefit present and succeeding generations.⁴³⁹

Furthermore, Sovereign Wealth Funds notwithstanding their variations, are usually government funded investment tools with enormous potential to trigger sustainable development especially in petro-states. This is because they can substantially boost economic growth by diversifying the economy. Likewise, the capacity of petroleum resources to facilitate lucrative wealth funds is evinced by the fact that oil production forms a sizeable portion of global sovereign wealth investments. Indeed, an estimated 60% of total global funding for sovereign wealth funds are derived from oil and gas resource revenues.⁴⁴⁰ The foregoing are therefore pointers to the fact that oil funded sovereign wealth funds from developing petro-states, wield enormous development potential to benefit present and succeeding generations.

Even though the rationale for the creation of oil based sovereign wealth funds may be controversial as it is possible to view the creation of wealth funds as a purely economic growth or business strategy.⁴⁴¹ It is nonetheless argued that where the manifest intention of the creators of a wealth fund is to form ringed or hedged funds or create savings from petroleum investments, preserved to benefit future generations, in the event of petroleum resource depletion or decarbonization, it becomes evident that inter-generational equity considerations

⁴³⁸ Karl P. Sauvant and Jonathan Strauss, State-controlled entities control nearly US\$ 2 trillion in foreign assets, 64 *Columbia FDI Perspective*, Apr. 2, 2012

⁴³⁹ See International Working Group of Sovereign Wealth Funds, *Sovereign Wealth Funds: Generally Accepted Principles and Practices* (2008) at 27. See also, Justin O'Brien, "Barriers to Entry: Foreign Direct Investment and the Regulation of Sovereign Wealth Funds" (2008) 42:4 *Intl Lawyer* 1231 at 1235.

⁴⁴⁰ See, P.F. Wouter, Schmit Jongbloed, L. E. Sachs, and K. P. Sauvant, "Sovereign Investment: An Introduction" in *The Rise of Sovereign Wealth Funds and State-Owned Enterprises*. Oxford, New York, (2012)

Also indicative of the global character and relevance of the SWFs is the fact that the net worth of Sovereign Wealth funds exceeded over \$15 Trillion (US Dollars) in 2015.

⁴⁴¹ JONGBLOED, WPF SCHMIT, Lisa E. Sachs, and Karl P. Sauvant. "Sovereign Investment: An Introduction." *Sovereign Investment. Concerns and Policy Reactions, Oxford* (2012): 3.

drives that agenda or the motive and rationale for the wealth fund despite the envisaged economic gains. Creation of petroleum-based sovereign wealth funds thus serves to ensure that savings accruing from percentages of petroleum tax revenues are deposited and re-invested for the benefit of future generations.⁴⁴² The underlying principle for such action is that, in the event of depletion of petroleum resources, these funds, the resource rents and interests generated can provide requisite funding for social goods or services for the benefit of succeeding generations.⁴⁴³

1.7. Conclusion

This chapter is an assessment of the principles of sustainable development in relation to petroleum exploitation. It appraises the challenges evident in the operationalization of such an all-encompassing concept despite its global character and popularity. The chapter thereafter scrutinizes the SDGs to determine their efficacy for operationalizing the sustainable development agenda in petro-rich states. In this vein, the chapter identifies a suitable balance between legitimate interests affecting all three pillars of the SD paradigm and petroleum production to engender a sustainable petroleum industry.

In fulfilling these aims, the chapter identifies the tools essential for sustainable development of the petroleum industry. Similarly, it unveils the environmental goals for a sustainable oil industry comprising the protection of terrestrial and aquatic eco-systems and elucidates the necessity of sustainable development tools like the EIAs and SEAs to optimize planning and decision making for ecosystem protection during oil and gas production. The chapter also

⁴⁴² P. Garton, and Dr. D. Gruen, The Role of Sovereign Wealth Funds In Managing Resource Booms: A Comparison Of Australia And Norway. 23 February 2012 | Third Annual Asia Central Bank and Sovereign Wealth Fund Conference. This position is clearly articulated by the Norwegian example. Also, F. Berents, “Norway’s Management of the Petroleum Revenues” (2006) UNCTAD Expert Meeting on FDI in Natural Resources, 20-22 November 2006
http://www.unctad.org/sections/wcmu/docs/com2em20p007_en.pdf Accessed at 06/02/2015. (Norway has been financially prudent, with mandatory saving of resource revenue through the Government Pension Fund – Global (formerly the Petroleum Fund)

⁴⁴³ Nakatani K. Sovereign Wealth Funds: Problems of international law between possessing and recipient States, International Review of Law 2015:swf.7 <http://dx.doi.org/10.5339/irl.2015.swf.7>

posit that, atmospheric protection regulations are more effective or preventative in fostering atmospheric protection targets when they contain clear and practical guidelines regarding equipment stipulations for re-injection or storage of associated gas during oil exploitation.

Moreover, economic growth tools to diversify the economy and prevent inflation, are assessed including their ability to boost the economic growth indicator relating to GDP growth of non-oil sectors. The chapter also finds essential tools of social development in the oil industry to include access and participation rights before and during oil exploitation to allay petroleum related concerns whilst encouraging consensus positions beneficial to both people and the environment. Another core finding of the chapter relates to HRIAs for the oil industry. The chapter convincingly argues that HRIAs are competent tools of engendering the social development pillar while optimizing states' collaborative efforts towards obligations of due diligence, to preserve and protect against state and corporate violations of human rights during oil exploitation.

The scrutiny of sustainable use of petroleum resources and Equity in both the inter and intra-generational dimensions constitute relevant elements of sustainable development that may be operationalized in the oil industry and in developing states via the polluter pays principle (PPP). While sovereign wealth funds are posited as useful tools of equity in the oil industry context. Moreover, sustainable governance which is crucially reliant on tools and platforms such as multi-stake holder collaboration and international partnerships for the actualization of the SDGs are stressed as essential towards petroleum industry sustainability that would be considered in the Nigerian context, through the perusal of law and policy to verify their capacity for achieving sustainable development goals.

Chapter 2

Petroleum Resource Exploitation in the Niger-Delta: A Perusal of Law and Challenges to Sustainable Development Goals?

Introduction

In accordance with deliberations from the first chapter, sustainable development as expressed in international legal instruments, case law and the sustainable development goals (SDGs) remains a significant means of policy and regulatory reforms in the petroleum industry. This chapter therefore undertakes a scrutiny of the legal regime governing the Nigerian petroleum industry. The chapter likewise unveils the impact of environmental, economic, social and governance challenges accruing from nearly 6 decades of unsustainable oil production patterns in Nigeria. Moreover, the extant oil and gas legal framework comprising: the principal Acts, enabling petroleum Regulations,⁴⁴⁴ policies and the contractual framework in the Nigerian petroleum sector, is juxtaposed with the SDGs, tools or indicators identified in the previous chapter to pinpoint their areas of alignment or divergence with sustainable development objectives.

Consequently, oil industry governance in Nigeria and the accompanying challenges in both the upstream⁴⁴⁵ and downstream⁴⁴⁶ aspects of the petroleum industry are scrutinized to assess the feasibility of achieving reforms towards a green economy in the context of sustainable development. Another relevant issue for determination is the extent to which the Nigerian legal

⁴⁴⁴The term regulation can have different meanings, as defined in Bronwen Morgan and Karen Yeung, *An Introduction to Law and Regulation: Text and Materials* (2007). In the context of this chapter, petroleum regulation means the deliberate attempt of the State to establish, monitor and enforce legal rules relating to the exploitation of petroleum. See also, Tina Hunter, *Legal Regulatory Framework for the Sustainable Extraction of Australian Offshore Petroleum Resources; A Critical Functional Analysis*.

⁴⁴⁵ The upstream sector, also called Exploration and Production (E&P) includes the search and obtaining of underground or underwater crude oil and natural gas fields, drilling exploratory wells, subsequently drilling and operating the wells that recover and bring the crude oil or raw natural gas to the surface.

⁴⁴⁶ The downstream sector affects the refining, transportation and marketing of petroleum or its derivatives, including the processing and purifying of raw natural gas.

and policy frameworks requires reinforcements to modify and improve state and corporate conduct towards oil exploitation in the Niger-Delta. Likewise assessed is the extent to which the current Nigerian rules are equipped to expedite core themes of sustainable development affecting eco-systems protection, poverty eradication, social development, sustainable use of petroleum resources, including their capacity to engender equity and secure the interests of present and succeeding generations of Nigerians. The purpose of this appraisal is to determine the extent of consistency with international legal instruments, whilst assessing their capacity to trigger and maintain sustainable development.

2.1. The Nigerian Oil and Gas Regulatory Framework: A Concise Overview

A proper overview of the Nigerian oil and gas regulatory framework entails an acknowledgement of its jurisdictional background. The jurisdictional background is often an embodiment of the overarching rationale for the adoption of specific legal regimes, and the regulatory framework for oil exploitation is no different. The Nigerian petroleum regulations are patterned after the United Kingdom (UK) regulations by virtue of the British colonial influence prevalent at the commencement of oil and gas exploratory activity in Nigeria.⁴⁴⁷ Some erstwhile regulations like the Mineral Oils Ordinance evolved into the Nigerian Petroleum Act (PA) its amendments and subsidiary legislation.⁴⁴⁸ These include the Petroleum Drilling Regulations (for monitoring petroleum drilling operations) and the Petroleum Refining Regulations (which constitute the regulatory parameters for petroleum refining operations in

⁴⁴⁷ The Nigerian Legal System is a transplant of the UK regulations and is comprised of the Statutes of General Application, Common Law and Doctrines of Equity, statutes made before October 1, 1960, including unrepealed regulations extending to Nigeria. Laws made by the local colonial legislature also form part of Nigerian legislation. Eg. The Petroleum Ordinance of 1889. This legislation had existed before commencement of exploration, the Mineral Regulation (Oil) Ordinance of 1907 entitled only British subjects to prospect for oil. The Mineral Oils Act of 1959 thereafter repealed the Mineral Oils Ordinance of 1914. See also, J.G. Frynas, “Oil in Nigeria: Conflict and litigation between oil companies and village communities” (1999)

⁴⁴⁸ The Nigerian Petroleum Act (PA) (1969) discussed in the subsequent section

the oil industry).⁴⁴⁹ The Nigerian PA, which is also reminiscent of the UK Petroleum Act, remains the primary legislation overseeing petroleum activities in Nigeria. It provides a framework for regulating upstream and downstream petroleum activities. The Associated Gas Reinjection Act (1979) provides statutory basis for the control of gas flaring in Nigeria.⁴⁵⁰ The Environmental Impact Assessment Act (1992) provides a regulatory framework for EIAs as a part of project development. The Minerals Ordinance (1914) prohibits the pollution of watercourses in the process of mining and prospecting for minerals in Nigeria and incidentally amended in 1925, 1950, and 1958. The Oil Pipelines Act was enacted in 1965 to provide a legislative framework for the prevention of land and water pollution during oil transportation via pipelines.

In the same vein, the Mineral Oils Act (1963) provides a framework for health, safety and environmentally friendly exploration and production activities. The Hydrocarbons Oil Refineries Act⁴⁵¹, the Petroleum Regulations (1967) also provide a framework for safe petroleum operations, including environmental protection. The Oil in Navigable Waters Act⁴⁵², essentially prohibits discharge of oil into navigable water courses and other areas. There is also the Nigerian National Petroleum Corporation (NNPC) Act No 33 of (1977) which empowers the Corporation to engage in all activities relating to the petroleum industry and to enforce all regulatory measures relating to the general control of the petroleum sector through its Petroleum Inspectorate Department. The Act also provides appreciable opportunities for the NNPC to be engaged in petroleum activities without limitations by ensuring that the NNPC is an operator, participant and regulator of the Nigerian oil and gas industry.⁴⁵³ Other relevant

⁴⁴⁹ The Petroleum Drilling and Petroleum Refining Regulations were also enacted in 1969 as subsidiary legislation to the Petroleum Act of 1969.

⁴⁵⁰ See later section on Atmospheric protection regulations

⁴⁵¹ See, Hydrocarbons Oil Refineries Act (1965) assessed in later sections

⁴⁵² Oil in Navigable Waters Act (1968) also discussed in later sections

⁴⁵³ NNPC functions include *inter alia*: exploration and production, refining, purchasing and marketing of petroleum, its products and by-products. Also, providing and operating pipelines, tanker-ships and other facilities for the conveyance of

laws include pertinent sections of the Federal Constitution of Nigeria (1999) and the Land Use Act (1979). Each law is accountable for different but significant roles in the administration and regulation of the petroleum industry. Moreover, they establish the regulatory agencies for implementing government policies whilst optimizing compliance mechanisms towards corresponding statutes.

In accordance with the administrative and regulatory obligations vested on the petroleum minister by the PA, the petroleum Ministry is accountable for the formulation, implementation and co-ordination of government policies for the industry.⁴⁵⁴ The Ministry also exercises its regulatory functions through the Department of Petroleum Resources (DPR), which is responsible for the monitoring and supervision of the petroleum industry and its operations. Industry operations are normally executed via petroleum licences and leases in the country, while the DPR ensures compliance with the applicable laws and regulations in line with good oilfield practices. The Minister of Petroleum Resources oversees the DPR with overarching regulatory powers.⁴⁵⁵ This encompasses powers to grant the rights for the exploration, extraction and production of oil and gas in Nigeria through the issuance of oil exploration licences (OELs)⁴⁵⁶, oil prospecting licences (OPLs)⁴⁵⁷ and oil mining leases (OMLs).⁴⁵⁸ The

crude oil, constructing equipping and maintaining tank farms, research and development and doing anything for giving effect to agreements entered into by the Nigerian Government with a view to seeking participation by the Government or the Corporation in activities connected with petroleum.

⁴⁵⁴ See, Section 2(1) Petroleum Act 1969

⁴⁵⁵ See, Section 2 Petroleum Act 1969

⁴⁵⁶ See, S. 2 (1) (a) Petroleum Act, 1969 An Oil Exploration Licence (OEL) is granted for one year for the search of oil only. The nature of the interest granted is to confer on the licensee the right to explore for petroleum. This right is however not exclusive to the licensee as another OEL may be granted to another applicant over the same area. This right granted by an OEL extends to conducting aerial and surface geological and geophysical surveys, excluding drilling below 91.44 metres. An OEL is also renewable.

⁴⁵⁷ S.2 (1) (b) Petroleum Act, an oil prospecting licence (OPL) is granted for five years and is also renewable for the search, drill, win and disposal of oil. It confers on the licensee the right to explore, carry away and dispose of petroleum discovered and won in the area covered by the licence. This grant is exclusive so that another OPL may not be granted in respect of the same area.

⁴⁵⁸ S.2 (1) © Petroleum Act, an oil-mining lease (OML) is granted for twenty years and is renewable for the search, win and disposal of oil.

Minister may also authorise other contractual arrangements, such as production sharing contracts (PSCs)⁴⁵⁹ and service agreements or service contracts (SCs).⁴⁶⁰

Other supervisory agencies for the oil and gas industry include: The Federal Ministry of Environment (FME) which is responsible for administering environmental impact assessments (EIAs) for public and private schemes, as well as oil and gas projects. The DPR also has primary responsibility for the enforcement of safety and environmental standards in the oil and gas industry. Whereas, the Petroleum Inspectorate, operates as a department within the Nigerian National Petroleum Corporation (NNPC), it is responsible for issuing permits and licences for activities connected with petroleum exploration and exploitation.⁴⁶¹ Also, the National Oil Spills Detection and Response Agency (NOSDRA) is responsible for preparing, detecting and responding to oil spillages. Likewise, the agency undertakes surveillance of oil exploration activities including securing compliance with all existing environmental legislation, particularly in spills detection.⁴⁶²

2.2. Sustainable Development Goals and Oil Exploitation in Nigeria: A Case of Multiple Trade-Offs and Elusive Synergies?

As argued in chapter 1, the SDGs are designed to enhance synchronisation between development goals and environmental protection. In the petroleum industry context, it is further stressed that the integration of the 17 goals articulated in the 2030 Agenda for Sustainable development remains integral for achieving a green and sustainable petroleum industry. One however acknowledges that synergies across all 17 goals though ideal, may not always be

⁴⁵⁹ See, David Smith & Louis T. Wells: "Minerals Agreements in Developing Countries: Structure and Substance" 69 AJIL 560.

⁴⁶⁰ See, M. Taylor and S. Tyne: *Joint Operating Agreements* (London, Longman, 1992) p. 20.

⁴⁶¹ See, Section 5 (1) (a-g) of the NNPC Act 1977;

⁴⁶² See, Section 5 of the NOSDRA Act, 2006

feasible and the likelihood of trade-offs remain realistic considerations in the administration of an industry as global, complex and dynamic as the petroleum industry. Notwithstanding this limitation, global and planetary sustainability is dependent on goals harmonization across SDGs especially as it affects the oil industry and its ability to impair the environment via unsustainable exploitation processes. This section thus undertakes an assessment of the Nigerian petroleum regulations to ascertain their feasibility for achieving sustainable development.

A scrutiny of the Nigerian oil and gas rules at this juncture is thus relevant to determine whether adequate consideration and application of the SDGs in relation to oil exploitation are evident. In other words, the questions regarding Nigerian oil and gas regulations remain: Are there apparent synergies across the 17 SDGs and the Nigerian petroleum laws? More importantly, are the Nigerian petroleum regulations and policy compliant with specific environmental goals represented in the SDGs? For instance, do Nigerian petroleum regulations effectively engender: goal 13 affecting climate action, goal 14 (aquatic system protection), as well as goal 15 (terrestrial ecosystems / bio-diversity protection) including their associated targets? Are the rules realistic and capable of optimizing the social development pillar as well as ensuring green economic growth or is the current Nigerian scenario a case of zero synergies and excessive trade-offs? In view of these foregoing issues, Nigeria's efforts at securing all three pillars of the sustainable development paradigm is thus considered in the proceeding sub-sections, commencing with the environmental protection pillar, followed by the economic growth and social pillars.

2.2.1. Environmental Protection Guidelines in Nigerian Petroleum laws

In addressing the preceding issues, a state's cognisance, adoption and implementation of international environmental treaties as policy instruments to optimize SDGs during oil

exploitation becomes relevant. Apparently, Nigeria's willingness to commit to environmental goals may be inferred from the considerable number of international legal instruments that it is party to. Pertinent treaties or instruments from the oil industry context include: The 1992 United Nations Framework Convention on Climate Change (UNFCCC) and its accompanying Protocols, the 1995 Amendment to the Montreal Protocol on Substances that deplete the Ozone Layer⁴⁶³, International Convention on Oil Pollution Preparedness, Response and Cooperation of 1992⁴⁶⁴, Convention on Biological Diversity⁴⁶⁵ and a host of others that foster the aims of sustainable development in the petroleum industry.⁴⁶⁶ This section thus considers the extent to which these international environmental treaties have influenced oil exploitation in Nigeria. Further attention is given to the successes or failings of the Nigerian attempts at inter-linking the SDGs, achieving sustainable development and a green petroleum industry via environmental regulations.

The underlying foundation of environmental law and policy in Nigeria is traceable to Section 20 of the Nigerian Constitution which stipulates the provisions for: environmental protection, preservation of water, air, land, forests and wildlife in Nigeria.⁴⁶⁷ Other legislative enactments in furtherance of environmental protection, administered by the Federal Ministry of Environment comprise of the Federal Environmental Protection Agency Act of 1988 denoted as the FEPA Act and its accompanying regulations.⁴⁶⁸ The associated regulations also impact on oil industry operations in the areas relating to habitat protection and waste management

⁴⁶³ Nigeria signed this Protocol on the 10th of April 1996

⁴⁶⁴ Nigeria became a signatory on the 27th of November 1994

⁴⁶⁵ See UNCED (1992), Nigeria also signed this Convention in November 1994

⁴⁶⁶ Other Environmentally protective treaties which Nigeria is signatory to include, the United Nations Convention on the Law of the Sea the Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (Basel Convention) the Protocol on Substances that deplete the Ozone Layer (Montreal Protocol) the Convention for the Protection of the Ozone Layer (Vienna Convention) the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage the Convention on the Conservation of Migratory Species of Wild Animals, etc

⁴⁶⁷ See S.20 Federal Republican Constitution of Nigerian 1999.

⁴⁶⁸ Other regulations under the Act include; National Environmental Protection (Effluent Limitation) Regulations, the National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations, the National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations,

comprising: the Environmental Impact Assessment Act of 1992 (EIA Act), the National Oil Spills Detection and Response Agency Act, (NOSDRA)⁴⁶⁹, which provides statutory backing for the agency of the Federal Ministry of Environment to optimize oil pollution controls. The Agency is empowered to tackle preparedness, detection and response to all oil spillages in Nigeria.⁴⁷⁰ Similarly, the Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN)⁴⁷¹ as codified by the DPR, pursuant to the Petroleum Act of 1969 crucially provides regulatory and compliance guidelines to secure performance of environmental objectives during petroleum exploitation.

In the same vein, the Petroleum Act's environmentally relevant aspect is hinged on the fact that it provides a nominal framework for the observation of safety procedures, health guidelines and pollution prevention during petroleum operations.⁴⁷² Indeed, S.9. (1) of the PA stipulates that;

“the Minister may make regulations prescribing anything requiring to be prescribed for the purposes of this Act; by providing generally for matters relating to licences and leases granted under this Act and operations carried on thereunder, including, the safe working, the conservation of petroleum resources, the prevention of pollution of water courses and the atmosphere....”⁴⁷³

Although these provisions seem to lend environmental support during oil exploration, they are however vague, prone to subjective interpretation and difficult to enforce. A further perusal of S.9 of the PA indicates a recommendation for the Minister to make regulations for oil pollution

⁴⁶⁹ See Section 5, 6 & 7 National Oil Spill Detection and Response Agency (NOSDRA) (Establishment) Act, CAP 157 LFN 2006

⁴⁷⁰ Section 1, NOSDRA (Establishment) Act, CAP N157, LFN 2006.

⁴⁷¹ EGASPIN (1991) as amended in 2002

⁴⁷² See, S.9, Petroleum Act 1969.

⁴⁷³ Ibid

prevention.⁴⁷⁴ Though well-meaning provisions, they lack specific guidelines for effective implementation or enforcement. This is because it relies heavily on excessive discretion of the minister who is not obliged to make specific regulations that would guarantee environmental protection. This has resulted in the claims that the PA has been partly responsible for the poor environmental state of the Niger-delta, as the regulations lacked clear or comprehensive environmental guidelines and proffer minimal standards.⁴⁷⁵

Furthermore, the provisions relating to the grant of oil prospecting license and oil mining leases under the Act, wherein license holders must relinquish portions of the lease after ten years, exacerbate this issue of inadequate and unclear environmental guidelines conferred by the PA.⁴⁷⁶ S.12 of the PA inadvertently serves to attenuate environmental goals by engendering trade-offs which expedite the exploitation process for economic growth, but impinge on environmental protection and sustainable production goals as the oil companies are less keen to remediate oil-impacted sites before decommissioning. This is obviously in a bid to exploit the utmost gains from their leases and investments, thereby culminating in a severely degraded Niger-delta.⁴⁷⁷

Apparently, the PA mostly reproduced the provisions of the colonial legislation albeit in a different title and did very little to improve on the limitations of the erstwhile regulation.⁴⁷⁸ This substantiates why the PA was criticised as an environmentally lacking legislation, having scant provisions against water, atmosphere and land pollution and fails to optimize goals and

⁴⁷⁴See, Section 9 (1)(b)(iii)

⁴⁷⁵ Lawrence Atsegbua, “Acquisition of Oil Rights under Contractual Joint Ventures in Nigeria”. (1993) Journal of African Law, 37, pp 10-29. doi:10.1017/S0021855300011086.

⁴⁷⁶ See, S. 12. (1) Of the Petroleum Act which provides; “Ten years after the grant of an oil mining lease, one half of the area of the lease shall be relinquished. (2) Paragraph 18 of this Schedule shall apply to the relinquished area”.

⁴⁷⁷ Ibid

⁴⁷⁸ Lawrence Atsegbua, “Acquisition of Oil Rights under Contractual Joint Ventures in Nigeria”. (1993) Journal of African Law, 37, pp 10-29. doi:10.1017/S0021855300011086.

targets across goals 6, 13, 14 and 15. The PA is further constrained in its scope of enforcement and fails to provide comprehensive environmentally protective guidelines regarding habitats or species preservation during petroleum exploitation.⁴⁷⁹ Ultimately, the extant PA remains weak and incapable of triggering or driving synergies across the SDGs to engender a green oil industry in Nigeria, but requires reforms to guarantee its relevance as a tool of environmental sustainability in the Nigerian petroleum industry.

2.2.1.1. Environmental Impact Assessment Regulations in Nigeria

The Nigerian government established an institutional framework to tackle environmental problems via the Federal Environmental Protection Agency (FEPA) Act of 1988 which was subsequently amended by Decree 59 of 1992. FEPA was empowered to oversee the environment and undertake measures and policies to expedite environmental protection and pollution control. Thereafter state governments were also authorised to establish state environmental protection agencies. FEPA subsequently published the National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulation 1991 wherein EIA was made obligatory, requiring compliance within 90 days. In furtherance of the UNCED objectives⁴⁸⁰, Nigeria enacted the Environmental Impact Assessment (EIA) Act.⁴⁸¹ Before the EIA Act, most projects in Nigeria complied with feasibility reports based on a cost and benefit analysis statement with minimal attention given to the environmental risks or possible environmental impacts of proposed development projects.⁴⁸²

A closer contemplation of S.1 of the EIA Act reveals the primary intent of the Act, which stipulates that an EIA must be conducted to determine the likely environmental impacts of a

⁴⁷⁹ Ibid

⁴⁸⁰UNCED 1992, See especially, Principle 17 of the Rio Declaration and Agenda 21

⁴⁸¹See EIA Act No. 86 of 1992

⁴⁸² M. N. Isah, “Regulatory Framework and EIA Process in Nigeria” 42

project, and the extent to which the proposed activity would significantly or otherwise affect the environment or the environmental effect of projects or proposed industrial activities instigated by individuals, corporate and public entities.⁴⁸³ The EIA Act by virtue of sections 3 and 4 (a-h) also requires that the proponent of a project, obtain the Ministry's approval before proceeding with a project. The EIA Act also sets out the EIA process by the provisions of sections 16, 17 and 19 of the Act, which commences from an EIA proposal to its approval for implementation, resulting in the issuance of an Environmental Impact Statement (EIS) and certificate.⁴⁸⁴ The EIA stages identified by the Act include screening which entails project appraisal for potential environmental effects, scoping which sets out the spatial and temporary dimension of environmental effects including detailed base line studies for determining the environmental conditions prior to project implementation.⁴⁸⁵

The Act also gives a detailed definition of the environment to mean the components of the Earth comprising; (a) Land, water, and air, including all layers of the atmosphere; (b) All organic and inorganic matter and living organisms; and (c) The interacting natural systems that include components referred to in paragraphs (a) and (b)⁴⁸⁶ with the aim of promoting a broader scope of application. Furthermore, S. 4 of the Act requires an EIA to indicate the description of the proposed activities, expatiate on the potentially affected environment including specific information necessary to identify and assess the environmental effects of the proposed activities, including the details of the practical activities envisaged.

Likewise, S.4 requires an assessment of the likely or potential environmental impacts of the proposed activity and the outline of alternatives, including the direct or indirect, cumulative,

⁴⁸³ Sections 1 and 2 EIA Act 1992

⁴⁸⁴ See Part II, Sections 16-19 of the EIA Act (1992)

⁴⁸⁵ S.63(1) of the EIA Act

⁴⁸⁶ EIA definition also affects the socioeconomic and biophysical attributes of the environment.

short-term or long-term effects and available mitigating or palliative measures. The Act also provides sanctions for noncompliance with the provisions of S.4, which includes the imposition of a fine or imprisonment but not both.⁴⁸⁷ Moreover, the Act commendably prohibits individuals, public and corporate bodies from embarking on or authorizing projects without consideration of their environmental impacts at the earliest stages. It further provides that decisions cannot be concluded either against or in support of the proposed activity without the contribution and opinion of government agencies, experts and members of the public.⁴⁸⁸

Notwithstanding these commendable attributes of the EIA Act, it is however not flawless. Its major weakness lies in the fact that it fails to stipulate the need for continuing EIAs through the lifetime of a development project. In addition, the approval and permits process often involve undue concurrence with the federal, state and even local government authorities where the proposed industrial activity is sited. This is highly problematic because the states and local governments consider the award of permits, approvals and other related EIA certification procedure to be a revenue generating measure for the ministry or environment departments as opposed to an environmental protection initiative.⁴⁸⁹

Frequently, other regulators including State EPAs unnecessarily charged with matching responsibilities as the FEPA, rather than synchronizing with FEPA, undermine its efforts by demanding economic benefits from the IOCs as an essential part of EIA certification procedures. This occurs particularly where FEPA involves them only at the review stage of the EIA process.⁴⁹⁰ Quite unfortunately, confusion and bureaucratic delays in implementing industry related EIAs become unavoidable due to such replication of regulatory agencies,

⁴⁸⁷ For an individual, the penalty is fine of N100, 000 (approximately £330) or a 5-year jail term. In the case of corporate bodies, penalty is a fine not less than N50, 000 but not more than N1. million.

⁴⁸⁸ Sections 6 – 11 EIA Act

⁴⁸⁹ See, Echefu, Nerry, and E. Akpofure. "Environmental Impact Assessment in Nigeria: Regulatory Background and Procedural Framework." *EIA Train Resouce Manual* (2002): 63-74.

⁴⁹⁰ *Ibid*

leading to enormous cost and unnecessary waste of time. This impacts negatively on the objectives of the EIA Act and its corresponding performance. Thus, some EIA processes are often avoided because the penalties for breaching the cumbersome nature of permit approvals are cheaper and less burdensome than conducting EIAs for every project or environmentally intrusive activity.

Moreover, the Act fails to stipulate the recruitment of environmentally experienced or expert personnel to ensure full compliance with the EIA directives. It is clarified that, the use of experienced EIA consultants is a critical element towards strengthening and optimizing EIAs, as there exist interlinkages between EIA quality and the expertise of consultants and planning authorities. Essentially, inexperience on a general level not only hinders decent quality impact assessments but jeopardises the knowledge and data that is built with experience.⁴⁹¹ This further complicates EIA enforcements as it threatens the ability to generate and accumulate indispensable data, which should normally provide the technical solutions crucial for mitigation measures. Likewise, the Nigerian reality portrays the absence of alternative sites for consideration in EIA applications, should there be negative outcomes of an EIA.⁴⁹² An additional unfavourable situation created by the Act is that it places an unhealthy reliance on the project proponents for provision of environmental information and reports of environmental studies, thus, its aims are easily circumvented.

Furthermore, a visible and relevant flaw of EIA processes conducted under the Act relates to the issue of public participation during EIAs and the difficulties experienced by private persons in ensuring EIA performance via judicial process.⁴⁹³ These foregoing factors formed the crux

⁴⁹¹ Kakunge, John O., and Anthony M. Imevbore. "Constraints on Implementing Environmental Impact Assessments in Africa." *Environmental Impact Assessment Review* 13, no. 5 (1993): 299-309.

⁴⁹² See, Kakunge, John O. "EIA And Good Governance: Issues and Lessons from Africa." *Environmental Impact Assessment Review* 18, no. 3 (1998): 289-305.

⁴⁹³ Public participation as an aspect of EIA is mentioned under this subheading, however it will be adequately discussed under the Public Participation sub-heading which forms a social development tool of sustainable development.

of the controversy in the case of *Oronto Douglas v. Shell Petroleum Development Company and Ors.*⁴⁹⁴ The appellants in this case filed an action against the respondents who were jointly engaged in a liquefied natural gas project. Before commencing the project, the respondents failed to conduct an environmental impact assessment, thereby infringing the provisions of the Act. The appellant contended that the respondents had failed to comply with statutory provisions and sought declaratory and injunctive reliefs restraining the respondents from continuing and/or carrying on with the liquefied Natural Gas project until a proper environmental impact assessment has been conducted strictly in accordance with the terms of the EIA Act. The trial court (Federal High Court Lagos) rather than considering the merits of the case in accordance with the EIA Act to determine issues affecting the alleged statutory infringements, dismissed the suit based on the preliminary objections raised by the respondents who contended that the Appellants lacked locus standi and that the mode of commencement of the action was procedurally defective. The Court maintained that, in the absence of the plaintiff showing that he had suffered a personal loss by the failure to conduct the environmental impact assessment, his suit could not be sustained.⁴⁹⁵

The suit was thus frustrated at the trial stage by an extremely strict or narrow construction of standing or locus standi, to deny the plaintiffs access to remedy. Thus, procedural technicalities and rules of court relating to the form of application stalled the enforcement of a core aspect of the EIA Act, relating to EIA performance, or associated public consultations, before commencement of an environmentally invasive activity. However, the Court of Appeal upturned this decision and ordered a re-trial.⁴⁹⁶ Regrettably, and in a rather unexpected turn of events, a re-trial proved to be impossible as the “Res” or subject matter of the litigation, the

⁴⁹⁴ *Oronto Douglas V. Shell Petroleum Development Company Ltd. & Ors* (1998) (Unreported) CA/L/143/97

⁴⁹⁵ Ibid. See also, Obiora Chinedu OkaforI, Basil Ugochukwu, “Raising legal giants: The agency of the poor in the human rights jurisprudence of the Nigerian Appellate Courts”, Afr. hum. rights law j. vol.15 n.2 Pretoria 2015 1990-2011.

⁴⁹⁶ See Appeal Court decision in *Oronto Douglas v. Shell* (1999) 2NWLR at 475, the court of Appeal thereafter set aside the decision of the learned trial Judge. Belgore, C.J, on the 17th day of February 1997.

Liquified Natural Gas (LNG) project had been completed in the Niger-Delta and commissioned before the commencement and determination of the Appeal in Lagos, effectively foreclosing any chance of a properly executed EIA for such an high risk, environmentally intrusive project.

Also, in accordance with Nigeria's objectives for improving environmental policy in the petroleum industry, the DPR was empowered by the PA to make regulations for pollution prevention and abatement. Consequently, the DPR created and endorsed the Environmental Guidelines and Standards for the Petroleum Industry (EGASPIN) in 1991 with a view to enforcing EIAs in the oil industry. However, these provisions also duplicate those of the earlier mentioned EIA Act and creates undue replication of similar objectives. Moreover, the EGASPIN is responsible for ensuring proper environmental management and averting threats posed by oil exploratory equipment and installations.⁴⁹⁷ Part VIII, Section A of the EGASPIN governs EIA processes, while Articles 1.3 and 1.6 stipulate the performance of EIA studies prior to exploratory and operational activity to protect and enhance environmental resources in an eco-efficient manner. Article 1.4 makes the EIA report an essential part of the EIA.

The EGASPIN further promotes protection of the environment via, the Environmental Evaluation (post-impact) Report (EER) which is a systematic process, requiring a project proponent or operator to provide the preliminary assessment of impacts through a screening process before an initial report is submitted to DPR. It is only when significant impacts are identified for a project or activity that full EIA studies and report preparation is authorised. The EGASPIN is however flawed in that it fails to mandate EIAs in circumstances where petroleum wastes from exploration and production require transfer from one site location to

⁴⁹⁷ See, Nerry Echefu and E Akpofure, Environmental impact assessment in Nigeria: regulatory background and procedural framework.

another production facility for disposal. This is an important but currently overlooked area as it poses serious environmental hazards.⁴⁹⁸ This is because, some oil production facilities classified as off-shore locations like the Forcados and Escravos oil terminals are inextricably linked with the Niger-delta inland waterways and environment, thus the failure or non-performance of an environmental risk assessment before transfers and disposal of petroleum wastes generates significant environmental problems.⁴⁹⁹ This omission thus proves detrimental to optimizing the aims or targets of goals 14 and 15 of the SDGs in securing aquatic and terrestrial systems protection during oil exploitation to prevent environmentally adverse impacts.

2.2.1.2. Atmospheric and Climate Protection Regulations in Nigeria

As argued in chapter 1, environmental regulations, which mitigate climate change, enhance atmospheric protection, whilst fulfilling the targets of SDG 13 relating to climate action are crucial tools of sustainable development in the petroleum industry. Nigerian Petroleum regulations are also embedded with atmospheric protection provisions following the ratification of the Vienna Convention on the Protection of the Ozone layer, the UNFCCC and additional protocols.⁵⁰⁰ However, the effectiveness of the Nigerian regulations in generating viable synergies towards atmospheric protection and securing the objectives of SDG 13 is another matter altogether. Indeed, Nigeria has oil and gas regulations like the Associated Gas

⁴⁹⁸ Petroleum wastes include any unavoidable materials resulting from oil and gas operations for which there is no economic demand or value and which must be disposed of. See H. Bashat, Managing Waste in Exploration and Production Activities of the Petroleum Industry (Paper presented at the 4th International Conference & Exhibition for Environmental Technologies, 30 September- 02 October 2003).

⁴⁹⁹ See, Anwuli Irene Ofuani, 'Environmental Regulation of Offshore (E&P) Waste Management in Nigeria: How Effective?', 7/2 Law, Environment and Development Journal (2011), p. 79, available at <http://www.lead-journal.org/content/11079.pdf>. See also, <http://www.britannica.com/place/Forcados-River> assessed at 1st November 2015.

⁵⁰⁰ See the Vienna Conference of 1985 which entered into force in 1988, See also, the UNFCCC (1992), the Kyoto Protocol, the 1996 Amendment to the Montreal Protocol on Substances that deplete the Ozone Layer etc. See also, Omorogbe, Y., *The Kyoto Protocol and the International Energy Industry: The Implementation of the Kyoto Protocol in Nigeria*, in Cameron, P.D., and Zillman, D., (ed.), Kyoto: From Principles to Practice, 345-355 (2001).

Re-Injection Act, which has commendable provisions for climate and atmospheric protection.

The Act specifically provides for oil companies in Nigeria,

“...to submit to the Minister a preliminary programme or schemes for the viable utilization of all associated gas produced not later than 1st April 1980 and provide detailed programmes and plans for either the implementation of programmes relating to the re-injection of all produced associated gas or schemes for the viable utilization of all produced associated gas no later than 1st October 1980”.⁵⁰¹

The essence of these provisions is to phase out gas flaring in Nigeria, prevent atmospheric pollution and reduce carbon emissions from the flares which is an essential step towards achieving the targets of goal 13 regarding climate action on a national level. Nevertheless, incredible amounts of gas continue to be flared each day unabated in the Niger-delta.⁵⁰² Despite the Act’s articulation of timelines for the cessation of gas flaring for April and October 1980. Previously, the penalty for breaching anti-flare provisions was a forfeiture of the concession. This penalty was however considered unduly harsh and inimical to investment.⁵⁰³ The initial penalty for not re-injecting associated gas was thereafter changed to a low fine, which made it more economical for companies to flare than to market or re-inject associated gas. The IOCs or multinational Oil companies found it cheaper to flare gas at a cost of 1 million US Dollars as against the 56 million US Dollars cost of new infrastructure to enable switching from water to gas injection.⁵⁰⁴

Regrettably, the alteration of Government’s position as against the penalty of 1980 was due to factors ranging from lack of Infrastructure for associated gas utilization, including the financial

⁵⁰¹ See Sections 1 and 2 of the Associated Gas Re-Injection Act 1979 (as amended in 1985) CAP 20, LFN 2004.

⁵⁰² Human Rights Watch, The Price of Oil: Corporate Responsibility and Human Rights Violations in Nigeria’s Oil Producing Communities, (New York USA, 1999) at 72.

⁵⁰³ See, Ifesinachi, Ken, and Ernest Tooichi Aniche. "The Nigerian National Petroleum Corporation (NNPC) and Enforcement of Zero Gas Flaring Regime in Nigeria." (2015).

⁵⁰⁴ Ibid.

implications of switching gas infrastructure. The Government was expected to contribute, based on the existing Joint Venture agreements to the cost of any gas injection facility. Incidentally, government's input has not been significant as greater consideration has always been paid to short-term economic goals than building resilient and efficient infrastructure in accordance with goal 9, to optimize environmental goals and a long-term green economy.⁵⁰⁵ Sadly, the Act has since been amended to reflect a gas flaring deadline shift to January 1985 and beyond, when the Associated Gas Re-injection (Continued flaring of gas) Regulation of 1984 came into force and provided for exemptions to the general ban on flaring. Although there are other attempts at amendments towards curtailing gas flaring such as the Associated Gas Re-Injection Act of 2004 and the Associated Gas Re-Injection (Amendment) Act of 2004⁵⁰⁶, these appear to be window-dressing of the 1979 Act with negligible adjustments towards fines for flare exemptions. Sadly, the proposed Petroleum Industry Bill which would hopefully resolve regulatory lapses, and allegedly entails an overhaul of the extant regulatory framework, to actualize holistic, sustainability geared regulatory and policy reforms for the Nigerian oil and gas sector remains stalled in a knotty and complex political bog that has spanned 14 years and 3 legislative terms.

Furthermore, flaring phase out dates have been problematic in Nigeria mostly because they have been predicated on public statements of successive governments, without legislative backing or regulatory enforcement measures, accompanied with a dismal lack of political will to implement the ban.⁵⁰⁷ The more disturbing issue of continued delays and political ambivalence towards the enforcement of the stipulated date for the cessation of flaring

⁵⁰⁵ See, Goal 9 of the SDGs regarding building resilient infrastructure for engendering sustainable industrialization and development.

⁵⁰⁶ See, The Associated Gas (Reinjection) Act. Cap 57 Laws of the Federation of Nigeria 2004.

⁵⁰⁷ See, G. I. Malumfashi, "Phase-Out Of Gas Flaring In Nigeria By 2008: The Prospects Of A Multi-Win Project (Review of the Regulatory, Environmental and Socio-Economic Issues)" See also, Ifesinachi, Ken, and Ernest Tooichi Aniche. "The Nigerian National Petroleum Corporation (NNPC) and Enforcement of Zero Gas Flaring Regime in Nigeria." (2015).

activities has proved counterproductive to the aims of sustainable development as it has resulted in an incalculable level of atmospheric pollution in the Niger-delta.⁵⁰⁸

Unfortunately, the Associated Gas Re-Injection Act fails in delivering sustainable development on all three pillars of the sustainable development paradigm⁵⁰⁹, bearing in mind that gas flaring has continued unabated because of the failure of the Act's enforcement and inadequate or inappropriate sanctions under the Act. This has resulted in severe environmental damage and significant economic loss. The gas flaring problem and its attendant effects on Niger-delta communities was also addressed in the case of *Jonah Gbemre & Ors. V. Shell Petroleum Development Company*.⁵¹⁰ Where the appellants sought the enforcement of their fundamental human rights to life and a healthy environment. They contended that, their right to a clean and poison free, healthy environment were violated because of the persistent gas flaring in their Niger-delta communities by the respondents. The Appeal Court held that;

“...these constitutionally guaranteed rights inevitably include the right to clean, poison-free, unpolluted and healthy environment. That the actions of the 1st and 2nd respondents in continuing to flare gas during their oil exploration and production activities in the applicants' community is a gross violation of their fundamental right to life (including healthy environment) and are therefore unconstitutional, null and void by virtue of section 1(3) of the same Constitution”.⁵¹¹

⁵⁰⁸ The Energetic Solution Conference (2004) estimates that the Niger Delta region has about 123 gas flaring sites. T. Agbola and T.A.Olurin, "Land use and Landcover Change in the Niger Delta". (2003) stated that about 45.8 billion kilo watts of heat is discharged into the atmosphere from 1.8 billion cubic feet of gas daily in the Niger Delta region, leading to temperatures that render large areas uninhabitable. Several postulations suggest that, harsh penalties or deterrents would result in economic dislocation or folding up of the IOCs, loss of jobs, reduce government revenue and probably discourage foreign investment”.

⁵⁰⁹ See WSSD 2002, Paragraph 2, Agenda 21. See also, D. French, International Law and Policy of Sustainable Development, (Manchester, Manchester University Press, 2005) UN Doc A/CONF.199/20. See also, UNCSD 2012,

⁵¹⁰ (Unreported) (suit No. FHC/B/CS/53/05). In that case, gas flaring was held to be illegal and a violation of communities' human rights. The case is however on appeal.

⁵¹¹ The Appeal Court ruled that Gas flaring violated the dignity of the human person as enshrined in the Constitution. That section 3(2)(a) and (b) of the Associated Gas Re-Injection Act and section 1 of the Associated Gas Re-Injection (Continued Flaring of Gas) Regulations of 1984, under which gas flaring in Nigeria may be allowed are inconsistent with the applicant's

Based on these findings, the reliefs claimed by the applicants as stated in their motion were granted. However, the court could not award damages or compensation and costs as sought by applicants for breach of the Associated Gas Act's provisions against gas flaring, despite the losses incurred by the Plaintiffs. This judicial shortcoming indicates a manifest failure of the Act as it lacks practical and realistic compensatory measures to victims of gas flare induced environmental degradation. Even more damning is that, such environmental harm ensues from state approved or authorised activity. Undoubtedly, the appropriate sanctions or compensations could have proved realistic in curbing gas flaring. Moreover, appropriate sanctions would better align with industry standards or international best practices whilst positively targeting SDG 13 towards climate action and promoting sustainable development in Nigeria.

2.2.1.3. Biodiversity Protection Regulations in Nigerian Oil and Gas Laws

As also identified in the previous chapter, environmental sustainability in the oil industry predicates the need for regulations affording biodiversity protection. Such an approach better accommodates the aims of SDGs 14 and 15 covering aquatic and terrestrial ecosystems. This subsection therefore considers Nigerian petroleum regulations and their effectiveness in fulfilling the obligations articulated in the Biodiversity Convention and the African Convention on Conservation of Nature and Natural Resources which have Nigeria as signatory.⁵¹² Also considered is the competency of these petroleum regulations to ensure an environmentally sustainable system for biodiversity preservation and restoration. A perusal of the

rights to life and/or dignity of the human person enshrined in sections 33(1) and 34(1) of the Constitution of the Federal Republic of Nigeria, 1999 and articles 4, 16 and 24 of the African Charter on Human and Peoples' Rights (Ratification and Enforcement) Act, cap A9, vol 1, Laws of the Federation of Nigeria, 2004)

⁵¹² Nigeria signed the Biodiversity Convention on 27th November 1994 and the African Convention on Nature Conservation (Maputo Convention) in Maputo in 2003.

Constitution⁵¹³ and relevant oil legislations affecting the environment and supporting ecosystem mostly reveal legislative provisions endorsing “reasonable measures” or “safety measures”⁵¹⁴. For instance, the Petroleum Drilling Regulations in Sections 23 and 27 prohibits, without lawful permission, the cutting down of trees in forest reserves. Section 25 posits that reasonable measures be taken to prevent water pollution and to end it, if it occurs.

In as much as these regulations appear environmentally relevant, they are regrettably minimal, limited in their scope of application as they lack realistic compliance measures and standards for enforcement. The lack of specific rules for pollution prevention of designated and protected areas in the EIA provisions weaken the laws and render them highly prone to subjective interpretation and non-performance.⁵¹⁵ Some other statutes like S.17 of the Petroleum Drilling Regulations, recommend the protection of lands considered sacrosanct.⁵¹⁶ For instance, S.1 sets out the requirements and documents to accompany the application for an oil prospecting license or oil mining lease. It also states the rights and powers of licensees and lessees, and sets out the limitations in their rights; such as entry into lands considered sacred.⁵¹⁷

Likewise, S.25 of the regulation imposes obligations on the licensees and lessees to take necessary precautions to prevent pollution, or control and ensure its cessation when it occurs.⁵¹⁸

⁵¹³ The Nigerian Constitution (FRCN) 1999, acknowledges the relevance of environmental protection in Section 20. Section 12 also purports that international treaties (including environmental treaties) ratified by the National Assembly should be implemented as law in Nigeria.

⁵¹⁴ See for example, Section 9 of the Petroleum Act, S.25 Petroleum Drilling Regulations, S.43 of Petroleum Refining Regulations merely requires that the manager of a refinery should take “measures” to prevent and control the pollution of the environment.

⁵¹⁵ See the Petroleum Drilling Regulations 2004. Also, D. Omoweh, *Shell Petroleum Development Company: The State and Underdevelopment of Nigeria’s Niger Delta “A Study in Environmental Degradation* (Eritrea, Africa World Press, 2005) 52

⁵¹⁶ Petroleum Drilling and Production Regulations: Section 17 (1) (b) places restrictions on licensees from using land within fifty yards of any building, dam, reservoir, public road, etc. Section 23 and 27 prohibits, without lawful permission, the cutting down of trees in forest reserves. Section 25 establishes that reasonable measures be taken to prevent water pollution and to end it, if it occurs.

⁵¹⁷ Entry on land (1) The licensee or lessee is not authorised to enter upon or occupy, or to exercise any of the rights and powers conferred by his licence or lease in relation to-(a) any area held to be sacred (the question whether any area is held to be sacred being decided, if necessary, by the State authority, whose decision shall be final);

⁵¹⁸ S.25. Prevention of pollution; “The licensee or lessee shall adopt all practicable precautions, including the provision of up-to-date equipment approved by the Director of Petroleum Resources, to prevent the pollution of inland waters, rivers...if possible, end it”.

However, a closer observation of these provisions show that they are inadequate and rather limited to the extent that they mostly apply to religious areas and not the entire oil producing areas. Thus, the Petroleum Drilling Regulations also fail to identify the relevant forms of precaution and control measures, rendering it subject to debate or varied interpretation to the detriment of the environment.

Currently, the Niger-delta effectively lacks protected areas and is deprived of enforceable statutory provisions to safeguard its forests, lands, aquatic and other habitats.⁵¹⁹ This situation cannot expedite the achievement of the sustainable development goals. Moreover, the lacunae created by the PA and Drilling Regulations failure to stipulate habitats and species protection guidelines, while affording protection of just sacred trees has resulted in rapid deforestation in the Niger-delta accruing from the execution of oil concessions and leases. This is accountable for the elevated level of CO₂ emissions, erosions and desertification of the Niger-delta region.

The Nigerian oil and gas regulations also fail to clarify how the biodiversity in operational areas may be maintained. This has also negatively impacted on its ability to guarantee biodiversity preservation in most petroleum producing communities. Both fauna⁵²⁰ and flora have been depleted by decades of unsustainable oil exploitation and production in operational areas. The paramount considerations like nature conservation and biodiversity protection evident in the Biodiversity convention, which Nigeria is party to, is not manifest in the oil and gas laws.⁵²¹ The PA which ought to be a fully competent or self-contained legislation with adequate provisions to ensure that petroleum production does not deleteriously impact the Niger-delta environment has unfortunately failed to identify and engender synergies between

⁵¹⁹The closest legislation with some relevance to biodiversity protection in the Niger-delta is the Endangered Species Act, Cap E9, LFN 2004. This Act focuses on the protection and management of Nigeria's wildlife and some of the species in danger of extinction because of overexploitation, however it hardly relates to petroleum exploitation and the consequent impact on Biodiversity.

⁵²⁰Amaize, Emma. "[Nigeria: Pollution in Niger Delta - Oil Firm, Fish Farmers Fight](#)". *Vanguard*. allafrica.com. Retrieved, 20th November 2014.

⁵²¹ Article 6. Of the Biological-Diversity Convention (1992)

environmental goals, bio-diversity protection and oil industry sustainability. It has unfortunately provoked unfavourable trade-offs resulting in the extinction of rare fauna and flora species, including massive deforestation of the Niger-delta for the speedy execution of oil concessions and petroleum leases.

2.2.2. Petroleum Exploitation in Nigeria: Clarifying Endemic, Economic and Unsustainable Governance Challenges

As previously identified in chapter 1, goal 8 of the SDGs relating to sustainable economic growth remains an embodiment of the economic growth pillar of sustainable development in the petroleum industry. This section therefore considers the Nigerian petroleum regulations and their capacity to deliver the utmost economic benefit from the exploitation of petroleum resources whilst maintaining a green petroleum industry. In furtherance of these aims, the NNPC is chiefly considered as it is the Nation's bastion of economic growth, while its multiple roles as an oil and gas producer as well as a regulator of the Nigerian petroleum industry are appraised. The pertinent issue regarding this situation is to ascertain the extent to which Nigerian regulations and policy formulations orchestrated by the NNPC in the petroleum industry have optimized good governance objectives to engender oil sector transparency.

Moreover, the NNPC's competence at achieving oil industry capacity upgrades and institutional strengthening to prevent bribery and corruption, whilst sustaining GDP and green economic growth are assessed. These are core factors which constitute relevant indicators for oil industry governance. This appraisal is also needful as it serves to determine how a host state like Nigeria has managed the peculiar economic challenges of developing its petroleum

resources via a state-owned enterprise (SOE) such as the NNPC and if by so doing, it has achieved sustainable development goals.⁵²²

Evidently, the petroleum industry is uniquely prone to oil price volatility and is frequently plagued with uncertainties.⁵²³ Oftentimes, this instability in oil prices negatively affects the sustainable development of petroleum resources by frustrating national planning measures.⁵²⁴ Furthermore, the highly valuable net worth of petroleum in the International market and its capacity to generate super-profits, exclusive of production costs promotes sharp practices in the sector.⁵²⁵ This often encourages oil multinationals in developing countries with weak institutions, to vie for regulatory regimes that expedite profit maximisation to the detriment of environmental objectives or social development.⁵²⁶

However, green economic growth initiatives envisage that states institute regulatory modalities that effectively counteract the economic challenges in the petroleum industry. Such economic challenges often represent inhibitors of the corresponding economic growth indicators relevant for the oil industry, which in the Nigerian context include: The level of transparency and comparable extent of bribery and corruption experienced within the public sector. Likewise, the level of dependence on resource rents and the impact of petroleum resources on the GDP becomes relevant. More so, the adequacy of budgetary and regulatory measures and the level

⁵²² Richard M. Auty and Raymond F. Mikesell, Sustainable Development in Mineral Economies at 86-87 (Clarendon Press, Oxford 1998). See also, Terry Lynn Karl, The Paradox of Plenty: Oil Booms and Petro States (Univ. of California Press 1997)

⁵²³ Jeffrey Davis, Roland Ossowski, James Daniel and Steven Barnett, Stabilisation and Savings Funds for Non-Renewable Resources: Experience and Fiscal Policy Implications (2001), 6.

⁵²⁴ The price of petroleum swung wildly in the years 2004-2008, including 2012-2013. Crude was priced at around US\$30 per barrel in January 2004, rising to a record high of almost US\$150 in July 2008, and then quickly plummeting to around US\$40 per barrel in December 2008. See oil prices history at EIA, Petroleum Navigator.

⁵²⁵ Sometimes ranging from (500%-1000%). In 2000, petroleum revenue accounted for over 90% of export earnings. This included Nigeria (99.6 %), Algeria (97.2%), and Saudi Arabia (92.1%) Furthermore, for some countries petroleum exports comprised more than 40% of the GDP. This included Bahrain (50.9%), Turkmenistan (493.7%), Nigeria (48.7%), Saudi Arabia, 44.7%), and Trinidad and Tobago (41.1%). In comparison, in the same year, petroleum exports comprised 23.7% of Norway's GDP. See Michael L Ross, Nigeria's Oil Sector and the Poor (2003), 19.

⁵²⁶ Partha Dasgupta and Geoffrey Heal, Economic Theory and Taxable Resources (1979) 153, 153.

of Nigeria's competence in gaining petroleum revenues through taxation and pricing mechanisms also constitute pertinent issues which are subsequently considered.

2.2.2.1. Corruption, Regulatory Gaps and Enforcement Failures in the Nigerian Oil Industry

As previously argued in chapter 1, sustainable governance of the oil industry presupposes the achievement of economic development goals evident in goal 8 of the SDGs in tandem with goals 16 and 17 which interlinks building: effective, accountable, transparent and inclusive institutions at all levels and strengthening the means of implementing the SDGs. Such means of implementation of sustainable development thus envisages oil industry governance devoid of corruption.⁵²⁷ More so, in stressing the crucial challenges posed by corruption and the exigency of subduing and eradicating its pervasive influence, it is recapitulated that, Corruption remains synonymous with "the abuse of public office for private gain".⁵²⁸ When corruption becomes so widespread and seeps through a state's political and economic institutions, it becomes indicative of poor governance and the chances of actualizing sustainable development become remote.⁵²⁹

Moreover, due to the seriousness of the threats corruption poses, the UN in the United Nations Corruption Convention (UNCAC), stresses that, combating corruption requires multi-stakeholder cooperation and international participation.⁵³⁰ Corruption thus constitutes a complex challenge, as it is borderless or without frontiers⁵³¹, universal in scope, even though

⁵²⁷ See Corruption and Integrity Improvement Initiatives in Developing Countries (United Nations publication, Sales No. E.98.III.B.18).

⁵²⁸ Enry Quinones, "What is Corruption?" Organisation for Economic Cooperation and Development. The OECD Observer. 220 (2000): 23-4. ProQuest. 23 Apr. 2018.

⁵²⁹ S. Okogbule, "Regulation of money laundering in Africa: the Nigerian and Zambian approaches." Journal of money laundering control 10, no. 4 (2007): 449-463.

⁵³⁰ General Assembly resolution 58/4 of 31, United Nations Convention against Corruption. (UNCAC) 2003

⁵³¹ F. Galtung, "Transparency international's network to curb global corruption", in Caiden, G. et al. (Eds), *Where Corruption Lives*, Kumarian Press, New Haven, CT. at (2001) at 192

more palpable in some regions where institutional and funding mechanisms to tackle the problem is lacking than in places with more competent systems.⁵³² Additionally, the impacts of corruption are generally more devastating on the poor or most vulnerable who end up more deprived, as social goods and welfare benefits become increasingly inaccessible.⁵³³ These crucial factors thus substantiate the UN's call for cohesive efforts towards national, regional and international participation, to eradicate the menace of corruption.

Undoubtedly, corruption in all its forms and as affecting petro-business in Nigeria remains a topical issue as it significantly impacts on the pathways and the means of implementation of sustainable development in the petroleum industry. Indeed, the Extractives Industries International Index (EITI) ranked Nigeria 55th from 89 valuations in the 2017 Resource Governance Index (RGI), with a score of just 42 out of 100 points.⁵³⁴ Considering that Nigeria has the largest oil and gas reserves in sub-Saharan Africa with an estimated 37 billion barrels of oil and 188 trillion cubic feet of gas,⁵³⁵ these poor scores are suggestive of severe transparency, corruption and other governance challenges in the oil industry decision and administration chain. To corroborate this point, Nigeria was again recently ranked 148th by the Transparency International (TI) index, which ranks 180 countries and territories by their perceived levels of public sector corruption.⁵³⁶ The 2017 index found that more than two-thirds

⁵³² See, L. Manzetti, L. and C.H. Blake, "Market reforms and corruption in Latin America: new means for old ways", *Review of International Political Economy*, (1996) Vol. 3 No. 4, pp. 662-97.

⁵³³ Michel. Dion, "What is corruption corrupting? A philosophical viewpoint." *Journal of Money Laundering Control* 13, no. 1 (2010): 45-54.

⁵³⁴ Available at: <https://opinion.premiumtimesng.com/2017/06/28/nigeria-%EF%BF%BC2017-resource-governance-index-oil-and-gas-by-natural-resource-governance-institute/> Accessed on 6 June 2018

⁵³⁵ See NNPC News and Updates. Available at:

<http://www.nnpcgroup.com/PublicRelations/NNPCinthenews/tabid/92/articleType/ArticleView/articleId/811/Nigeria-Inches-Closer-to-40-billion-barrels-oil-Reserve-Target.aspx>

⁵³⁶ The TI index uses a scale of 0 to 100, where 0 is highly corrupt and 100 is very clean. Available at:

<http://saharareporters.com/2018/02/21/transparency-international-ranks-nigeria-148th-worlds-least-corrupt-country>

Accessed, 26 April 2018

of countries scored below 50, while the overall average score was 43, Nigeria scored 28, which is even lower than the Sub-Saharan African average score of 32.⁵³⁷

Likewise, preceding arguments in chapter 1, clarified the nexus between transparency, sustainable governance including the accompanying impact on regulatory outcomes and corruption. These are further ascertained by scrutinizing the petroleum regulatory framework and how it impacts core areas of oil and gas exploitation. Such areas as governed by the petroleum regulations oversee specific aspects of the oil industry value chain⁵³⁸ encompassing: Awards of Petroleum Contracts/Exploration and production licenses, Public procurement, Accounting and Petroleum Revenue Management, as well as Oversight and Enforcement Actions. In the same vein, transparency in the awards of Petroleum contracts and mining leases, remains crucial to achieving the SDGs and sustainable development in the oil industry. This is because, transparency and accountability remain key tools to forestall corruption and optimize the SDGs. Consequently, the extent of transparency and accountability evident in the Nigerian oil industry becomes a relevant focus point for ascertaining the sustainability of oil sector governance in Nigeria.

Apparently in Nigeria, oil industry processes, including oil contracts and bids transparency remain problematic as bid rounds have perennially been trailed by controversy.⁵³⁹ These controversies range from: discretionary award allegations, shadowy and obscure bidding arrangements or procedures as bidding processes are sometimes shielded from public scrutiny. Worse still, there have been allegations of arbitrary awards of OMLs to the oil producing

⁵³⁷See Corruptions Perceptions Index of the Transparency International, (TI) 2017. Available at: https://www.transparency.org/news/feature/corruption_perceptions_index_2017 Accessed at 26 April 2018

⁵³⁸ See, The EITI value chain: "Strengthening Governance Along The Extractive Industries Value Chain" Available at: <https://eiti.org/eiti-value-chain>

⁵³⁹ A. Gillies, "Reforming Corruption Out of Nigerian Oil? Part Two: Progress and Prospects" U4 Brief, 2009 See also, A. Gillies, "Obasanjo, the donor community and reform implementation in Nigeria." The Round Table 96, no. 392 (2007): 569-586.

subsidiary of the NNPC known as the NPDC⁵⁴⁰ through circumvention of bid rounds or due process.⁵⁴¹ Evidently substantiating these irregularities, the EITI in its 2017 index scored Nigeria 17 out of 100, ranking it 77th amongst 89 countries contracts and licensing assessments. These scores and rankings are thus implicit of elevated levels of opacity and corruption in core areas of decision-making affecting petroleum contracts and licensing, corporate classifications,⁵⁴² process rules and disclosure.⁵⁴³

To a large extent, many of these challenges are a throw-back from the Nigerian military era in the early 70's, where the competence, economic proficiency and institutions to account for and manage petroleum wealth during unexpected petroleum resource booms left such juntas largely unprepared to tackle patronage and rentier state complications.⁵⁴⁴ As already argued in chapter 1, a rentier state or patronage system inevitably relies on a continual stream of income such as oil revenues while inherently generating incentives at odds with sound economic management, ultimately fomenting and institutionalizing corruption.⁵⁴⁵

Indeed, the all-encompassing fiat of military heads of states at the commencement of commercial oil discoveries, set the backdrop for systemic corruption in the oil industry. Especially as the military could unilaterally award contracts, oil blocks and licenses to themselves, allies⁵⁴⁶ and even effect nationalization or expropriation policies instantaneously

⁵⁴⁰ Nigerian Petroleum Development Company

⁵⁴¹ See Ifeanyi Izeze, "Oil blocks Controversy" Available at: <http://saharareporters.com/2017/05/22/oil-blocs-controversy-buhari-nnpsc-and-sorry-tale-ifeanyi-izeze> Accessed, 20 April 2018

⁵⁴² D. Smith, A Culture of Corruption: Everyday Deception and Popular Discontent in Nigeria, Princeton, Princeton University Press; Transparency International (2002-2008) "Corruption Perceptions Index" available at http://www.transparency.org/policy_research/surveys_indices/cpi Berlin

⁵⁴³ See, Corruptions Perception Index (CPI) and EITI – changes on the horizon, available at: <https://eiti.org/blog/cpi-eiti-changes-on-horizon> See also, Natural Resource Governing Institute, Oil and Gas Mining for Development. Available at: <http://resourcegovernanceindex.org/country-profiles/NGA/oil-gas> Accessed. 20 April 2018

⁵⁴⁴ Thurber, Mark C., Ifeyinwa M. Emelife, and Patrick RP Heller. "NNPC and Nigeria's oil patronage ecosystem." *Working paper# 95, Program on Energy and Sustainable Development* (2010): 1-52.

⁵⁴⁵ Bevan, Alan, Saul Estrin, and Klaus Meyer. "Foreign investment location and institutional development in transition economies." *International business review* 13, no. 1 (2004): 43-64.

⁵⁴⁶ D. Omoweh, *Shell Petroleum Development Company: The State and Underdevelopment of Nigeria's Niger Delta "A Study in Environmental Degradation* (Eritrea, Africa World Press, 2005)

via military decrees.⁵⁴⁷ However, Nigeria now urgently needs to move on and ensure more concerted efforts in line with its democratic status since 1999, through transparent governance of petroleum industry processes for sustainable development.

Notwithstanding, there have been sporadic efforts in the Nigerian oil industry targeting improvements in process transparency, depending on the prevailing administration's willingness to tackle corrupt practices.⁵⁴⁸ For instance, bid rounds in 2005-2008 were made public, open and accommodating a more competitive process.⁵⁴⁹ The available oil blocks and relevant bidding criteria were even advertised in accordance with the Nigerian Extractive Industries Transparency Initiative (2006).⁵⁵⁰ However, more needs to be done as corruption still mars oil and gas bidding processes in Nigeria as publication of bid rounds remains irregular. In some cases, bidders make bids which they expect to review or negotiate downwards by capitalizing on the often-obscure process and the minister or government's discretionary powers.⁵⁵¹ There are also instances of forced mergers with third-party agents on undisclosed grounds, while Signature bonus payments deadlines were irregularly enforced.⁵⁵² In extreme cases, companies lacking capacity to execute petroleum contracts secured leases or acreages.⁵⁵³ Although the legislative chambers conducted investigations regarding these

⁵⁴⁷ Thurber, Mark C., Ifeyinwa M. Emelife, and Patrick RP Heller. "NNPC and Nigeria's oil patronage ecosystem." *Working paper# 95, Program on Energy and Sustainable Development* (2010): 1-52.

⁵⁴⁸ See, Gillies, Alexandra. "Obasanjo, the donor community and reform implementation in Nigeria." *The Round Table* 96, no. 392 (2007): 569-586. See also, N. Okonjo-Iweala, "Managing Natural Resources Revenue: Lessons from Nigeria's Experience" <http://go.worldbank.org/92MH1847B0> 4 Revenue Watch Institute (2007) Leaving a Legacy of Transparency in Nigeria. New York: Revenue Watch Institute

⁵⁴⁹ N. Okonjo-Iweala, and P. Osafo-Kwaako, Nigeria's Economic Reforms: Progress and Challenges, Washington DC, The Brookings Institution: (2008) 1-29 available at <http://www.brook.edu/views/papers/20070323okonjo-iweala.html>.

⁵⁵⁰ See, Nigeria's version and transposition of the EITI, The Nigerian Extractive Industries Transparency Initiative (2006), also the "Nigeria Extractive Industries Transparency Initiative Audit of the Period 1999-2004 Final Report"

<http://www.neiti.org.ng/>. The NEITI is the Nigerian model of the Extractive Industries Transparency Initiative (EITI). The EITI serves to promote international good practice for bid rounds whilst concretising the sustainable reforms agenda for revenue transparency in Extractive industries.

⁵⁵¹ A. Gillies, "Reforming Corruption Out of Nigerian Oil? Part Two: Progress and Prospects" U4 Brief, 2009 See also, A. Gillies, "Obasanjo, the donor community and reform implementation in Nigeria." *The Round Table* 96, no. 392 (2007): 569-586.

⁵⁵² Fred Itua, "Senate Probes Revocation of Oil Blocks" Sun Newspapers, Abuja, Available at: <http://sunnewsonline.com/senate-probes-revocation-of-oil-blocks/> Accessed 20 April 2018

⁵⁵³ A. Gillies, "Reforming Corruption Out of Nigerian Oil? Part Two: Progress and Prospects" U4 Brief, 2009

irregularities and revoked several blocks, much more still needs to be done to make the contractual and licensing phase more transparent and ensure sustainable development of the industry.

Furthermore, crude oil commodity sales and transactions negotiated by the NNPC constitutes another core challenge in the Nigerian petroleum industry. This is attributable to the fact that, NNPC crude sales remains an intractable aspect of the petroleum industry value chain. Allegedly, NNPC crude sales are shrouded in mystery, fraught with corrupt practices, financial irregularities, illicit cash flows and unaccounted funds.⁵⁵⁴ Accounting for this challenge is the fact that, the NNPC via its Domestic Crude Allocation (DCA) scheme is vested with far-reaching discretionary powers regarding crude oil sales. The DCA comprises the government's portion of the joint venture (JVs) and production sharing contracts (PSCs), accruing to 1 million (bpd).⁵⁵⁵ Indeed, NNPC authorizes and determines the buyers, manner of sale and the corresponding remittances of generated sales revenues to the national treasury. Also, NNPC decides what sums to remit and what to retain for its administrative and operational requirements. Even more alarming is the fact that, NNPC has retained as much as \$7 Billion (USD) per annum or sometimes amounts accruing to $\frac{1}{2}$ (half) the cost of each barrel of crude sold.⁵⁵⁶ This created serious controversy regarding the validity of such retention of funds.⁵⁵⁷

The DCA or domestic crude allocation system operated by NNPC is a military era scheme which allows NNPC's Crude Oil Marketing Division (COMD) to sell an estimated 500,000 barrels (bpd) of crude on an inter-company basis to NNPC's downstream marketing subsidiary

⁵⁵⁴ See, Alexandra Gillies, Aaron Sayne, Christina Katsouris, "Inside NNPC Oil Sales: A Case for Reform in Nigeria" August 2015. Available at: <https://resourcegovernance.org/analysis-tools/publications/inside-nnpsc-oil-sales-case-reform-nigeria>

⁵⁵⁵ Barrels per day (bpd)

⁵⁵⁶ See, the Nigerian Extractives Industry Transparency Initiative (NEITI), 2012 Oil and Gas Audit Report, Appendix 9.3.4.3;

⁵⁵⁷ See, the Nigerian Extractives Industry Transparency Initiative (NEITI), 2012 Oil and Gas Audit Report, Appendix 9.3.4.3;

PPMC. (the Petroleum Pipelines and Product Marketing Co.). Basically, the PPMC reserves the option to send some of the crude to domestic refineries or resell as exports or convert it as exchange for petroleum products. Thereafter PPMC makes necessary payments to the NNPC, which in turn remits payments to a joint NNPC-Central Bank of Nigeria (CBN) Naira denominated account. The thrust of the ensuing challenges thus involves: NNPC in a conflict of interest situation where it can be both the seller, and the buyer as PPMC is its downstream subsidiary.⁵⁵⁸

More so, NNPC decides on its own behalf, the most favourable or convenient price terms and conditions in dollars denominated transactions which are extremely opaque.⁵⁵⁹ Moreover, NNPC decides on the remittances conversion rates, converting Dollars into Naira, and adopts a considerably lower rate than the CBN's, inevitably remitting drastically reduced sums to the CBN which are tough to verify. This resulted in the claim by the Nigerian Extractives Industries Initiative (NEITI) that this unilateral conversion practice has accrued to astronomical losses which amounted up to \$217 million per year for 2009 to 2011.⁵⁶⁰ Ultimately, NNPC retains more funds from the DCA scheme than the government, resulting in confusion, escalating government debt profile, mismanagement and misappropriation of public funds, which could have been better utilized for public or social goods, including optimizing more synergies across the sustainable development goals.

⁵⁵⁸ See, NEITI Audit Report for Oil and Gas 2015. Available at: <http://www.neiti.gov.ng/index.php/neiti-audits/oil-and-gas/category/174-2015-audit-report>

⁵⁵⁹ See, the Nigerian Extractives Industry Transparency Initiative (NEITI), 2012 Oil and Gas Audit Report, Appendix 9.3.4.3; PwC Report p.141. 96 In that month, President Obasanjo revoked the recurrent subsidy on NNPC refinery oil, issuing a directive that all future refinery sales would "attract the prevailing international market price." Office of the President, PRES/158, to Group Managing Director, NNPC, dated October 9, 2003. Before then, NNPC had paid fixed fees ranging from \$9.50 and \$22/bbl. For crude sales that could cost as high as \$65 at prevailing market rates.

⁵⁶⁰ See e.g., Lawan Report p.12, 101. 94 See e.g., KPMG Project Anchor Report sec. 3.4.3 (claiming that retroactive pricing cost government \$67 million in three years); Lawan Report p.101 (reporting N108.648 billion in "discounted sales" between 2009 and 2011); PRSTF Report p.68 (calculating \$4.6 billion in losses between 2002 and 2011). 2 As shown on NNPC Crude Oil Lifting and Sales Profiles, 2005-2014. For more on how NNPC term contracts work, and NNPC's sources of oil, see main report p.16.

Regarding oil industry procurements, similar records of irregularity and corruption are evident. Indeed, a massive portion of Nigerian government revenues accruing over 80 percent⁵⁶¹, mostly from oil sources are disbursed through industry procurement. Also, in the military or pre-1999 era alone, the Nigerian government suffered colossal losses exceeding US\$ 300 million annually to procurement fraud and inefficiency.⁵⁶² Procurement irregularities and corrupt practices range from: budget opacity or inconsistencies, to rampant inflation of contract costs, the award of contracts for fictional projects, over-invoicing, diversion of public funds to foreign banks, and low project quality due to inexpert contractors.⁵⁶³

Evidently, due to the significant level of bureaucratic bottlenecks, ineptitude and opacity evident in conducting business in a developing petro-state like Nigeria, business in the sector and with NNPC is accompanied with considerable time and over-head costs. All too often the process becomes severely prone to bribery and corruption as IOCs and investors seek opportunities to secure favourable acreages, contracts, including fast tracking their bids and applications.

Similarly, a considerable number of licenses, contracts and acreages, with even minimal cost thresholds require the NNPC's approval and are subjected to a three-tier verification process consisting of: NAPIMS⁵⁶⁴ the investment subsidiary of the NNPC Group, the NNPC Group Executive Council, including the NNPC Board. Occasionally, awards with higher cost configurations require the approval of the Federal Executive Council (FEC).⁵⁶⁵ To further

⁵⁶¹ See, J.A. Arogundade, "Nigerian income tax and its international dimension: An in-depth analysis of the taxation of incomes from local and cross-border transactions in Nigeria" (2nd ed. Ibadan, Nigeria: Spectrum House, 2010).

⁵⁶² See, A. Gillies, "Reforming Corruption Out of Nigerian Oil? Part Two: Progress and Prospects" U4 Brief, 2009.

⁵⁶³ See A. Gillies, "Obasanjo, the donor community and reform implementation in Nigeria." The Round Table 96, no. 392 (2007): 569-586.

⁵⁶⁴ The National Petroleum Investment Management Services (NAPIMS) is a Corporate Services Unit (CSU) in the Exploration and Production (E&P) Directorate of the NNPC, authorized to manage Nigeria Government's investment in the Up-Stream sector of the Oil and Gas industry. Available at: <http://napims.com/aboutus.html>

⁵⁶⁵ The Federal Executive Council (FEC) is the Nigerian Executive Cabinet, constituted of the President, Vice-President, all Ministers of the Federation, the Secretary to the Federation, as well as Permanent Secretaries of these ministries.

worsen and complicate issues, the review period could span through 24 months whereas the global industry average is about 6-9 months.⁵⁶⁶

Likewise, bidding processes, fiscal in-flows, expenditures and other procurement processes, frequently become severely compromised and vulnerable to grandiose bribery schemes or other forms of corruption perpetrated by international actors. The most notorious of these procurement irregularities with significant media attention, included, the bribery scandal involving associates of the Halliburton oil servicing subsidiary, Halliburton Co. via Kellogg, Brown and Root which paid-up, US\$ 180 million in bribes to Nigerian government officials in exchange for US\$ 6 billion worth of contracts to build liquified natural gas plants.⁵⁶⁷ The case proceedings revealed that, fake firms were also set-up to conceal the illicit funds and paper trail.⁵⁶⁸

A more recent scenario unfolded with the past Minister of petroleum resources, Mrs. Diezani Alison-Madueke who was the Nigerian petroleum minister between 2010-2015 and a former OPEC President.⁵⁶⁹ She was accused of diverting monstrous sums of money ranging from \$6 billion (USD) or 1.2 trillion Naira equivalent⁵⁷⁰ to \$20 billion (USD) from the NNPC.⁵⁷¹ She

⁵⁶⁶ Thurber, Mark C., Ifeyinwa M. Emelife, and Patrick RP Heller. "NNPC and Nigeria's oil patronage ecosystem." *Working paper# 95, Program on Energy and Sustainable Development* (2010): 1-52.

⁵⁶⁷ Reuters "Kellogg Brown & Root LLC Pleads Guilty to Foreign Bribery Charges and Agrees to Pay...", Washington, 11 February 2009

⁵⁶⁸ US District Court of Southern District of Texas (2008) US v. Albert Jackson Stanley. Plea Agreement.

⁵⁶⁹ "Nigerian Minister Becomes 1st OPEC Female President". NUJ Europe. 27 November 2014. Available at: <http://www.nujeurope.org/2014/11/nigerian-minister-becomes-1st-opec.html> Retrieved 20-04-2018.

⁵⁷⁰ Nick Schifrin "How A Cancer of Corruption Steals Nigerian Oil, Weapons and Lives". PBS News Hour. (2 December 2015). Retrieved 1 April 2018. See also, Jolo Sobuto "Ex-minister might have personally supervised stealing of \$6bn. pulse.ng. (7 December 2015). Retrieved 1 April 2018.

⁵⁷¹ Jola Sobuto, "Nigeria was losing \$1bn a month under Jonathan,' Emir says". (December 2015) pulse.ng. Retrieved 1 April 2018.

was also indicted for awarding petroleum contracts, acreages and licenses without recourse to due process⁵⁷², as well as inappropriate spending of government funds on private jets.⁵⁷³

Similarly, the Nigerian Senate allegedly indicted the former minister for the transfer of 1.2 billion Naira into the private accounts of a company without due process therefore violating the terms of concession agreements.⁵⁷⁴ She was further charged by the anti-financial crimes agency, Nigerian Economic and Financial Crimes Commission (EFCC) as well as the UK' National Crime Agency, (NCA) for money laundering and other financial crimes.⁵⁷⁵ This catalogue of financial crimes and corruption perpetrated by no less than an ex-Minister and former OPEC President⁵⁷⁶ typifies the extent to which corruption is ravaging the NNPC and by extension the Nigerian oil industry.

The Petroleum Act (PA) is thus, considerably flawed as a regulatory instrument for tackling corruption since it allows an extreme level of regulatory discretion and state bureaucratic interference especially via the NNPC during award of petroleum leases or contracts, arbitrary crude oil sales and remittances, as well as severely obscuring due process, fiscal and procurement transparency. The foregoing issues are therefore indicative of crucial areas requiring reforms, institutional and capacity strengthening to tackle corruption, financial

⁵⁷² Udo, Bassey "Missing \$20bn: Alison-Madueke sues PREMIUM TIMES, APC, 9 others". The Premium Times. Archived from the original on 22 April 2015. Available at: <https://www.premiumtimesng.com/news/headlines/178649-missing-20bn-alison-madueke-sues-premium-times-apc-9-others.html> Accessed 20 April 2018

⁵⁷³ "The Diezani Allison-Madueke Saga: Another Private Jet Uncovered!". Bella Naija. 26 March 2014. Archived from the original on 22 April 2015. Available at: <https://www.bellanaija.com/2014/03/nigerias-petroleum-minister-accused-of-squandering-over-n10-billion-on-private-jets/> Accessed at, 26 April 2018

⁵⁷⁴ "Nigerian Senate probes mystery govt payments". Mail & Guardian. South Africa. 27 June 2008. Available at: <https://mg.co.za/article/2008-06-27-nigerian-senate-probes-mystery-govt-payments> Accessed 22 April 2018

⁵⁷⁵ "N23bn Bribe: EFCC Charges Alison-Madueke, INEC Staff to Court". Prompt News Available at: <https://www.premiumtimesng.com/news/headlines/243187-efcc-confirms-moves-extradite-diezani-alison-madueke.html> Retrieved 22 April 2018, See also "Nigeria's Former Oil Minister Alison-Madueke Arrested In the UK" Bloomberg News 10 May 2015. Available at: <https://www.bloomberg.com/news/articles/2015-10-05/nigeria-s-former-oil-minister-alison-madueke-arrested-in-u-k-> "Nigeria's Ex-Oil Minister Arrested in London" Reuters: <https://www.reuters.com/article/us-nigeria-oil-arrest/nigerias-ex-oil-minister-alison-madueke-arrested-in-london-sources-idUSKCN0RW21020151002>

⁵⁷⁶ "Nigerian Minister Becomes 1st OPEC Female President". NUJ Europe. 27 November 2014. Available at: <http://www.nujeurope.org/2014/11/nigerian-minister-becomes-1st-opec.html> Retrieved 20-04-2018.

crimes whilst engendering transparency and accountability for sustainable development in the Nigerian oil industry.

Moreover, other attenuating aspects of the Nigerian oil regulations responsible for challenges to oil sector governance include unclear petroleum regulations and guidelines. These can prove detrimental to achieving the SDGs, as is largely the case in Nigeria. To a substantial extent, the Nigerian Petroleum Act (PA) including other regulatory controls for the petroleum industry appear vacuous. In many cases the roles of regulators are poorly defined, as the directives are either opaque, ambiguous, or failing to give adequate guidelines, whilst often conferring excessive discretionary powers on the petroleum minister. This has proved detrimental to transparency and accountability for regulatory and administrative actions in the oil industry.

Another anomaly is evident where, the state-owned Nigerian National Petroleum Corporation (NNPC) is accredited with excessive discretionary powers, while the industry regulator or Department of Petroleum Resources (DPR) appears constrained and lacking in human and technical capacity.⁵⁷⁷ More so, the extant legal framework fails to clearly define roles and responsibility between the NNPC and the DPR. Initially, the Petroleum Inspectorate, which was a department within the NNPC, was also responsible for petroleum monitoring, issuing permits and licences for activities connected with petroleum exploration and exploitation.⁵⁷⁸ Since the inspectorate appeared to replicate DPR's functions relating to monitoring and permits approvals, it was excised in 1988 with the DPR absorbing its functions, albeit as a part of the Ministry of Petroleum resources along with the NNPC.⁵⁷⁹ However, this evolution of both government agencies has been riddled with confusion and inconsistencies. Often, the NNPC

⁵⁷⁷ A. Gillies, "Reforming Corruption Out of Nigerian Oil? Part Two: Progress and Prospects" U4 Brief, 2009 See also, A. Gillies, "Obasanjo, the donor community and reform implementation in Nigeria." The Round Table 96, no. 392 (2007): 569-586.

⁵⁷⁸ See, Section 5 (1) (a-g) of the NNPC Act 1977;

⁵⁷⁹See the History of the DPR. Available at: <https://dpr.gov.ng/history-of-dpr/>

which is more financially buoyant assumes DPR functions and intrudes into the DPR's regulatory mandates, by unilaterally monitoring its own subsidiaries engaged in exploration and production.⁵⁸⁰

More so, issues of accountability for unjustifiable conduct of the NNPC, financial impropriety or unsustainable exploitation patterns are inadequately addressed or poorly enforced. Reason being that conflicts of interest between the DPR and NNPC are inevitable and mar enforcement mechanisms against NNPC for breach of environmental, social or other procedural safe-guards that optimize sustainable development in the oil industry. These unsustainable scenarios are however offshoots of an erstwhile era when the DPR at its inception in 1970 and for much of 2 decades stayed a departmental unit under the NNPC.⁵⁸¹ Thus resulting in a dilemma where the regulator (DPR) remains subservient to the NOC and the industry's biggest player. In a nutshell, the foregoing point to the urgency of petroleum industry reforms towards clearer and expansive petroleum guidelines, including their enforcement and combatting corruption in the NNPC. Although these portend to be ominous or daunting tasks, as the possibility of quick fix scenarios remain slim. Nevertheless, these effectively constitute inevitable, essential and substantial pathways towards a holistic achievement of green economic growth and poverty eradication for sustainable development.

2.2.2.2. Budgetary and Tax Limitations in Nigerian Petroleum laws

Core legislations governing economic growth objectives in the Nigerian petroleum industry include the Petroleum Act and the Petroleum Profits Tax Act (PPTA).⁵⁸² The Petroleum Profits Tax Act (PPTA) improves on the Petroleum Act, and is deemed a remarkable tool for revenue

⁵⁸⁰ Nwokeji, G. Ugo. *The Nigerian national petroleum corporation and the development of the Nigerian oil and gas industry: History, strategies and current directions*. James A. Baker III Institute for Public Policy, Rice University, 2007.

⁵⁸¹ See the History of the DPR which was a department under the NNPC until 1988. Available at: <https://dpr.gov.ng/history-of-dpr/>

⁵⁸²(PPTA) 1959 with amendments in 1967, 1970, 1973 and 1979

generation and for curbing inflation whilst regulating taxation of companies engaged in petroleum operations.⁵⁸³ The Act defines petroleum operations as:

“[...] the winning or obtaining and transportation of petroleum or chargeable oil in Nigeria by or on behalf of a company for its own account by any drilling, mining, extracting or other like operations or process, not including refining at a refinery, during a business carried by the company engaged in such operations, and all operations incidental thereto and sale of or any disposal of chargeable oil by or on behalf of the company”.⁵⁸⁴

Any other activity not covered by the given definition is liable to tax under the Companies Income Tax Act (CITA), 1990.

Moreover, this definition specifically applies to the upstream sector of the petroleum industry and as a result, only companies in the upstream sector are charged with petroleum profit tax (PPT). As also previously ascertained, efficient taxation and economic growth are inextricably linked. In the Nigerian case, the PPT has been accountable for the major chunk of total tax revenue available to the Nigerian government. The Federal Government presumably harnessed N4.62trillion from tax collections in 2011 alone.⁵⁸⁵ A breakdown of this N4.62tn indicates that N1.51trillion was collected as taxes from non-oil sources. By implication, the excess of N3.11trillion was collected from oil revenue which amounts to 67.32 per cent of total tax

⁵⁸³ See, A.O. Onaolapo, F. H. Taiwo and T. Adegbite, “The Analysis of the Effect of Petroleum Profit Tax on Nigerian Economy” Asian Journal of Humanities and Social Sciences (AJHSS) Vol 1 – Issue 1, May 2013 ISSN: 2320-9720

⁵⁸⁴ Part III, Sections 8, 9 and 10 of the PPTA govern the charge of tax

⁵⁸⁵ A.O. Onaolapo, F. H. Taiwo and T. Adegbite, “The Analysis of the Effect of Petroleum Profit Tax on Nigerian Economy” Asian Journal of Humanities and Social Sciences (AJHSS) Vol 1 – Issue 1, May 2013 ISSN: 2320-9720

earnings.⁵⁸⁶ Other claims entail that the Federal Government made a total of N1.7trillion from taxes in the first three months of year 2012.⁵⁸⁷

Nevertheless, the effectiveness of the Act has been undermined by the ability and tendencies of IOCs to evade taxation.⁵⁸⁸ Analysts have argued that the petroleum profit tax structure, in Nigeria, has been characterized by tax evasion, tax avoidance, corruption and poor tax administration.⁵⁸⁹ This is well illustrated by the Chevron case where on 1st July 2005, ABZ Integrated Limited, a Nigerian company based in Abuja publicized a \$10.8 billion tax evasion and fraud by the Nigerian branch of the Chevron Corporation of Houston, Texas. Following the disclosures, ABZ was authorized by the Economic and Financial Crimes Commission (EFCC) of Nigeria to recover the unpaid taxes from Chevron Nigeria Limited. In the last quarter of 2005, the House Committee on Petroleum Resources (Upstream), had a public hearing regarding the allegation of \$10.8 billion tax evasion and fraud against Chevron Nigeria Limited. And in September 2006, the Chairman confirmed that Chevron evaded tax as alleged and was ordered to refund the sum of \$492 million. However, Chevron only refunded a fraction of the total Petroleum Profit Tax (PPT) evaded, without paying the penalties required by the PPTA. Not much was done to redress this issue as the penalty for the breach was ridiculously insignificant.⁵⁹⁰

⁵⁸⁶I. Onuba, FG made N1.7tn from taxes in q1 – FIRS. Punch. Retrieved from <http://www.punchng.com/business/business-economy/fg-made-n1-7tn-from-taxes-in-q1-firs/>

⁵⁸⁷Executive Chairman, Alhaji Kabir Mashi, made a disclosure at the opening ceremony of the Field Operations Group Regional Management Meeting, He asserted that petroleum profit tax contributed about 72 per cent of the total tax earnings.

⁵⁸⁸See, Sections, 8,9,10, 21 and 22 of the PPTA. See also, B.D. Kiobel, and N.G. Nwokah, “Curbing Tax Evasion and Avoidance in Personal Income Tax Administration: A Study of the South-South States of Nigeria. European Journal of Economics, Finance and Administrative Sciences” (2009) (15). 52-61

⁵⁸⁹T.O. Fagbemi,, O.M. Uadiale and A.O. Noah (2010). The ethics of tax evasion: Perceptual evidence from Nigeria. European Journal of Social Sciences, 17(3), 360-371. Retrieved www.unilorin.edu.ng/publications/fagbemito/TOPE2.pdf Asabor, FIRS hunts tax evading oil companies. Nigerian Tribune. Retrieved from <http://www.tribune.com.ng/index.php/complete-business-package/36089-firs-hunts-tax-evading-oil-companies> Accessed at 11th November 2014

⁵⁹⁰ See Sections 31 and 39 PPTA. “The making of incorrect accounts, such as understating profits or overstating losses; incorrect schedules overstating expenditure or royalties or other sums. (Understating amounts repaid, refunded, waived

More so, the PPTA fails to provide a system of checks and balances by the lack of a competent or expert oversight body for monitoring the veracity of accounts, statements-returns and information supplied by companies and certified as correct by the FBIR staff who are mostly inexpert and easily induced due to poor wage remunerations.⁵⁹¹ Similar to the other appraised oil laws, the PPTA remains unduly reliant on the oil companies for information relating to: accounts, returns, schedules, reports of asset base, balance sheet of profits and losses etc. Consequently, the objectives of the Act are easily undermined, resulting in negative impacts on economic growth.

As also clarified in the previous chapter, another economic growth indicator in the petroleum industry, relates to the level of resource dependence for GDP growth and how effectively petroleum regulations can prevent undue resource reliance.⁵⁹² This indicator of sustainable development in the oil industry serves to ascertain Nigeria's level of dependence on petroleum resource rents for economic growth as against the adoption of efficient petroleum taxation. It also applies to the level of the national income predominated by petroleum resource inputs as well as the impact of such petroleum resource inputs on the Gross domestic product (GDP).⁵⁹³

A scrutiny of the PPTA however shows that it has not been able to arrest the resource rent pattern that has been prevalent in Nigeria since the production of oil in commercial quantities.⁵⁹⁴ This view is substantiated by an assessment of the percentage of petroleum tax

or released; or giving or causing to be given incorrect information relating to liability to pay tax makes the offending party liable to a fine of (a) N1,000.00 (approximately £2.50) and twice the amount of tax undercharged in consequence of such incorrect accounts....

⁵⁹¹ See, V. E. Kalu, "Nigeria's Petroleum Profits Tax Act: An Assessment" The FIRS had 7,643 staff members throughout the country; of this were mere 12.6 percent or 964 employees were tax professionals or officers.

⁵⁹² See, Richard M. Auty and Raymond F. Mikesell, Sustainable Development in Mineral Economies at 86-87 (Clarendon Press, Oxford 1998). See also, Terry Lynn Karl, The Paradox of Plenty: Oil Booms and Petro States (Univ. of California Press 1997), See also, Jeffrey Davis, Roland Ossowski, James Daniel and Steven Barnett, Stabilisation and Savings Funds for Non-Renewable Resources: Experience and Fiscal Policy Implications (2001), 6.

⁵⁹³ See previous chapter on Economic growth indicators of sustainable development in the petroleum industry

⁵⁹⁴ See, V. E. Kalu, *Ibid*

revenues generated by OPEC member countries where Nigeria's petroleum export earnings accounted for about 90% of its GDP whereas the tax revenues generated from the oil industry only accrued to less than 1% of the national income.⁵⁹⁵ Indeed, the NEITI financial audit in 2005 and onwards till 2014 is indicative that the government revenue service is yet to grasp the complexities of the petroleum profit taxation regime reposed in MOUs and contracts, thus IOCs in Nigeria can manipulate such loopholes to access extremely favourable interpretations of the tax rules.⁵⁹⁶

Ultimately, such ineptitude in recouping the utmost gains from petroleum resources, complicated by unclear tax guidelines is highly detrimental to the aims of sustainable economic growth highlighted in goal 8 of the SDGs. These buttress why goal 17 of the SDGs proposes international partnerships and capacity development with international agencies to tackle tax challenges in developing countries.⁵⁹⁷ Reason being that the failure to forestall such a situation of poor taxation places a heavier demand on the stock of petroleum resources for revenue generation. This undue resource dependence is also accountable for the incessant unrest in the Niger-delta as local indigenes are concerned about the depletion of petroleum resources, without significant improvements in their environment.⁵⁹⁸ In effect, Nigeria is still predominantly dependent on oil rents, is weak at harnessing oil revenues through efficient

⁵⁹⁵J.A. Arogundade, "Nigerian income tax and its international dimension: An in-depth analysis of the taxation of incomes from local and cross-border transactions in Nigeria" (2nd ed. Ibadan, Nigeria: Spectrum House, 2010).

⁵⁹⁶ See, Thurber, Mark C., Ifeyinwa M. Emelife, and Patrick RP Heller. "NNPC and Nigeria's oil patronage ecosystem." *Working paper# 95, Program on Energy and Sustainable Development* (2010): 1-52. See also, See, NEITI Audit Report for Oil and Gas 2015. Available at: <http://www.neiti.gov.ng/index.php/neiti-audits/oil-and-gas/category/174-2015-audit-report>

⁵⁹⁷ See, Goal 17, Target 17.1, Indicators 17.1.1. and 17.1.2. of the Sustainable Development Goals. UN General Assembly, Transforming our world : the 2030 Agenda for Sustainable Development, A/RES/70/1,

⁵⁹⁸ See, Shell World Energy Supplies Projections, (1995-2050); B.E. Bafor: "Economic and Social Constraints to Harnessing the Potentials of the Upstream Sector of the Nigerian Petroleum Industry" in I.A. Ayua & D.A. Guobadia (eds): Political Reform and Economic Recovery in Nigeria (Lagos, N.I.A.L.S 2001) p. 560. See also, O. Oge: "Oil and Nigeria" and E.A. Ifaturoti: "Stable Administration and Mineral Resources Development" Nigerian Mining and Geophysics Series, (NMGS) Annual Lecture Series, 1994.

taxation, directly causing the decline of other sectors of the economy.⁵⁹⁹ Consequently, the PPTA does not optimally perform as a legislation for guaranteeing green economic growth objectives or sustainable development in the Nigerian oil industry.

2.2.3. Social Development in Nigerian Oil and Gas laws

As emphasized in the first chapter, social development tools constitute vital means of operationalizing sustainable development in the context of petroleum exploitation. Implementing the social development pillar during oil exploitation therefore envisages a recognition of the interlinkages between participatory rights and human rights articulated across much of the SDGs.⁶⁰⁰ Consequently, this section appraises: Public participation, access to information and justice, as articulated in Principle 10 of the Rio Declaration including human rights impacts assessments, all identified in this research as social development tools, in the Nigerian oil industry context to determine their efficacy for achieving the sustainable development goals.⁶⁰¹

2.2.3.1. Public Participation in the Nigerian Oil Industry

The pertinent issues regarding implementation of the social development pillar in the Nigerian petroleum industry considers the extent to which participation has fostered: Openness, inclusive societies, justice and a partnership with the public to develop and manage the vast wealth of petroleum resources. A closer observation of Nigerian petroleum regulations has not

⁵⁹⁹ See, Ross, Michael L. "Does oil hinder democracy?." *World politics* 53, no. 3 (2001): 325-361. This has led to the finding that oil hinders democracy. and that presidential democracies are more likely to face a resource curse than parliamentarian democracies, Andersen, Jørgen Juel, and Silje Aslaksen. "Constitutions and the resource curse." *Journal of Development Economics* 87, no. 2 (2008): 227-246.

⁶⁰⁰ See, Sustainable Development Goals and "Transforming Our World: Agenda 2030 for Sustainable Development" Available at: <https://sustainabledevelopment.un.org/post2015/transformingourworld> Accessed 26 April 2018

⁶⁰¹ David Banisar, Sejal Parmar, Lalanath de Silva, and Carole Excell "Moving From Principles To Rights: Rio 2012 And Access To Information, Public Participation, And Justice"

shown very positive results in this area. Apart from the EIA Act which provides for the report of an EIA to be published, other regulations are silent on participation.⁶⁰²

Furthermore, the issue of the Nigerian government's ownership rights over subsurface minerals as provided by Part 1, S.39 the Nigerian Constitution⁶⁰³, the Land Use Act and the PA⁶⁰⁴ seem to obviate the need for consultations with the public on matters affecting those natural resources which are directly under state patrimony. Apparently, this seems to be a pattern with some oil producing states like Ecuador which prompted the observation of the ILO Committee in the *Confederación Ecuatoriana Case*.⁶⁰⁵ Although the ILO Convention does not specifically apply to Nigeria, the observation of Clavero regarding the relationship between states, their citizens and the natural resources within their jurisdictions is quite instructive and proves beneficial for oil producing states and affected communities.⁶⁰⁶

Notwithstanding that the people of the Niger-delta do not directly come within the classification of “indigenous peoples”⁶⁰⁷ they however constitute the local communities and populations whose very lives and well-being depend on the environmental decisions concluded on the region.⁶⁰⁸ The Niger-delta environment constitutes their ancestral homelands, hence

⁶⁰² See, especially S.22 (1) (b), also S.26 of the EIA Act

⁶⁰³ S.39, Part 1. Includes, Mines and minerals, including oil fields, oil mining, geological surveys and natural gas, as coming within the Exclusive legislative list of the Federal government.

⁶⁰⁴ Nigerian ownership of mineral rights under the PA and Land Use Act is discussed in detail under the subsection on HRIAs and Equity (infra). See also the Ogoniland and Serac cases discussed in the earlier chapter.

⁶⁰⁵ In the Report of the committee set up to examine the representation by the *Confederación Ecuatoriana de Organizaciones Sindicales Libres* alleging non-observance by Ecuador of the Indigenous and Tribal Peoples Convention 1989 (no 169), made under art 24 of the ILO Constitution, particularly para 38: ILO doc GB/282/14/2 (14 November 2001) (Ecuador Report). Ecuador had argued that it did not consider it appropriate to enter consultations because oil was under state ownership and the right to subsurface products (unlike surface products) was part of state patrimony.

⁶⁰⁶ See, B Clavero “The indigenous rights of participation and international development agencies” (2005) 22/1 *Arizona Journal of International and Comparative Law* 41 at 46. As argued by Clavero, “the ILO Convention directly assigns to states, rights over these natural resources, charging them with the mission of communicating to and participating with indigenous peoples...There is no indigenous right over the natural resources themselves, but rather a right to participate in the policymaking processes of the states that control resources.”

⁶⁰⁷ See, International Labour Organization Convention 169 Concerning Indigenous and Tribal Peoples in Independent Countries (ILO Convention 169).

⁶⁰⁸ The Niger-delta communities are classified as minority groups or populations in the Nigerian context. This is because the region accounts for an estimated 23% of the Nigerian population even though that accounts for up to 31 million people as at 2005.

requiring statutory protection, not just for themselves but for their environment and future generations.⁶⁰⁹ Due to the position articulated by Article 15 of the ILO Convention,⁶¹⁰ and stressed in the Ecuador Report,⁶¹¹ it is quite instructive for Nigeria as an oil producing state, to make necessary adjustments in its petroleum regulations regarding consultations with local communities to guarantee sustainable development. As also earlier deliberated in the *Ogoni-land case*,⁶¹² the Nigerian authorities performed poorly in providing environmental information during and after emergencies and spills of disaster proportions, equally failing to inform on the impact of those spills including the toxicity generated by the spills on freshwater sources as well as on food crops and other vegetation. All of these shortcomings prove antithetical to the aims of sustainable development.

Moreover, most of the Nigerian oil and gas laws, comprising sixteen (16) in number fail to recognize core issues relating to access rights of the oil producing communities. Some of the legislations in the petroleum industry specifically exclude the public on access to relevant environmental information. A typical example of a petroleum regulation that effectively serves to withhold information and public participation during and after spills occurrence, including its clean-up implications is evident in the National Oil Spills Detection and Response Agency Act (NOSDRA Act).⁶¹³ The primary objective of the Act is the responsibility for preparedness, detection and response to all oil spills in Nigeria. By virtue of section 5 of the Act, the Agency

⁶⁰⁹ See, M.R. Anderson, *Human rights approaches to environmental protection: An overview*” in AE Boyle and MR Anderson (eds) *Human Rights Approaches to Environmental Protection* (1996, Clarendon Press) 1 at 9.

⁶¹⁰ Article 15(1) of the ILO Convention 169 requires states to safeguard indigenous peoples' rights to the natural resources on their lands, including their right to participate in the use, management and conservation of those resources.

⁶¹¹ *Confederación Ecuatoriana de Organizaciones Sindicales Libres alleging non-observance by Ecuador of the Indigenous and Tribal Peoples Convention 1989* (no 169), made under art 24 of the ILO Constitution, particularly para 38: ILO doc GB/282/14/2 (14 November 2001) (Ecuador Report).

⁶¹² *African Commission on Human and Peoples' Rights, The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, A, Comm. No. 155/96, 2001

⁶¹³ National Oil Spills Detection and Response Agency (NOSDRA) Act 2006.

is mandated among other things to ensure a safe, timely, effective and appropriate response to oil pollution and to identify high risk and priority areas for clean-up.

However, the provisions of section 24 of the Act, entail that oil spills information are to be treated as strictly confidential matters by the agency or board officials, and could only be divulged by a court order.⁶¹⁴ This requirement for a court order before information can be disclosed on critical issues like oil spills in the Nigerian petroleum regulations and justice system undermines transparency or accountability for such spills, and is inimical to the interests of sustainable development. More so, it frustrates credible efforts of informants regarding spills information and data collection that is crucial for a more preventative approach against environmental damage by oil spills. This provision thus serves as a major hurdle against the equitable norms of good faith by barring access to vital environmental information whilst encumbering participatory and access rights of the public. Consequently, the right to demand immediate response and remediation of oil spills impacted areas and hold polluters accountable for oil pollution are grossly eroded.

The Nigerian petroleum policies also fail to identify the relevant stakeholders for a quality representation within the oil-producing communities and this becomes detrimental to the enforcement of access rights and participation. As also clarified in the previous chapter, the provisions of international legal instruments like the Rio declaration and Art. 6 of the Aarhus Convention purports that, the duty to consult the public entails the duty to inform them about the proposed activity and the application on which a decision will be taken. This ensures that the public make adequate preparations for effective participation during the decision-making process. The Nigerian petroleum laws even as provided by the EIA Act does not stress this requirement for enhanced or informed public contribution on relevant environmental issues

⁶¹⁴Section 24 provides that a member of the Board, an employee or officer of the Agency shall treat as confidential any information which has come to his/her knowledge, and not disclose any information except where required by a court of law.

accruing from oil exploitation. In other words, the public is not involved on matters relating to petroleum site description, lack information about the physical or technical characteristics of oil exploitation and the immediate or protracted impacts, nor are they made aware of any estimates relating to the expected emissions or residues, the local communities are not informed about any mitigatory measures, worst of all they are totally ignorant of any alternatives.

Regrettably, the largely illiterate and uninformed local communities are often taken advantage off due to the absence of non-technical summaries published in relation to EIAs performed in the industry, as the petroleum laws offer them minimal protection. More often, publicity for EIAs is minimal to avoid controversy and save costs.⁶¹⁵ The consequences of these gaps in the petroleum laws has thus resulted in extreme distrust and animosity between oil industry operators, the government and oil producing communities. This has led to incessant protests, militancy and pipelines vandalism, all of which have negatively impacted on the environment, economy and socio-cultural life of the people.⁶¹⁶ These factors constitute drawbacks against sustainable development and a green petroleum industry in Nigeria.

2.2.3.2. Human Rights Impact Assessment for Social Development in Nigerian Petroleum laws

As initially argued in the previous chapter, human rights impact assessments (HRIAs) are essential tools that optimize the social development pillar whilst shielding against human rights violations accruing from a state authorized activity such as oil exploitation. HRIAs thus optimize the aims of the SDGs, especially forming a viable means of engendering SDGs 1-6

⁶¹⁵ See, Chilenyne Nwapi "A Legislative Proposal for Public Participation in Oil and Gas Decision-Making in Nigeria" Journal of African Law, 54, 2 (2010), 184–211 © School of Oriental and African Studies, 2010.doi:10.1017/S0021855310000045

⁶¹⁶ Boele, Richard, Heike Fabig, and David Wheeler. "Shell, Nigeria and the Ogoni. A study in unsustainable development: I. The story of Shell, Nigeria and the Ogoni people—environment, economy, relationships: conflict and prospects for resolution." Sustainable development 9, no. 2 (2001): 74-86.

to prevent a degraded environment and associated food crises or severe health consequences for people in oil producing regions. Moreover, Nigeria is a signatory to both the International Covenant on Civil and Political Rights (ICCPR) the International Covenant on Economic, Social and Cultural Rights (ICESCR), as well as the regional African Covenant for Human Rights.

Nevertheless, the accompanying responsibility to protect the human right to a healthy environment, prevent human rights violations and degradation occurring from oil exploitation via a tool as remarkable as the HRIA is unfortunately absent in Nigerian petroleum law and policy. Undoubtedly, such an inadequacy in the petroleum regulations regarding HRIA performance at the earliest stages of exploration, affecting screening, scoping and baseline submission stages can impair the aims of sustainable development in the oil industry.

Apparently, the absence of human rights provisions in the petroleum regulations has also resulted in the neglect of the health and well-being goals articulated in the SDGs which are crucial for the sustainable development of oil producing regions.⁶¹⁷ In as much as a plethora of factors, ranging from corruption, to weak governance structures or even paucity of regulations and a lack of capacity development may be blamed for the unprecedented level of human rights abuses recorded in the Nigerian petroleum industry, the fact remains that, enhanced impacts assessments and implementation of HRAs will undoubtedly improve the status quo. Ultimately, the situation in the Niger-delta can drastically improve if HRAs which are crucial tools to optimize local participation, foster health and well-being goals whilst eliminating human rights abuses are included in Nigerian petroleum regulations to achieve the SDGs.

⁶¹⁷ In the Ogoni-land Case, the African Commission was also of the view that the Nigerian government's disregard of human rights including a manifest breach of Art.24 was a violation of the right to a healthy environment.

2.2.3.3. Access to Justice and Judicial Review in Nigerian Petroleum Regulations

As discussed in the previous chapter, the issue of access to environmental justice is relevant on two fundamental levels. These include; access to justice to challenge regulators in respect of projects, (especially for non-compliance with regulations) and to seek redress including, holding polluters accountable for a polluting activity or environmentally harmful occurrence during oil exploitation.⁶¹⁸ Despite the level of environmental and economic collapse in the Niger-delta due to petroleum production activities, the indigenes often find it an uphill task in securing justice or access to courts and judicial proceedings. Several statutory limitations like, statutory time lapse or statutory bars, “locus standi rules”, abound in Nigerian regulations in relation to negligence or environmental damage claims against national or multinational oil companies.⁶¹⁹

Oftentimes procedural hurdles relating to standing or “locus standi” and the right to enforce environmental actions on a personal or representative capacity deter legitimately affected persons from pursuing such actions.⁶²⁰ All too often, the rather strict and narrow judicial construction of standing or “locus standi” for petroleum induced environmental pollution, constitutes a challenge faced by litigants in pursuing judicial review for environmentally harmful activity. The situation is further compounded by the substantial costs of litigation, including, the low guarantees of success in view of the powerful or influential government or IOC defendants. Thus, the courts which ought to be channels to preserve the rights of the poor to secure justice in the face of environmental degradation and the consequential negative

⁶¹⁸ See, *Oronto Douglas v. Shell & Ors.* (Unreported) Suit No FHC/2CS/573. Here, the plaintiff alleged that the mandatory provisions of the EIA Act, regarding the conducting of an EIA before project commencement had not been complied with by the proponents of the Gas project. The plaintiff also sought to restrain the Defendants from carrying out or commissioning their project until an environmental impact assessment was carried out with public participation by those to be affected.

⁶¹⁹ Section 12 of the NNPC Act provides that “no suit against a member of the board or an employee of the Corporation for an Act done or in respect of an alleged neglect or harm shall be instituted in any court unless it is commenced within 12 months after the act or the neglect complained of thereby imposing a strict statutory limitation of action and unduly insulating the board or an employee from legal action that may be brought against them.

⁶²⁰ See, *Oronto Douglas v. SPDC*, (Unreported) Suit No FHC/2CS/573. The Federal High Court struck out the suit on the ground inter alia that the suit was baseless, and that the Plaintiff had no standing to institute the suit.

impacts on the incomes, social systems, or livelihoods of oil producing communities, become inaccessible. This further entrenches poverty and frustrates the efforts of these communities to lift themselves and their families out of poverty. Indeed, regarding standing, it has been opined that;

“...the Nigerian standing rule has a very narrow concept of personal standing (one that focuses on private legal rights) and no concept of representative standing. Hence, persons with a real interest in an issue of local or national importance invariably will be denied standing; even if what is assailed involves obvious illegality”.⁶²¹

Furthermore, in instituting claims concerning compensation for environmental pollution or damage caused by oil and gas activities, the vagueness of corresponding statutory provisions renders the process futile. Reason being that the prevalent petroleum regulations fail to clarify, modalities for compensation and how to ensure a “just and adequate compensation”⁶²² by specific mathematical standards or scientific calculations.⁶²³ Likewise, other justice challenges include the problematic situation of conferring exclusive jurisdiction on specific courts. Indeed, S. 251 (1) of the Nigerian Constitution confers exclusive jurisdiction on the Federal High Courts in respect of oil and gas matters.⁶²⁴ Consequently, actions can only be instituted at the Federal High Courts instead of the States’ High Courts which are within reasonable proximity to the Niger-delta environment where the alleged acts of pollution and damage occurred. In

⁶²¹ See, TI Ogowewo 'Wrecking the law: How article III of the Constitution of the United States led to the discovery of the standing to sue in Nigeria' (2000) 26 *Brooklyn journal of International Law* 529. See also, Obiora Chinedu OkaforI, Basil UgochukwuII “Raising legal giants: The agency of the poor in the human rights jurisprudence of the Nigerian Appellate Courts, 1990-2011” (2015) *African Human Rights Law Journal*.

⁶²² See, Petroleum (Drilling and Production) Regulation 1969 with amendments in 1995 and 1996, S.23. Fishing rights; If the licensee or lessee exercises the rights conferred by his licence or lease in such a manner as unreasonably to interfere with the exercise of any fishing rights, he shall pay “adequate compensation” therefore to any person injured by the exercise of those first- mentioned rights. This was an issue in the case of *R. Mon & Anor. V. Shell BP* (1970-72) RSLR 71

⁶²³ See also *Jonah Gbemre and Ors. V. SPDC and Ors.* supra

⁶²⁴See S. 154 (1) (n) which provides “Notwithstanding anything to the contained in this Constitution and in addition to such other jurisdiction as may be conferred upon it by an Act of the National Assembly, the Federal High Court shall have and exercise jurisdiction to the exclusion of any other court in civil causes and matters relating to:-mines and minerals (including oil fields, oil mining, geological surveys and natural gas)”

many instances, the indigent victims lack the funds, knowledge, finesse, or expertise to pursue such technical, financial or time-consuming claims to achieve environmental and economic relief. Thus, the plight of the indigenes is exacerbated by these judicial setbacks as they unduly suffer loss of their income and damage to their environment and in most cases denied compensation⁶²⁵.

Another aspect of this problematic issue is that, due to the state's ownership and control over mineral rights in Nigeria, compensation cannot be claimed on mineral and oil resources as it comes within the purview of state patrimony⁶²⁶. However, land owners are entitled to make claims on surface rights, which affect their title and land occupancy. As a result, the Land Use Act provides the parameters for compensation where land is compulsorily acquired for oil mining purposes and for purposes connected thereto.⁶²⁷ Section 29 (2) (b) provides that "the occupier of land acquired for mining purposes is entitled to compensation as provided under the Minerals Act or the Mineral Oils Act or the Petroleum Act or any legislation replacing the same". However, the terms, scope or adequacy of compensation is not subject to participatory decision making. Neither is it justiciable in any Nigerian court. Section 47(2) of the Land Use Act provides, "No court shall have jurisdiction to inquire into any question concerning or pertaining to the amount or adequacy of any compensation paid or to be paid under this Act."⁶²⁸ As a result, compensation rates are decided without the input of local communities, pre-determined rates categorised under "government approved rates" and

⁶²⁵ See *African Commission on Human and Peoples' Rights, The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, A, Comm. No. 155/96, 2001. (Ogoniland Case)

⁶²⁶ See Section 44 of Federal Republican Constitution 1999

⁶²⁷ Section 28 (3) (b) Land Use Act 1979.

⁶²⁸ S. 47 Land Use Act.

“industry rates”⁶²⁹ influence the modalities for compensation of victims of oil exploitation, notwithstanding the extent of loss or damage suffered on a realistic or pecuniary scale.⁶³⁰

Moreover, these compensation rates, be they government or industry rates often fail to consider adjustments regarding inflation and even future crop yields in situations of compulsory acquisitions of plantations, agricultural or farm lands which are crucial for a fair assessment of damages.⁶³¹ Thus exacerbating poverty in such regions. Despite some improvements in the industry rates which are better than the government approved rates, challenges remain evident as they are also concluded by the Multinational companies without consultation or participation of local communities. More so, the IOCs compensations likewise disregard prevalent market rates and inflation.⁶³² Ultimately and quite ironically these local communities inadvertently end up getting exploited along with the petroleum resources derivable from their ancestral lands. Arguably, the sustainable development tool of access to justice and judicial proceedings for social development is virtually absent in Nigerian oil and gas laws. This lacuna requires redress and underscores a need for Nigerian petroleum policy and regulatory adjustments to accommodate this social empowerment tool.

⁶²⁹ The “industry rates” are set by the Oil Producers Trade Section (OPTS) of the Lagos Chamber of Commerce (an association of oil-producing companies). These rates though inadequate are substantially higher than the government approved rates which are old and have not been reviewed for decades, they are unrealistic and currently amounts to very little, even in Nigeria. For instance, in 1997 the OPTS rates for rice was =N=15,860 (£53) per hectare while the 1995 government rate was =N=1,924 (£7) and according to the World Bank, based on an annual rent of =N=5,000, (£16) the amount of compensation should not be less than =N= 50,000 (£160) per hectare yet, companies operating in the Niger-Delta states paid only =N= 1,000 (£3) per hectare a sum that cannot be regarded as fair and adequate under international standards.

⁶³⁰ See, A. Rhuks Temitope and A.A. Adedeji, “Public Participation: An Imperative to The Sustainable Development Of The Nigerian Oil Industry” in R. Ako, Nigeria’s Land Use Act: An Anti-Thesis to Environmental Justice. Journal of African Law, (2009) 53(2), 289-304. doi:10.1017/S0021855309990076

⁶³¹ See, the Petroleum Drilling Regulation (1969) and (2004). Although the regulation has been periodically amended to reflect current economic realities in terms of fees, rents and royalties, there are no clearly defined provisions on penalties for offences resulting from breach of the regulations, the requirement of “a fair and adequate compensation” has also been subject to judicial misapplication. Section 21(2) of the Act states, If the licensee or lessee cuts down or takes any other productive tree, he shall pay fair and adequate compensation to the owner thereof: S. 23. Fishing rights; if the licensee or lessee exercises the rights conferred by his licence or lease in such a manner as unreasonably to interfere with the exercise of any fishing rights, he shall pay adequate compensation therefore to any person injured by the exercise of those first-mentioned rights. This was an issue in the case of R. Mon & Anor. V. Shell BP (1970-72) RSLR 71

⁶³² Akanimo Sampson, “Ecologist blames FG for oil pipelines vandalism”, Daily Independent, Wednesday, August 20, 2003.

2.2.4. Integration of technological innovations in Nigerian petroleum laws

As also argued, the adoption of modern, environmentally sound and efficient technology for the extraction, production and management of petroleum resources remains vital to the achievement of sustainable development in the petroleum industry. SDG 9 further corroborates the need or exigency of innovative technology or environmentally sound technologies for sustainable development. Similarly, goal 9 also targets the upgrade of infrastructure to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.⁶³³ However, an observation of the Nigerian oil regulations indicates the absence of specific rules regarding technological innovations for optimal efficiency during petroleum operations, to optimize holistic approaches with benefits to eco-systems and society.

Moreover, the rules remain inchoate in terms of the failure to harness safety guidelines for application of best practice, best techniques or technologies for the entire range of petroleum industry activity that pose environmental and social risks. Thus, missing the point in what constitutes the essence of adopting science as a means of checks to forestall negative oil development impacts on people and environment, whilst enhancing positive aspects. More so, the Nigerian oil regulations lack specific equipment stipulations to curb pollution, which remains a target of goal 9, requiring the use of environmentally sound technology to control pollution and industry wastes in the most eco-efficient manner. This creates enforcement problems as there is no transparent or clear means of assessing compliance, while mere deterrence fails to produce desired effects. Thus, IOCs often choose cost cutting production and exploration measures over expensive environmentally enhancing techniques or technologies. The NNPC, is likewise a culprit as they fail to innovate and upgrade industry

⁶³³ See, 4th Target, Goal 9, A/RES/70/1 - Transforming our world: the 2030 Agenda for Sustainable Development.

infrastructure, reinforcing poor regulatory gaps that undermine industry best practices or global best standards.

Furthermore, the government regulators rely on the multinational companies for virtually all forms of technical assistance, and such reliance is undesirable and unfavourable for sustainable development as it promotes undue dependence on external forces for efficient petroleum resource exploitation and maintenance. This also creates a major monitoring and enforcement challenge as the government officials lack the technical or expert capacity to quickly detect and respond to spills and other violations.⁶³⁴ This has been accountable for the poor infrastructure maintenance and security patterns evident in the petroleum industry ultimately responsible for incessant spills from ageing pipelines.

The SPDC “recorded an average of 221 spills per year since 1989 in its operational areas. This involved a total of 7,350 barrels of oil a year”.⁶³⁵ There are also further claims of as many as 9,640 spills incidents in 2008 alone from worn infrastructure.⁶³⁶ Due to the evident infrastructural, technical and technological limitations indicated by the quantum and frequency of these oil spills in the Niger-delta environment, sustainable development of petroleum resources cannot be guaranteed in Nigeria. Unless of course, regulatory improvements regarding resilient infrastructure and environmentally innovative technologies, which further superimpose clear industry specifications and guidelines are articulated and implemented.

⁶³⁴ See *Serac v. Nigeria before the ECOWAS Court of Justice* in Judgment No. ECW/CCJ/JUD/18/12, (December 14, 2012) at paras 15- 121

⁶³⁵ See, F. Onuoha, Why the poor pay with their lives: Oil pipeline vandalism, fires and human Security in Nigeria, *Disaster* 33(3):369-389. 17.

⁶³⁶ Freedom Onuoha,” Poverty, pipeline vandalism/explosion and human security. Integrating disaster management into poverty education in Nigeria (2009).

2.3. Elements of Sustainable Use of Petroleum Resources in Nigerian Oil and Gas Laws

As clarified in the first chapter, a sustainable oil industry requires a stable resource base, engendered by sustainable consumption and production patterns envisaged by goal 12 of the SDGs. In the oil industry context, such sustainable production can be achieved via regulatory tools for control of extraction and depletion rates as well as enhanced recovery methods.⁶³⁷ It is however pointed out that, though preserving the petroleum resource base is crucial for sustainable development, Nigeria is still deficient in contemporary regulatory measures to sustain the petroleum resource base via control of extraction and depletion rates.⁶³⁸ Thus, the essential regulatory safe-guards to ensure specific performance of this sustainable consumption and production measure in the oil industry is lacking in Nigerian rules.

Regrettably, the extant Nigerian petroleum laws cannot prevent over-exploitation of the non-renewable petroleum resources as they fall short of precise means of engendering sustainable use advocated by SDG 12. This is due to the absence of enabling statutes and regulatory parameters required for the prudent monitoring and control of petroleum extraction rates of specified fields. The Petroleum Drilling Regulations in S.52 articulates the modalities for measuring the extracted crude oil.⁶³⁹ The relevant detail for consideration is that these provisions as afforded by Sections 52, 53 and 62 of the Regulations however emphasize the extracted crude quantities and measurements in the interests of royalties, taxation, and remuneration and not for petroleum resource conservation and sustainable use or management of resources.⁶⁴⁰ This view is substantiated by the specific provisions of S.52 (4) (b) which

⁶³⁷ See previous discussion on sustainable use of petroleum resources

⁶³⁸ Mineral resources are non-renewable or exhaustible resources that do not regenerate, and include petroleum. See Jonathon E Snow, 'Theory of Exhaustible Natural Resources: Surprises for the Geologist' (2000) Inaugural Lecture for the Habilitation degree, University of Mainz, Germany, 21 June 2000 Extraction of Exhaustible Resources: Economic Theory.

⁶³⁹ See the Petroleum (Drilling and Production) Regulations [L.N. 69 Of 1969.] Under Section 9. S.52. Measurement and weighing of crude oil and natural gas: (1) "The licensee or lessee shall, with volume and gravity correction to 60 OF and by a method or methods approved by the Director of Petroleum Resources in writing, measure or weigh-(a) all crude oil won and saved and casing-head petroleum spirit recovered from the relevant area; and (b) all natural gas sold".

⁶⁴⁰ See Rio Declaration, Agenda 21, Rio + 20 and previous chapter on sustainable use of petroleum resources

prohibits erroneous recordings of crude extracted as it would provoke a corresponding impact on the royalties payable by such companies.⁶⁴¹

Furthermore, the Petroleum Drilling regulations which provides modalities for oilfields and wells abandonment or decommissioning in S.36 of the Regulations only after obtaining approval from the DPR is however limited as it is silent on the need for technology and research to determine the maximum or minimum depletion levels of oil fields before decommissioning.⁶⁴² Thus, Nigeria cannot guarantee the stability of the petroleum resource base or optimize the aims and targets of SDG 12 regarding sustainable consumption and prudent use of natural resources. Likewise, Nigeria remains wholly dependent on the multinational oil companies for the generation of data and analysis relating to the volumes of oil extracted and the resultant stock of petroleum reserves.⁶⁴³

2.4. Assessing Equity in the Nigerian Oil and Gas Laws

As considered in chapter 1, equity remains an indispensable aspect of the sustainable development discourse in terms of oil exploitation. Having assessed its role via the polluter pays principle, common but differentiated responsibility and its utility as a tool for optimizing petroleum wealth funds for the benefit of future generations, this section considers how and in what ways equity has been applied to operationalize sustainable development in the Nigerian context.

⁶⁴¹ See Petroleum Drilling Regulations, S.52 (4).

⁶⁴² See Petroleum Drilling Regulations S. 39 “The licensee or lessee shall use approved methods and practices acceptable to the Director of Petroleum Resources for the production of crude oil or natural gas from any pool or reservoir, and shall in particular take all necessary steps- (c) to cause every pool in each well to produce within the limits of its maximum efficient potential or rate as may be determined from time to time by the licensee or lessee”.

⁶⁴³ See Part V of the Petroleum Drilling Regulations S. 49, 52, 53, 54, 55.

2.4.1. The Polluter Pays Principle as a Tool of Intra-Generational Equity in Nigerian Oil Regulations

Nigeria in signifying commitment to the aims of pollution prevention during oil and gas exploitation has become signatory to several international treaties. Some of these include: International Convention on Oil Pollution Preparedness, Response and Cooperation,⁶⁴⁴ International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage,⁶⁴⁵ Protocol concerning Cooperation in combating Pollution in cases of Emergency,⁶⁴⁶ International Convention on Civil Liability for Oil Pollution Damage,⁶⁴⁷ etc. Moreover, in consonance with international agreements on oil pollution prevention, Nigeria established the National Oil Spills Detection and Response Agency, (NOSDRA),⁶⁴⁸ to engender preparedness, detection and response to all oil spillages in Nigeria. S. 5 of the Act provides for the co-ordination and implementation of the National Oil Spill Contingency Plan for Nigeria.⁶⁴⁹ S.6 of the Act clarifies the functions of the agency which include, surveillance and ensuring compliance with all existing environmental legislation as well as oil spills detection in the petroleum sector.

Furthermore, NOSDRA is empowered to receive reports of oil spillages and co-ordinate oil spill response activities throughout Nigeria.⁶⁵⁰ The NOSDRA Act by virtue of S.6 (2) and (3) further provides penalties for breach of its provisions or failure to report spills and instigate clean-up of spills impacted sites.⁶⁵¹ Notwithstanding these efforts to curtail oil pollution, there

⁶⁴⁴ Nigeria signed this Convention on 13th May 1995

⁶⁴⁵ Nigeria signed this Convention on the 10th of December 1987

⁶⁴⁶ Nigeria signed this Convention on 23rd May 1981 and subsequently ratified it on 5th May 1984

⁶⁴⁷ This Convention was ratified in Nigeria on 27th January 1980 after it was signed on 23rd May 1969

⁶⁴⁸ Ss. 5, 6 & 7 National Oil Spill Detection and Response Agency (NOSDRA) (Establishment) Act, CAP 157 LFN 2006

⁶⁴⁹ S. 5(a-n), ibid; See also, Second Schedule to the NOSDRA Act. The Plan is mandatory for Nigeria as a party to the International Convention on Oil Pollution Preparedness and Response Cooperation (OPRC).

⁶⁵⁰ See, S.6 (1) (a-e) of the NOSDRA Act, 2006.

⁶⁵¹ S.6 (2-3) of the NOSDRA Act.

is still a prominent level of oil spill incidents in the Niger-delta.⁶⁵² This situation has also been aggravated by the substantial level of wastes (industrial wastes, refinery wastes and E & P wastes⁶⁵³) with inadequate means of their disposal in Nigeria.⁶⁵⁴ The laws also fail to protect community leaders, victims and informants who draw attention to environmental harm from spill incidents. This complicates their situation as they often become targets of aggression.⁶⁵⁵ Such omissions constitute flaws in the oil regulations as they undermine pollution enforcement, frustrate broader SDGs by increasing inequalities and exacerbating poverty, security and health crises in oil producing regions.

Moreover, efficient forms of spills mitigation are lacking in Nigeria due to poor funding or poor facilities, giving rise to indiscriminate dumping. Worst of all, prosecutions for pollution are hardly carried out.⁶⁵⁶ These shortcomings have been attributed to: paucity of contemporary and realistic directives or guidelines, poor enforcement provisions, human and technical capacity deficiencies, corruption, inadequate deterrents prescribed for infringements, as the offenders would often rather commit the stated offence and pay fines that are inconsistent with current economic realities.⁶⁵⁷ This is deducible from the provisions of the Petroleum Refining Regulations and the Oil in Navigable Waters Act.⁶⁵⁸ The Act provides for the prevention of

⁶⁵² Kadafa, Adati Ayuba. "Oil exploration and spillage in the Niger Delta of Nigeria." *Civil and Environmental Research* 2, no. 3 (2012): 38-51, "the Niger Delta region is one of the five most severely petroleum damaged ecosystems in the world. Studies have shown that the quantity of oil spilled over 50 years was at least 9-13 million barrels, which is equivalent to 50 Exxon Valdez spills."

⁶⁵³ E&P wastes are already clarified as waste accumulated in the course of exploration and production of crude petroleum, see details under discussion of EIAs.

⁶⁵⁴ John Vidal, "Nigeria's agony dwarfs the Gulf oil spill. The US and Europe ignore it". *The Observer*. Retrieved 27 May 2015. Nigeria's national oil spill detection and response agency (NOSDRA) says that between 1976 and 1996 alone, more than 2.4m barrels of oil were spilled in the region.

⁶⁵⁵ See *African Commission on Human and Peoples' Rights, The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, A, Comm. No. 155/96, 2001. See also, S.I. Skogly, Complexities in Human rights Protection: Actors and Rights Involved in the Ogoni conflict in Nigeria, in: 15 *Netherlands Quarterly of Human Rights* (1997), 47-60.

⁶⁵⁶ See Kadafa, Adati et al (*Ibid*)

⁶⁵⁷ Petroleum Refining Regulation Section 43 (3) requires the Manager of a refinery to take measures to prevent and control pollution of the environment, Section 45 makes any contravention punishable with a fine of N100 about (49Pence) or an imprisonment term of six months.

⁶⁵⁸ Oil in Navigable Waters Act (1968)

oil pollution in the navigable waters of Nigeria, by oil transporting vessels. S.1-3 of the Act prohibits the discharge of oil into the territorial sea area and makes it an offence by making the owner or master of the ship responsible for such discharge of oil, criminally liable.⁶⁵⁹ However, the stipulated monetary penalty in S.6-7 of the Act, for the stated offences are also unrealistic and inadequate.⁶⁶⁰ The law, which is primarily meant to enforce safety and protection of the marine ecosystem and accompanying environment, is therefore ineffective because of the weak penalties. The impact is that clean up demands for oil spills in the country's territorial waters are easily avoided, as polluters prefer to pay the cheap fines.

Another Act, which has failed to live up to its potential, is the Hydrocarbons Oil Act.⁶⁶¹ This Act provides modalities for the licensing and control of the refining of hydrocarbon oils for purposes of excise and such related matters.⁶⁶² It also prescribes parameters for liabilities and enforcement under the Act. It has however become obsolete due to current economic and social realities, thus requiring expeditious review.⁶⁶³ In other situations, the oil and gas laws like the Petroleum Act, merely suggest the adoption of “good oil field practice” which ought normally to serve as a protective and precautionary measure for regulators to upscale pollution prevention requirements and enforce international best standards. However, Nigerian petroleum regulators have failed to harness the full potential of the “best oil field practice” maxim. This has ultimately led to the adoption of minimalist operational standards that have failed in curbing pollution or preventing waste accumulation in the Nigerian petroleum

⁶⁵⁹ Sections (1 and 3). The owner or master of a vessel, or place on land or apparatus from which oil or any mixture containing oil is discharged into the sea within the territorial waters of Nigeria is guilty of an offence.

⁶⁶⁰ Sections 6 and 7. Of the Oil in Navigable Waters Act

⁶⁶¹ The Hydrocarbons Oil Refineries Act of 1965 provides a framework for health, safety during petroleum refining activities.

⁶⁶² See Hydrocarbons Oil Refineries Act of 1965 No.17

⁶⁶³ “Offences under section 1 of this Act (1) Any person who refines hydrocarbon oils in contravention of the provisions of section 1 of this Act shall be guilty of an offence, and shall be liable (a) on summary conviction, to a fine of not less than four hundred naira about (£1:50) or more than two thousand naira (£8) or to imprisonment for a term of two years, or to both; (b) On conviction or indictment, to a fine of an unlimited amount or to imprisonment for a term not exceeding five years, or to both.”

industry. These weaknesses in Nigerian pollutions control and regulatory mechanisms prevent regulators from enforcing compliance as the regulations are vacuous and require modification. More so, the lack of strict liability provisions also frustrates the immediate remediation of pollution while the failure to impose stiff sanctions for violations or unapproved discharges has also made operators grossly negligent in oil spill prevention and remediation. In many cases, there is failure of government intervention and the public must withstand the worst of the pollution instead of the operators.

Another regulation for the control of oil industry pollution is the EGASPIN.⁶⁶⁴ The EGASPIN regulates the discharges of produced water, drill cuttings and chemical residues from oil and gas operations via permits.⁶⁶⁵ EGASPIN requires permits for the discharge of produced water and imposes the penalties of fines, imprisonment and/or revocation of the permit or petroleum licence.⁶⁶⁶ However, the EGASPIN is inadequate to the extent that it does not cover all aspects of oil production activities essential for curbing pollution. It does not provide permits or proper oversight in relation to unplanned discharge of produced water or the transfer of produced water and drilling muds to other fields for treatment and their subsequent re-injection. Similarly, the DPR crucially fails to set out parameters for determining what comprises noncompliance, including articulating a clearly defined system for sampling and analysis of produced water.⁶⁶⁷

⁶⁶⁴ See the Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN), Part III,

⁶⁶⁵ See, Anwuli Irene Ofuani, 'Environmental Regulation of Offshore (E&P) Waste Management in Nigeria: How Effective?', 7/2 Law, Environment and Development Journal (2011), p. 79, available at <http://www.lead-journal.org/content/11079.pdf>. See also, <http://www.britannica.com/place/Forcados-River> assessed at 1st November 2015.

⁶⁶⁶ See the Environmental Guidelines and Standards for the Petroleum Industry in Nigeria (EGASPIN), Part III, Article 3.2.1. Article 3.2.3., part III and part IX, Articles 4.6.2.3 & 4.7. Article 4.6.2.3 provides that when the effluent quality of discharges is exceeded by twenty per cent of the allowed daily/monthly average concentration per parameter, a fine of N5,000.00 for every 50m³ of water discharged is imposed.

⁶⁶⁷ Drilling mud/fluids are substances that are used to control temperature and pressure in drilled boreholes, to cool and lubricate the drill bit and to remove drill cuttings from boreholes. Moreover, there are no defined parameters for carrying out sampling and analysis of produced water. See also, *Aguinda v. Chevron* (supra)

Whereas, the EGASPIN provides for contingency permits and transfer permits, it falls short of providing a proper permits process encompassing all stages of oil and gas production which remains crucial for pollution controls and effective recycling. Moreover, there is a need for improvements in effluents limitations contained in the produced water. The current effluent limitation in produced water in Nigerian regulations is 40mg/l.23 as opposed to the effluent limitation for the discharge of produced water in other jurisdictions like Norway, and the UK which have 30mg/l.23 as the effluents limit.⁶⁶⁸ Essentially, these highlighted factors in the Nigerian petroleum regulations have prevented the attainment of the sustainable development goals to minimize pollution, promote efficient recycling and re-use of waste components which is crucial for a sustainable and green petroleum industry.

2.4.2. Green Taxes and Emissions Charges

As initially argued in the first chapter, using green taxes and accounting measures to curtail polluting behaviour constitutes a relevant tool for optimizing the equity element of sustainable development. A perusal of the Nigerian petroleum regulations apparently indicates the relegation of this very important feature of sustainable development in the oil industry. This is because of the continued adoption of the unsustainable practice of fossil fuel subsidies and fuel importation, which indulges a propensity for polluting behaviour and reckless use of finite petroleum resources. Initially, petroleum subsidies were considered an equitable tool of poverty eradication to optimize wealth distribution and intra-generational equity in Nigeria. It also appeared to be a government solution necessitated by the moribund state of the nation's refineries and industry infrastructure.

⁶⁶⁸ See. Anwuli Ofuani, *Ibid.*

Even so, it has become all too evident that continuing petroleum subsidies would be antithetical to the aims of sustainable development. Whereas Nigeria produces up to 2.4 million barrels of crude daily, it still must export these products for refining abroad, at subsidized prices. Years of corruption and lack of transparency, administrative inefficiency and failure to harness and properly invest the gains of crude sales, not to mention neglected infrastructure have also fuelled incessant fuel crises and scarcities, making Nigeria dependant on refined imports. The result is that Nigeria imports 70% of its gasoline (about 250,000bpd of petroleum products, to be sold to Nigerians at subsidized rates. However, these fossil fuel subsidies cost the nation as much as \$8 billion in 2011 alone and is said to have shot up to 1.3 trillion Naira in 2012, which translates to more than £60 billion as at 2012.⁶⁶⁹

A further dimension to the subsidy problem includes its escalating negative impact on economic stability, which normally accrues from oil price volatility. Crude oil prices also increased from \$30.4 per barrel in 2000 to \$94.90 in 2010. In this period, Nigeria also saw a rapid increase in population from an estimated 123 million to 158 million. This situation resulted in sustaining a petroleum subsidy with mounting and significant overhead costs which easily and ultimately eroded the gains from the excess crude earnings or profits. Moreover, the fuel subsidy in Nigeria negatively impacts growth of other economic sectors, costs more than the fiscal allocations for education and even health and is also responsible for the stagnation in the downstream sector of the industry as investors shun the unattractive offers for refining and marketing products in Nigeria due to the uncompetitive rates. These facts coupled with fuel subsidy accounting for 30% of the Nigerian government's expenditure in 2011, 4% of the GDP and 118% of the capital budget, caused the Nigerian government to

⁶⁶⁹ "Nigeria bank boss Sanusi defends fuel subsidy removal". BBC News. Retrieved 10 January 2015

acknowledge that the fuel subsidy was no longer sustainable and sought its removal, but were met with the stiffest of opposition from its populace.⁶⁷⁰

2.4.3. Economic Inclusion for Equity and Poverty Eradication in Nigerian Petroleum laws?

In line with earlier discussions on forging synergies across the SDGs in the first chapter, sustainable development of petroleum resources creates the need for equitable distribution of opportunities, resources and the benefits accruing therefrom to optimize the SDGs and foster more inclusive societies as advocated by Goals 10 and 16.⁶⁷¹ Moreover, Goals 1-6 stress on equality enhancement across goals affecting poverty eradication, food security, health or well-being, gender equality, quality education, water and sanitation. These provide a background for the representation and involvement of petroleum producing areas in the economic gains derivable from petroleum exploitation to minimize environmental, economic and social impacts sustained from decades long adversative oil exploitation efforts.⁶⁷²

Undoubtedly, such economic involvement and petroleum revenue sharing arrangement would naturally serve as vital tools of poverty eradication, especially in the Niger-delta where the casualties from aggressive petroleum exploitation spanning over 5 decades remain high.⁶⁷³ More so, the extant Derivation Principle afforded by Section 162 (2) of the 1999 Constitution⁶⁷⁴

⁶⁷⁰ N, Moyo and V. Songwe, Removal of Fuel Subsidies in Nigeria: An Economic Necessity and a Political Dilemma. <http://www.brookings.edu/research/opinions/2012/01/10-fuel-subsidies-nigeria-songwe> Accessed at 11 June 2015

⁶⁷¹ See, A/RES/70/1 - Transforming our world: the 2030 Agenda for Sustainable Development. Available at; <https://sustainabledevelopment.un.org/post2015/transformingourworld> Accessed, 30 February 2018.

⁶⁷² This is distinguished from public participation as a social development tool of sustainable development discussed in the previous chapter and subsequent sections.

⁶⁷³ Cyril I. Obi “Oil Extraction, Dispossession, Resistance, and Conflict in Nigeria’s Oil-Rich Niger Delta”, Canadian Journal of Development Studies / Revue canadienne d’études du développement, (2010) 30:1-2, 219-236 To link to this article: <http://dx.doi.org/10.1080/02255189.2010.9669289>

⁶⁷⁴ S.162 (2) of the Nigerian Constitution (1999) directs the mandatory payment of not less than 13% derivation to the producing States. See also, Akpor Mudiaga Odje <http://www.vanguardngr.com/2016/02/13-derivation-falling-crude-oil-price-and-the-constitution/>

relating to the percentage of retainable revenues by oil producing states from petroleum or other mineral sources is currently 13%.⁶⁷⁵ Whereas, the derivation formula is intended as a compensatory measure to benefit minerals producing states, the 13% value attributed is considered grossly inadequate for meaningful improvement of the Niger-Delta.⁶⁷⁶ This perception is largely due to the appreciable benefits and profits accruing to the federal government from oil and gas production and the undeniable level of damage that oil exploitation has impacted on the Niger-Delta.⁶⁷⁷ Consequently, there is a palpable discontent in the Niger-Delta with recurring clamour for resource control, fiscal redress and the devolution of more funds to the states or local governments and indeed the oil producing regions.⁶⁷⁸

Although in a bid to improve the Niger-delta situation, the Nigerian government established the defunct Oil Mineral Producing Areas Development Commission (OMPADEC) as an institutional arrangement to accommodate welfare and environmental issues of the region, including creating the Niger-delta Development Commission (NDDC), not much has been achieved.⁶⁷⁹ OMPADEC was a governmental development agency required to administer the allocation accruing to the oil producing states from oil and gas revenue and at the same time

⁶⁷⁵ In the repealed Nigerian Republican Constitution of 1958 up until the early 60's, the Derivation formula accruing to the regions was 50%. However, with the advent of military dictatorships from 1968 till 1995 it was unfortunately reduced to 10%. And thereafter increased to 13% under the military government of General Sani Abacha.

⁶⁷⁶ See, Adedotun O. Phillips (2003) *Managing Fiscal Federalism: Revenue Allocation Issues*. Nigerian Institute of Social and Economic Research. (2003) <http://publius.oxfordjournals.org> See also, Afrrev Ijah "Oil Economy and the Revenue Allocation Debacle in Nigeria". *An International Journal of Arts and Humanities Bahir Dar, Ethiopia* Vol. 1 (1), February 2012:1-13 Agiobenebo, T. J. "Assignment, Criteria and the Fiscal Constitution: An Excursion into a Theory of Rational Fiscal Federalism". In: *Fiscal Federalism and Nigeria's Economic Development*, Proceedings of the 1999 Annual Conference of the Nigerian Economic Society, 25-51.

⁶⁷⁷ See, Obi, Cyril I. "The struggle for resource control in a petro-state: A perspective from Nigeria." (2007). See also, Douglas, Oronto, and Ike Okonta. *"Where vultures feast: Shell, human rights, and oil in the Niger Delta."* (2003).

⁶⁷⁸ See, Cyril Obi "Oil Extraction, Dispossession, Resistance, and Conflict in Nigeria's Oil-Rich Niger Delta", *Canadian Journal of Development Studies / Revue canadienne d'études du développement*, (2010)

⁶⁷⁹ See, Oil Mineral Producing Areas Development Commission (OMPADEC) Decree No 23 of 1992 and Niger Delta Development Commission [NDDC (Establishment) Act], No 6 of 2000. Also, C.O. Ikporuku "Petroleum, fiscal federalism and environmental justice in Nigeria" (2004) 8/3 Space and Polity 321 at 336, observing that the establishment of these bodies was not mainly for benevolent reasons: "The militancy of community groups was a fundamental factor, for it was partly an attempt to pacify the people of the oil-producing areas. This was also due to the Niger-delta claims of marginalisation.

coordinate development projects in the region. However, OMPADEC turned out to be largely unsuccessful in its endeavours.⁶⁸⁰ Authors claim that this failure was particularly because of the very poor representation of local communities in the governing board, the exclusion from participation in project selection and execution as well as corruption of its officials.⁶⁸¹ It was thereafter replaced by the NDDC via the NDDC Act of 2000 with similar objectives.

The NDDC quite unfortunately has also been fraught with similar controversies faced by the OMPADEC, namely; corruption, poor administration, lack of transparency and failure of public consultation in terms of project selection and implementation.⁶⁸² Apparently, the missing links in the Niger-delta scenario, comprising a more co-ordinated and representative approach to enhance social and economic inclusion, development interests and participation are those that essentially form the platforms necessary for optimising equity and reducing inequalities in the Niger-delta.⁶⁸³ In other words, the issue of the devolution of petroleum resource incomes to the communities where they have been generated must be addressed in the Nigerian petroleum regulations before there can be reasonable guarantees of sustainable development in the region. This is because devolving development funding to oil-producing regions for environmental and social rehabilitation serve as an equitable tool that would eventually create a crucial and cost-effective pathway of nurturing the sources of petroleum

⁶⁸⁰See, S. Omotola “From the OMPADEC to the NDDC: An assessment of state responses to environmental insecurity in Niger Delta, Nigeria” (2007) 54/1 Africa Today 72 at 79.

⁶⁸¹See, Y. Omorogbe “*The legal framework for public participation in decision-making on mining and energy development in Nigeria: Giving voices to the voiceless*” in D. Zillman, A. Lucas and G. Pring (eds) *Human Rights in Natural Resource Development: Public Participation in the Sustainable Development of Mining and Energy Resources* (2002, Oxford University Press) 549 at 560.

⁶⁸² See, Chilenyne Nwapi. A Legislative Proposal for Public Participation in Oil and Gas Decision-Making in Nigeria. *Journal of African Law*, (2010) 54, pp 184-211.”The key objectives of these two bodies were largely the same: to rehabilitate and develop the oil producing region; to tackle ecological problems that result from oil exploitation; and to embark on development projects”, See also, K.S.A. Ebeku “Appraising Nigeria’s Niger-Delta Development Commission Act 2000” (2004) 25/1 *Statute Law Review* 85 at 85.

⁶⁸³ See, Freedom Onuoha, “Poverty, pipeline vandalism/explosion and human security. Integrating disaster management into poverty education in Nigeria. See also, Onuoha, F. (2009)” Why the poor pay with their lives: Oil pipeline vandalism, fires and human Security in Nigeria, *Disaster* 33(3):369-389. 17. Ugwuanyi, E. (2013).” Stemming vandalism theft in the downstream sector. <http://the nation online.Net/new/business/energy/stemming-vandalism-theft-in-downstream-sector-2/>.

wealth, while simultaneously promoting peaceful and inclusive societies as envisaged by Goal 16 of the SDGs. Likewise, viable economic development and socially beneficial projects in these regions will halt or greatly minimise oil induced conflict, illegal bunkering, pipelines vandalism and other hostilities associated with oil exploitation as identified in the Ogoni-land case against Nigeria.⁶⁸⁴

2.4.4. Inter-Generational Equity and the Nigerian Sovereign Wealth Fund

Progressing from earlier arguments in chapter 1 regarding the utility of sovereign wealth funds for implementing the inter-generational equity element of sustainable development, this section assesses the Nigerian Sovereign Wealth Funds. This section considers the viability of the Nigerian model of Sovereign Wealth Funds and its utility as a tool for engendering wealth creation for the benefit of future generations. Likewise, considered is how the significant economic growth potential realizable from these oil-based wealth funds, including their efficacy for economic stabilization in petro-states have been adapted in the Nigerian context to benefit present and future generations.

Nigeria established a sovereign wealth fund in 2011, by virtue of the Sovereign Wealth Fund Act which is managed by the Nigeria Sovereign Investment Authority (the Authority).⁶⁸⁵ The fund was set up as depository of the surplus income produced from Nigeria's excess oil reserves. This sovereign wealth fund was also created to manage and invest these oil revenues and funds on behalf of the government of Nigeria.⁶⁸⁶ Moreover, Nigeria's wealth fund commenced operations in October 2012 and was allocated an initial \$1 billion USD in seed

⁶⁸⁴ *African Commission on Human and Peoples' Rights, The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, A, Comm. No. 155/96, 2001. See also, S.I. Skogly, Complexities in Human rights Protection: Actors and Rights Involved in the Ogoni conflict in Nigeria, in: 15 Netherlands Quarterly of Human Rights (1997), 47-60.

⁶⁸⁵ See the Nigerian Sovereign Wealth Fund Act (NSIA) 2011

⁶⁸⁶ Ibid at Sections 1-3 of the NSIA

capital. The aims and objectives of the Act are denoted in S. 3 of the NSIA, which provides that, the mandate of the Authority is necessary “to prepare for the eventual depletion of Nigeria's bi-carbon resources”. The Act further empowers the investment Authority to build a savings base for the Nigerian people, enhance the development of Nigerian infrastructure, provide stabilization support in times of economic recession and carry out such other matters as may be related to the above objects.⁶⁸⁷ To realize this mandate, the Authority is to establish three separate “ring-fenced” Funds. These are “the Future Generations Fund” (FGF), a diversified investment portfolio for the benefit of future generations of Nigerian citizens, “the Nigeria Infrastructure Fund” (NIF), dedicated to servicing an investment portfolio for “the development of critical infrastructure in Nigeria that will attract and support foreign investment, economic diversification and growth” including “the Stabilization Fund”, a portfolio of investments geared at providing supplemental stabilization funding for the government of Nigeria in times of need, especially when other funds set aside for fiscal stabilization purposes are insufficient for that purpose”.⁶⁸⁸ Likewise, the Authority is expected to invest the savings gained on the difference between the budgeted and actual market prices for oil to earn returns that would benefit future generations.

Notwithstanding these commendable objectives of the Act, the detracting feature is its marginal seed investment of \$1 Billion. Despite Nigeria's placement amongst the top 12 oil producing states globally, with immense oil generated revenues, its oil fund capital is about one of the smallest, ranking 39 on the list of sovereign wealth funds.⁶⁸⁹ Moreover, Nigeria's current \$1.5 billion sovereign wealth fund is one of the lowest in the world, constituting one of the least in

⁶⁸⁷ See Section 4 of the Act

⁶⁸⁸ See also, J.C. Ezeani, “An Overview of the Nigerian Sovereign Investment Authority” available at <http://fletcher.tufts.edu/~/media/Fletcher/Microsites/swfi/pdfs/2012/NigeriaSWFFinal.pdf> last assessed at 19 December 2015.

⁶⁸⁹ Sovereign Wealth Fund Rankings by Sovereign Wealth Fund Institute. Available at: <https://www.swfinstitute.org/sovereign-wealth-fund-rankings/> Accessed at 11 June 2015

global rankings. Likewise, in terms of the savings deposits, which is really poor in comparison with the annual budget, consisting only an estimated 10%.⁶⁹⁰ Indeed, these figures are derided as only ahead of war-torn Iraq and crisis ridden Venezuela, and only by a negligible margin.⁶⁹¹ Although political will and oil price fluctuations have been considered responsible for the minimal investment, the situation however requires statutory improvements to engender inter-generational equity and sustainable development. This is even more urgent as just 32.5% of the fund has been allocated as the investment share applicable to the interests of future generations, in the event of depletion of petroleum resources.⁶⁹²

Even more recently, Nigeria was criticized as having one of the lowest natural resource revenue savings globally.⁶⁹³ Apparently, the balance in the three component funds of the Nigerian sovereign wealth investments comprising: (Stabilization fund, Excess Crude Allocation and Nigeria Infrastructure Fund) is less than \$3.9 billion, which is grossly inadequate in funding even 20% of Nigeria's current annual budget.⁶⁹⁴ Even more damning is the fact that, within the time-frame of 2005 to 2015, wherein \$201.2 billion accumulated in the Excess Crude Account (ECA), a whopping \$204.7 billion was withdrawn from the ECA by the end of 2015. This scenario obviously translates into withdrawals accruing to 102% of deposited funds, which is indicative of a lack of prudent or robust oil revenues savings to weather oil price volatility or its impacts on government budgeting and expenditure.

Moreover, the governance and application of the Nigerian Sovereign Wealth Fund appears problematic and porous. Reason being that, the profits of the Nigerian Wealth Fund (SWF) can

⁶⁹⁰ See, NEITI "The Case for A Robust Oil Savings Fund for Nigeria" NEITI Occasional Paper Series. 2, JULY 2017 Available at: <https://eiti.org/sites/default/files/documents/neiti-ops2-180717.pdf> Accessed 26 January 2018.

⁶⁹¹ Ibid.

⁶⁹² Inokotong, Joseph (21 May 2013). "Nigeria Sovereign Investment Authority unfolds areas of interest". Retrieved 11 June 2015.

⁶⁹³ NEITI "The Case for A Robust Oil Savings Fund for Nigeria" NEITI Occasional Paper Series. 2, JULY 2017 Available at: <https://eiti.org/sites/default/files/documents/neiti-ops2-180717.pdf> Accessed 26 January 2018.

⁶⁹⁴ Ibid.

be withdrawn by up to 60% to fund national expenditures, while the whole of the stabilization funds or 100% can be withdrawn by securing the approval of a National Economic Council.⁶⁹⁵ The Council answers to the President, wields considerable or occasionally, unfettered discretion, often displaying inchoate or unclear rationale for triggering Fund withdrawals. This creates complications and avenues for opacity and corruption in the Funds management or application. Quite curiously, the Fund even gets overdrawn despite soaring oil prices, to fund domestic budgets, rather than securing deposits into the Fund as expected from the excess crude earnings. A clear example occurred in 2013 when Nigeria evidently gained a considerable \$58 billion USD from excess crude earnings, which ought to have been deposited in the Fund, but as at 2014/2015 when oil prices crashed, Nigeria's Fund contained just an estimated \$2 billion USD, triggering economic shocks and a recession that impacted the whole continent.

The foregoing examples effectively undermine the mandate and essence of Nigeria's Sovereign Wealth Fund (SWF), manifesting a clear failure of safeguards to optimize the SWFs to guarantee the interests of succeeding generations.⁶⁹⁶ As also clarified by the NEITI report, the current value of Nigeria's SWF cannot fund one-tenth of Nigeria's annual budget while Norway in comparison has 37 years of budget funding capacity accruing from its SWF. Even more worrisome is the extant, designated timescale for the peaking and subsequent decline of Nigeria's oil reserves, occurring in the next 38 years. Such a situation portends a catastrophe should such profligacy persist in Nigeria.⁶⁹⁷ This bleak scenario thus creates the urgency for reforms towards the governance and application of sovereign wealth funds in Nigeria, to optimize and deliver on its mandate of stabilizing the economy against shocks in the event of

⁶⁹⁵ The National Economic Council is often comprised of political appointees or other government nominees, wielding significant discretionary powers. See also, Sovereign Wealth Fund Institute representing: (fund size); countries' ministries of finance (budget); UN Department for Economic and Social Affairs (population); (fiscal rules)

⁶⁹⁶ See, NEITI Audit Report 2013. See also, Obiageli Ezekwesili, "Safeguarding and Smoothening Fiscal Adjustments in Nigeria: Policy Options" (2016)

⁶⁹⁷ NEITI asserts that, as at June 2017, there was less than \$3.9 billion dollars in all of Nigeria's oil revenue funds. Which was inadequate to finance 16% of the last year's 2017 budget of N7.44 trillion.

petroleum depletion and secure the well-being of future generations, especially in the event of a carbon redundant future.

2.5. Conclusion

This chapter is an assessment of the oil and gas regulations governing the Nigerian petroleum industry. It effectively portrays the weaknesses in the regulations and their lack of capacity to achieve a green oil industry and sustainable development goals in the Niger-delta region and Nigeria at large. It assesses how these regulations fail to meet international oil industry standards and how they have greatly compromised issues of environmental protection, social development in a bid for economic growth, which ironically has not been achieved as sustainable development entails the integration of all three pillars of the sustainable development paradigm. The chapter also portrays the failure of the Nigerian oil rules to promote vital synergies across the SDGs, but instead accommodates recurrent trade-offs which compromise environmental and social goals.

Moreover, the chapter highlights the limitations in the regulations ranging from: weak environmental legislation, scarce or minimal access to environmental information, dearth of environmental awareness aggravated by illiteracy in the region and failure of public participation. Likewise, acute levels of corruption in the oil industry fuelled by lack of revenue and process transparency, excessive government discretionary powers, inexpert bureaucracy and the incompetency of the tax regime to secure optimal revenue in-flows from oil and gas exploitation completely mar the aims of SDG 8 for sustainable economic growth.

Likewise, the chapter illustrates the fact that, weak or absent compliance mechanisms attenuate environmental and social goals in oil industry regulations, whilst poor monitoring procedures,

inadequate sanctions, failure of enforcement provisions, inadequacy of appeal procedures and a virtual lack of political will to promote, enact, modify and enforce environmentally protective and socially beneficial regulations trigger human rights violations, exacerbate inequities and poverty. Altogether, these factors have resulted in the pathetic state of the Niger-delta region and the under performance of the Nigerian petroleum industry. Notwithstanding this grim scenario, Nigeria can still achieve tremendous improvement via lessons learnt and implemented from jurisdictions that have succeeded in enmeshing sustainable development goals in petroleum exploitation whilst effectively preserving their environment. This invariably leads us to an appraisal of relevant sustainability entrenched oil and gas regulations available in other jurisdictions.

Chapter 3

Sustainable Development and Petroleum Exploitation: Salient Contributions from the UK and Norway

Introduction

Having previously considered opportunities for synergies between sustainable development approaches and petroleum exploitation, including the necessity of nurturing sustainability engendered perspectives in oil exploitation to achieve not just local but global sustainable development goals, this chapter by using the tools identified in this thesis assesses the petroleum law and policy contributions from the UK and Norway. The UK and Norway are compared as they are oil and gas producing contemporaries. Both countries like Nigeria, commenced exploitation of hydrocarbon resources nearly 6 decades ago in the 1960s.⁶⁹⁸

Moreover, the chapter juxtaposes the oil and gas regulations from two states with different jurisdictional backgrounds, (common and civil) to analyse how any points of convergence and divergence between both countries have impacted on the aims of sustainable development during petroleum exploitation. This assessment entails an examination of the efficiency and ease with which the elements of sustainable development relating to the integration principle, equity and sustainable use discussed in the first chapter, expedited UK and Norway's escape from the petro-curse phenomenon and triggered economic growth. The petroleum regulations of these jurisdictions are also assessed in terms of their capacity to engender human or social

⁶⁹⁸ Gas production from the United Kingdom Continental Shelf (UKCS) began in the late 1960s followed by the production of oil in the mid-1970s. Per reports by the Department of Energy and Climate Change (DECC), 42 billion barrels of oil equivalent have been produced with an estimated 12 to 14 billion reserves outstanding. After the initial exploration successes, almost 55 million have been discovered in more than 400 fields across the UKCS. Currently, nearly 300 fields are in production and approximately 100 fields are yet to be developed. Also, the UK exports of oil-related goods and services have been estimated at more than \$40 billion a year in value. Norway commenced oil investments in May 1963, by asserting its sovereign rights over natural resources in its sector of the North Sea. Oil exploration started in July 1966, although initial exploratory yield was insignificant, oil was discovered in commercial scale by August 1969. The earliest field called Ekofisk, produced 427,442 barrels of crude in 1980. Subsequently, large natural gas reserves have also been discovered.

rights including the absence of adverse ecological footprint from hydrocarbon exploitation. In furtherance of the above stated aims, this chapter adopts the comparative methodology as earlier discussed, by comparing and contrasting petroleum regulations of the UK and Norway. The chapter essentially utilises the “functional approach” to comparative research methods⁶⁹⁹ in assessing how the petroleum regulations of both jurisdictions optimize the SDGs. The chapter also considers the extent to which EU and international law have influenced the realization of the sustainable development goals (SDGs) in both economies.

3.1. Oil and Gas Regulatory Framework: Overview of the UK and Norwegian Models

To critically assess and compare the oil and gas regulations of the UK and Norway for ascertaining their alignment with the sustainable development goals, it is vital to lay a foundation to scrutinize the oil and gas institutional framework of both states. This is because these regulatory models account for the relative successes in the petroleum industries of both jurisdictions that could also positively impact oil regulations in a developing state like Nigeria. It is thus pertinent to acknowledge that the United Kingdom (UK) like the Kingdom of Norway (Norway) have since the commencement of oil and gas production in the 1960s, established functional and encompassing oil and gas regulations to accommodate the most relevant aspects of petroleum exploitation. Norway as an EEA state⁷⁰⁰ and the UK have a vital point of commonality, that of being oil producers in Europe with corresponding EU Directives.⁷⁰¹ The bulk of these EU Directives encompass regulations relating to economic development,

⁶⁹⁹ See earlier discussion on comparative research methodology.

⁷⁰⁰ The European Economic Area (EEA) provides for the free movement of persons, goods, services and capital within the internal market of the European Union (EU) between its 28 member states, as well as three of the four member states of the European Free Trade Association (EFTA): Iceland, Liechtenstein and Norway. States which join the EEA participate in the EU's internal market without being EU members, adopting almost all the relevant EU legislation apart from laws regarding agriculture and fisheries.

⁷⁰¹ Notwithstanding the UK's recent vote to leave the EU in June 2016 and the activation of Article 50 of the EU law in March 2017, EU Directives in the oil and gas sector remain applicable unless specifically jettisoned by the European Union (Withdrawal) Act 2018, which is an Act of the Parliament of the United Kingdom that provides for repealing the European Communities Act 1972. The Act entails the withdrawal of the United Kingdom from the European Union on 29 March 2019, the second anniversary of notice of withdrawal under Article 50 (2) of the Treaty on European Union.

environmental protection and social development to enhance sustainable development of petroleum resources and a green economy.

Furthermore, to promote a sustainable petroleum industry, both jurisdictions have established specific regulatory agencies to oversee vital aspects of oil and gas production pertaining to all three pillars of the sustainable development paradigm. Consequently, the UK and Norway have statutory bodies regulating environmentally intrusive activity during petroleum exploitation. Some of these agencies include the UK's Environment Agency (EA) in England⁷⁰², Scottish Environment Protection Agency (SEPA) in Scotland, Natural Resources Wales (NRW) and the Norwegian equivalent of the Ministry of Environment as well as the Climate and Pollution Control Agency (CPA).

More so, both jurisdictions have regulatory agencies that monitor and implement the social development aspects of oil exploitation. While the UK authorises the Health and Safety Executive (HSE) to enforce health and safety regulations in the oil industry, Norway operates through the Norwegian Labour Ministry to monitor the health, safety, working conditions and environment of the oil and gas industry. Basically, the primary petroleum regulatory agency of the UK is the Department of Energy and Climate Change (DECC) which is headed by the Secretary and Minister of State for Energy and Climate Change. The Secretary of State, is empowered by the Petroleum Act on behalf of the Crown with administrative and oversight responsibilities on Petroleum activities for offshore and onshore areas of the UK.⁷⁰³ The DECC is also responsible for petroleum licensing and regulation of the upstream oil and gas sector.⁷⁰⁴

⁷⁰² The Environment Agency operates as the environmental regulator for all onshore oil and gas operations

⁷⁰³ See, Ss.3 and 4 of the UK Petroleum Act 1998

⁷⁰⁴ See the UK Petroleum Act 1998, These Regulations consolidate with amendments to the provisions of the Petroleum (Production) Regulations 1982 (as amended) in relation to (a) applications to the Secretary of State for petroleum production licences in respect of seaward areas and (b) applications to the Secretary of State for petroleum exploration licences in respect of seaward areas and landward areas below the low water line.

Additionally, the DECC administers energy and climate change mitigation policies, as well as establishing a framework for expediting the policy objectives of these targeted areas.⁷⁰⁵

Moreover, there is the recently established Oil and Gas Authority (the “OGA”), which acquired the licensing and regulatory oversight functions performed by DECC, on behalf of the Secretary of State.⁷⁰⁶ The DECC also empowers the Office of Unconventional Gas and Oil (OUGO) with the responsibility of promoting the safe, responsible and environmentally sound recovery of the UK's unconventional reserves of gas and oil⁷⁰⁷, while the OFGEM is responsible for the regulation of the downstream gas market. OUGO also undertakes supervision of the gas transmission and distribution networks as well as third party access applicable to downstream gas infrastructure in furtherance of the UK's economic development objectives to harness the utmost gains from gas resources and achieve sustainable economic growth.⁷⁰⁸

The Ministry of Petroleum and Energy (MPE) is the primary regulatory body governing the Norwegian oil and gas industry and is accountable for the efficient management of the petroleum sector and associated resources.⁷⁰⁹ The Norwegian Petroleum Directorate (NPD), operates under the MPE and acts as an important advisory body to the MPE.⁷¹⁰ Its functions are similar to the UK DECC and are crucial for the sustainable development and management of petroleum resources in Norway.⁷¹¹ The Petroleum Safety Authority Norway (PSA) like the

⁷⁰⁵ See, S.4 UK Petroleum Act 1998

⁷⁰⁶ Initially, the OGA was established as an executive agency of DECC. However, the OGA has been an autonomous government regulator since the 1st of October 2016. Available at, <https://www.ogauthority.co.uk/regulatory-framework/overview/> Accessed at 4th of October 2017.

⁷⁰⁷ See Mineral Workings (Offshore Installation) Act (1971)

⁷⁰⁸ See, the Gas Act 1986, the Energy Act 2004, the Energy Act 2008. The Office of Gas and Electricity Markets (Ofgem), is the government regulator for the electricity and downstream natural gas markets in Great Britain. It was formed by the merger of the Office of Electricity Regulation (OFFER) and Office of Gas Supply (Ofgas).

⁷⁰⁹ See the Norwegian Petroleum Act 29 November 1996 no 72 relating to petroleum activities,

⁷¹⁰ See, S.3, S.86 of the Norwegian Petroleum Act

⁷¹¹ See, Regulations to Act relating to petroleum activities. Laid down by Royal Decree 27 June 1997 pursuant to Act 29 November 1996 no 72 relating to petroleum activities, section 10-18, public administration, section 13 c third paragraph and section 19 third paragraph. Last amended by Royal Decree 2 July 2012 No 729.

UK HSE, has regulatory responsibility for safety, emergency preparedness and the working environment in petroleum activities.⁷¹² Also, the Norwegian Climate and Pollution Agency (CPA) established on 18 January 2010 oversees climate or pollution control regulations in the oil industry. Moreover, CPA as a directorate under the Ministry of Environment is tasked with implementing government policy on pollution as well as expediting sustainable development goals on environmental protection. Some of its crucial functions entail exercising regulatory authority, carrying out inspections, managing and enforcing the Pollution Control Act, the Product Control Act, and the Greenhouse Gas Emission Trading Act.

Likewise, the CPA grants permits, establishes requirements in setting emissions limits and carries out inspections to ensure compliance. The petroleum sector also includes: Petoro AS, a state-owned company engaged in the management of Norway's direct financial interest. There is also Statoil ASA,⁷¹³ by which Norway, via the MPE, operates a 67% ownership of oil and gas investments in the NCS. This is a point of divergence from the UK which has no state-owned oil and gas investments on the UK Continental Shelf. Norway also authorises Gassco AS, an independent state-owned company operating an integrated system for transporting natural gas from the Norwegian continental shelf to other European countries to optimize trade in gas resources and expedite economic growth.

More importantly, the regulatory basis for oil and gas production in the UK is reposed in the Petroleum Act of 1998, Cap.17. It defines "Petroleum" in S.1 and establishes the regulatory regime for oil and gas operations while vesting oil and gas rights in the Crown or Her Majesty in S.2.⁷¹⁴ The UK Secretary of State is however vested with powers to grant licences for the search and winning of oil to competent persons.⁷¹⁵ The requirement for competency of persons

⁷¹² See, Chapter 3, Section 2 of the Norwegian Petroleum Act

⁷¹³ See, Section 3-6 on State participation which provides that "the King may decide that the Norwegian State shall participate in petroleum activities according to this Act".

⁷¹⁴ See Part I, Ss. 1 and 2 the UK Petroleum Act 1998

⁷¹⁵ See, S.3 of the UK Petroleum Act 1998

is essentially to ensure that the UK's vast hydrocarbon reserves can be efficiently developed to achieve the sustainable development goals (SDGs). The DECC issues licences through competitive licensing rounds that occur annually, to guarantee that the best bids, which target all pillars of the sustainable development paradigm including innovative technology are granted licenses for the sustainable development of the UK oil and gas reserves.⁷¹⁶

Thus, a company wishing to participate in the UK upstream oil and gas sector must bid for a licence, or seek to acquire an interest in existing assets, with any such acquisition being subject to regulatory permits and approvals.⁷¹⁷ Likewise, the principal regulatory framework for oil and gas exploitation in Norway resides in the Norwegian Petroleum Activities Act of 1996 (PAA).⁷¹⁸ Similarly, the rights to the petroleum resources on the Norwegian continental shelf are conferred on the Norwegian state by virtue of Section 1.1 of the Norway PAA which provides that "The Norwegian State has the proprietary right to subsea petroleum deposits and the exclusive right to resource management".⁷¹⁹

Just like in the UK, the regulatory regime for Norwegian petroleum activities is based on a licensing system whereby companies are accorded oil and gas exploratory and production rights via petroleum licences.⁷²⁰ The Norway PAA specifically regulates the award of licences, the oil and gas exploratory phases, field development and infrastructure, joint activity and field unitization as well as decommissioning and cessation of petroleum activities. These regulations

⁷¹⁶ See Part I, S.4, s.5, Part III, S.15 UK Petroleum Act

⁷¹⁷ There are three main types of licences: Seaward Production Licences, which are granted in relation to offshore fields. They cover the full life of a field, from exploration to production. These are categorized into Petroleum Exploration and Development Licences (PEDLs), which are granted in relation to onshore fields. These also cover the full life of a field. There are also Seaward Exploration Licences, which cover offshore exploration activities only.

⁷¹⁸ See, S.72 of Norway Petroleum Activities Act of November 1996 (PAA) hereinafter Norway PA or PAA

⁷¹⁹ See, Section 1-1 Norwegian Petroleum Act. The rights to the petroleum resources on the Norwegian continental shelf are vested in the Norwegian state. Time-limited licences to explore for and produce oil and gas on the shelf are granted under the Petroleum Act by the King in Council

⁷²⁰ See, Section 1-3 which pertains to licensing requirements etc. which provides "None other than the State may conduct petroleum activities without the licences, approvals and consents required pursuant to this Act". Chapter 2, Sections 2-4, Section 5 Norway Petroleum Act

serve to ensure that the Norwegian petroleum reserves are sustainably developed for the benefit of present and succeeding generations.⁷²¹ The Norway PAA like the UKPA also provides liability for oil pollution and resulting damage as essential control measures to drive sustainable development goals.

3.2. The Integration Principle and Petroleum Exploitation in the UK and Norway

Previous discussions in the first and second chapters considered the importance of integrating economic, environmental and social development goals in oil and gas exploitation to achieve sustainable development whilst instituting the regulatory agencies to advance those aims. This section therefore examines the environmentally protective regulations of Norway and the UK petroleum industry. The essence of this examination is to determine the extent to which both states have achieved a seamless integration of environmentally protective regulations with oil production to optimize the SDGs in their jurisdictions.

3.2.1. Environmentally Protective Regulations in UK and Norwegian Petroleum Legislations

Earlier discussions in chapter 1 clarify the efficacy of environmentally protective regulations in the oil and gas industry for achieving synergies across the SDGs. Moreover, crucial stages for conducting environmental assessments during oil exploitation were also stressed. These phases are recognised in the UK Petroleum Act and the Norwegian PAA to include: the Pre-commencement Phase regulations which encompass, permits or approvals that must be obtained prior to initiating oil and gas operations, regulations during Operational Activities and

⁷²¹ See, S.3-9 Norway Petroleum Act.

necessary permits or approvals for regulating exploration, production as well as regulations affecting conclusion of operations and decommissioning.⁷²² The UK petroleum regulations as administered by the DECC and likewise the Norwegian PAA administered by the MPE and the NPD seek to promote a preventative approach to environmental protection by underscoring the need for consultations prior to the commencement of petroleum operations or before the issuance of petroleum licences.⁷²³

Furthermore, the DECC like the Norwegian NPD in fulfilling their regulatory mandates may refrain from issuing petroleum licences in environmentally sensitive areas.⁷²⁴ For instance, in the UK's 14th offshore licensing round, 35 blocks nominated by the industry were not offered for licence because their location made them highly sensitive.⁷²⁵ Moreover, the high court's decisions in the Greenpeace cases are further illustrative of the incumbent powers of the UK petroleum regulatory bodies to enforce precautionary measures prior to and during petroleum operations. In *R v Secretary of State for Trade and Industry, ex parte Greenpeace*⁷²⁶, the principal issue entailed whether EC Directive 92/43 on the conservation of natural habitats and wild fauna and flora applied up to the 200-mile limit of the UK continental shelf.⁷²⁷ The Directive had been implemented in the UK through the Conservation (Natural Habitats) Regulations of 1994.

⁷²² See, Act 29, Chapters 3, 4 and 5 of the Norway PAA No. 72 of 1996 and Cap. 17 UK Petroleum Act 1998, Pt. I-IV.

⁷²³ See S.22 of the Norway PAA and Part V comprising Schedules relating to work programmes and Model Clauses for all petroleum exploiting activities.

⁷²⁴ The NPD via the MPE in Norway refrained from opening up the oil rich Lofoten Islands in Norway for petroleum exploitation due to its ecological sensitivity (to be addressed further). See also Section 3. SI 1988 No 1213. Consultations prior to offering blocks for licence See SI 1990 No. 1332, SI 1992 No. 2378, SI 1995. Firstly, before a licensing round begins, the DTI will consult 1435 and SI 1996 No. 2946.

⁷²⁵ See, Jeremy Rowan-Robinson, Environmental Regulation of the UK Offshore Oil and Gas Industry in, *Journal Of Energy & Natural Resources Law* Vol 18 No 3 2000 at 270. See also, Daintith and Willoughby, Chapter 9 of *UK Oil and Gas Law* (A Hill ed, Sweet & Maxwell).

⁷²⁶ See, *R v Secretary of State for Trade and Industry, ex parte Greenpeace* [1998] Env LR 415

⁷²⁷ Ibid

Moreover, the Natural Habitats Conservation Directive applies to marine areas which it defines as “any land covered continuously or intermittently by tidal waters or any part of the sea in or adjacent to Great Britain up to the seaward limit of territorial waters and the continental shelf”.⁷²⁸ The Court held that the Directive was applicable and it upheld the prescriptive nature of the provisions of Articles 3-11 of the Directive as binding on the DECC (then DTI) for the protection of habitats and species.⁷²⁹ In the subsequent Greenpeace case, Greenpeace challenged the failure of the Secretary of State for Trade and Industry for failing to carry out its licensing function in accordance with the Habitats Directive during the 19th Licencing round.⁷³⁰ The affected areas to be licensed in the 19th round within the Atlantic Frontier were outside the 12-mile limit of territorial waters but within the area of the UK continental shelf. Mr Justice Kay concluded that the reference in the Habitats Directive to the 'European territory of the Member States' (Article 2 of the Directive) included the area up to the 200-mile limit of the UK continental shelf. The significance of this judgment rests on the particular attention accorded to environmental protection of natural habitats in not just the onshore producing areas but the offshore locations which had been initially overlooked.⁷³¹

In addition, the Norwegian Environmental regulations impose statutory consultations during the planning applications conducted by the MPA. These consultations are also required in the assessment of the EIAs conducted for both onshore and offshore oil installations, exploration and production activities.⁷³² For instance, the Offshore Productions and Pipelines (Assessment

⁷²⁸ See, the Conservation of Natural Habitats Regulations 1994

⁷²⁹ *R v. DTI* (supra)

⁷³⁰ See, *R. v. Secretary of State for Trade and Industry* (Unreported), Queen's Bench Division, 5 November 1999. See also, SI 1994 No 2716 and Regulation 2 of the EC Directive 92/43.

⁷³¹ A further aspect of the pre-commencement phase of the environmentally protective petroleum regulations in England and Wales, include, environmental permits issued under the Environmental Permitting Regulations (EPR 2010).

⁷³² Offshore operations involving the use and or discharge of 'defined' chemicals must be the subject of a chemical permit which came into force on 15 May 2002. Amendments to the Offshore Chemicals Regulations 2002, made under Schedule 2 of the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 (OPPC) increase the powers of DECC inspectors to investigate non-compliances and risk of significant pollution from chemical discharges, including the issue of prohibition or enforcement notices.

of Environmental Effects) Regulations imposes the requirement of permits and approvals for offshore pipelines subject to public participation and involvement.⁷³³ More so, the Best Environmental Practice (BEP) adopted in the UK and Norway by EC regulations ensure more environmentally protective measures during oil exploitation. It is described as “the application of the most appropriate combination of environmental control measures and strategies”.⁷³⁴ The BEP considers specific issues, ranging from: the development of codes of good environmental practice, public access to information, sustainable use of resources, recycling and reuse of resources or by-products, substitution by less polluting activities or substances, including a commitment to continual monitoring and reassessment of what constitutes BEP.⁷³⁵

3.2.1.1. Environmental Impact Assessment Regulations in Norway and UK Petroleum Law

Environmental impact assessment and strategic environmental assessments in petroleum industry regulations are essential tools for fulfilling environmental goals in the oil industry. Accordingly, the UK and Norway have optimized impacts assessments regulations for environmental protection during oil and gas exploitation via SEA regulations, EIA regulations and environmental statements. The UK through the DECC imposes the requirement for a Strategic Environmental Assessment (SEA) to assess the environmental implications of

⁷³³The 1999 Regulations implemented the EC Directive on the assessment and effects of certain public and private activities on the environment. The 1999 Regulations came into force on 14 March 1999. The 2007 amendment implemented the requirements of the Public Participation Directive and came into force on 16 April 2007

⁷³⁴ See, Oil and Gas UK and Norway <http://oilandgasukenvironmentallegislation.co.uk/> Assessed at 15 February 2016

⁷³⁵ Ibid

potential offshore oil and gas activities⁷³⁶ in accordance with international obligations under the SEA Directive 2001/42/EC (Kyiv Protocol).⁷³⁷

In the same vein, the Norwegian MPE by virtue of S.22 and S.45 of the Norway PAA also mandates SEA for oil and gas operations in line with the objectives of the Kiev Protocol.⁷³⁸ SEA therefore requires that the state parties evaluate the environmental consequences of their official draft plans and programmes by ensuring a comprehensive assessment. Strategic environmental assessment (SEA) is undertaken much earlier in the decision-making process than project environmental impact assessment (EIA), and it is therefore seen as a key tool for sustainable development.⁷³⁹ In Norway for instance, the MPE considers the impact of the proposed petroleum activities in a holistic manner as it borders on trade, industry and the environment.⁷⁴⁰ The likelihood or possibilities of pollution as well as any economic and social effects resulting from the petroleum activities are thus evaluated with a final decision or recommendation from the MPE.

In addressing EIAs conducted in the petroleum industries of both jurisdictions, it is pertinent to note that the primary regulators in Norway include the MPE as empowered by the Norway PAA and the NPR.⁷⁴¹ Whereas the UK oversees petroleum industry EIAs via the DECC. Typically, EIAs conducted in the UK oil and gas industry are regulated by the Infrastructure Planning (Environmental Impact Assessment) Regulations of 2009. The Regulations require

⁷³⁶ Updated guidance has been issued by DECC relating to: Environmental statements and direction applications. Oil pollution emergency plans, Environmental reviews and inspections. See also, Courtney Fidler Bram F Noble “Advancing strategic environmental assessment in the offshore oil and gas sector: Lessons from Norway, Canada, and the United Kingdom” Environmental Impact Assessment Review 04/2012; DOI: 10.1016/J.EIAR.2011.11.004

⁷³⁷ Protocol on Strategic Environmental Assessment (Kyiv, 2003). The Kiev (SEA) Protocol, which entered into force on 11 July 2010.

⁷³⁸ Protocol on Strategic Environmental Assessment (Kyiv, 2003). The Kiev (SEA) Protocol.

⁷³⁹ See previous discussions on SEA

⁷⁴⁰ See, S.22A Norway Petroleum Regulations (NPR) 1997

⁷⁴¹ See also, Chapter 2a, S.6 and S.22 of the Norwegian Petroleum Regulations 1997 (as Amended by the Royal Decree of 2012 No. 729)

development consent for nationally significant infrastructure and its ambit includes onshore pipelines. These regulations also impose pre-application consultation relating to activities such as oil installations with a potential for substantial impacts on the environment, local communities and other legitimate uses of the sea. This new requirement specifically allows local communities, environmental groups and other interested parties to comment on any proposed development in its preliminary stages, before an application for a marine licence is even submitted.⁷⁴²

Moreover, the scope and content of EIA requirements in both jurisdictions indicate a penchant for precautionary approaches towards the environment and relevant communities. Thus, both the Norwegian and UK EIA regulations indicate specific measures to protect the environment from harm before, during and after cessation of oil and gas operations. Similarly, both jurisdictions impose preliminary impacts assessments of new sites and continuous assessments of work programmes and field development programmes as well as impacts assessments before decommissioning of oil fields or oil wells. Norway regulations require that EIA proponents highlight the likely impacts of opening new oil exploratory sites on the environment, on commercial activity, the accompanying social impacts as well as the possibility of pollution.⁷⁴³ Also, the UK petroleum regulations require that a licensee or oil and gas operator must undertake not only a preliminary assessment but also an overall assessment of the likely impacts on the environment of the proposed petroleum activity.⁷⁴⁴ In other words, the initial

⁷⁴² The Pipeline Works (Environmental Impact Assessment) Regulations 2000, proposed that onshore pipelines (except those of public gas transporters, the government and water companies) which are more than 10 miles (16 km) long require a Pipeline Construction Authorisation (PCA) from the Secretary of State, under Section 1 of the Pipelines Act 1962.

⁷⁴³ See, S.6 & 22 of the Norway Petroleum Regulations 2012.

⁷⁴⁴ See Part II, SS.10-13 UK Petroleum Act

EIA is summarized into specific conclusions in an environmental statement, (ES). This ES is thereafter submitted to the DECC.⁷⁴⁵

Furthermore, the Norwegian authorities require assessment of all relevant interests affiliated to the affected or proposed sites for oil and gas activity.⁷⁴⁶ The EIA proposal must also give a description of, the proposed development and relevant development solutions as well as the likely impact on other commercial activities and the environment. Likewise, the UK imposes the requirements for EIAs for the award of grants and renewals of production consents for field developments, drilling and deep boring of oil wells, construction and installation of production facilities and pipelines in the UK Territorial Sea and on the UK Continental Shelf (UKCS). DECC also requires that all ES carried out by oil and gas operators by themselves or by proxy be of the required standards and imposes strict liability on the operators for EIA commitments made thereunder.⁷⁴⁷

Furthermore, international instruments such as the Biodiversity Convention, the OSPAR and the EC Habitats Directive⁷⁴⁸ for the protection of habitats and species bear direct impact in the conduct of EIAs within the UK and Norway. The import of these regulations in relation to oil exploitation in the UK and Norway is that they prescribe environmentally protective measures that trigger the acceptance of environmentally-friendly oil and gas regulations. Accordingly, Norway in fulfilling international obligations derived from international environmental instruments, enacted provisions like S.6 of the Petroleum regulation requiring that, “an impact assessment must provide a description of the impact of opening the area for petroleum

⁷⁴⁵ See, Department of Energy and Climate Change (DECC) (Offshore Petroleum Production and Pipelines (Assessment of Environmental Effects) Regulations 1999 (as amended)).

⁷⁴⁶ Section 22 of the PA Norway provides that “Well in advance of submission of a plan for development and operation of a petroleum deposit, the licensee shall present to the Ministry a proposed programme for environmental impact assessment....”

⁷⁴⁷ See Part II, SS.10-13 UK Petroleum Act.

⁷⁴⁸ See, Articles 3-11 of the EC Directive 92/43

activities".⁷⁴⁹ These regulations also influenced the 2003 Norwegian government's decision not to open the ecologically sensitive Lofoten Islands to oil exploration until 2005, this illustration also indicates high environmental priorities and influence of EIAs over the issuance of oil licenses in Norway.⁷⁵⁰ The directive was again re-issued in 2013 not to open-up the "Lofoten Islands for exploration and drilling for another four years".⁷⁵¹ Although this decision was essentially predicated on environmental objectives in preserving fishing and biodiversity in that region, it also satisfies both the integration principle and the principle of resource conservation to achieve not just a "green" petroleum industry in Norway but also green economic growth.⁷⁵²

Similarly, Norway in a bid to implement precautionary measures, imposed a moratorium on deep sea oil drilling on the Norwegian Continental Shelf after the US Gulf of Mexico incident⁷⁵³. Norway thereafter banned deep water oil drilling in new areas based on environmental concerns and adopted such measures in favour of sustainable development objectives during oil exploitation. The moratorium has however been lifted since 2014 with recommendations for more extensive EIAs for such activity.⁷⁵⁴ Likewise, in the UK, the adoption of these international environmental regulations and EU Directives has served as a ground for their enforcement via EIAs undertaken for the petroleum industry. This formed the

⁷⁴⁹S. 6 c (e) Requires that an impact assessment must provide a description of the impact of opening the area for petroleum activities in relation to, i.e.: living conditions for animals and plants, the sea bed, water, air, climate, landscape, emergency preparedness and risk, and the joint impact of these;

⁷⁵⁰ See 'Norway's decision to put nature before oil is a turning point in history of oil development in sensitive areas' WWF International, Press Release, 15 December 2003. Accessed at: <http://www.panda.org>.

⁷⁵¹ <http://www.foeeurope.org/yfoee/lofoten-secured-oil-free-01-10-2013> accessed at 08/03/2013

⁷⁵² See also, Regulations relating to Protection of the environment in Antarctica, Published in May 1995, also, Protocol on environmental protection to the Antarctic Treaty".

⁷⁵³ See the Deepwater Horizon (the Gulf rig that exploded on 20 April 2010) Robertson, Campbell; Krauss, Clifford (2 August 2010). "Gulf Spill Is the Largest of Its Kind, Scientists Say" see the New York Times, available at: http://www.nytimes.com/2010/08/03/us/03spill.html?_r=2&fta=y Accessed at 25 February 2016

⁷⁵⁴See, the press statement of Norwegian Energy Minister Terje Riis-Johnson, "Norway will not allow any deep-water oil and gas drilling in new areas until the investigation into the explosion and spill in the US Gulf of Mexico is complete," Available at: <http://on.ft.com/1TAv81D> Accessed at 25 February 2016

thrust of Greenpeace' argument in *R. v. Secretary of State for Trade and Environment*⁷⁵⁵ where the high court upheld the provisions of Articles 3-11 of the EC Habitats Directive. The Directive provides that, before consenting to a plan or project which is likely to have a significant impact on a European site, an appropriate environmental assessment of the implications for the site's conservation objectives must be undertaken. If the assessment shows that the plan or project will adversely affect the integrity of the site, consent cannot be given unless there is no alternative solution and there exist imperative reasons of overriding public interest why the plan or project should be carried out.⁷⁵⁶ Although the Directive does not specifically define the phrase 'imperative reasons of overriding public interest', it however does not preclude social or economic interests, unless of course the EU has earmarked such a site as a priority natural habitat type or a priority species. If the site has been so designated, the imperative reasons would be restricted to issues of human health and public safety.⁷⁵⁷

Moreover, EIA participation and consultation is encouraged in both jurisdictions even though there exist perceptible differences in the Norwegian and UK approaches. In the UK, the DECC requires the EIA proponent to consult interested parties and stakeholders such as the local authorities and environmental rights groups. Also, a scrutiny of the UK PA and the Norway PAA indicate more public consultation or collaboration in the UK regime at the various EIA stages than in the Norwegian rules which only promote consultations and participation at pre-commencement stage.⁷⁵⁸ As evident from the Norway PAA, it is specifically at the point of opening-up of new areas (the Pre-commencement phase) that public consultation is carried out.

⁷⁵⁵Unreported, Queen's Bench Division, 5 November 1999. SI 1994 No 2716. 2 Regulation 2. [1998] Env LR 415. '4 See also, the discussion about the appropriate date in Greenpeace 2. Journal of Energy & Natural Resources Law Vol 18 No 3 2000

⁷⁵⁶ See Articles 6.3-6.4 of the Directive

⁷⁵⁷ See, Jeremy Rowan-Robinson, Environmental Regulation of the UK Offshore Oil and Gas Industry in, Journal of Energy & Natural Resources Law Vol 18 No 3 2000 at 273

⁷⁵⁸ See S.22 Norway PAA and S.6 Norway Petroleum Regulations

Thereafter, public consultation is discontinued and the MPE decides on the administrative or other procedure to be followed on a case by case basis depending on the outcomes of the EIAs conducted in development and decommissioning stages. The licence holder is only required to carry out all the stipulations for the impact assessment in relation to all oil wells and oil field developments and it is only on rare occasions that the MPE allows opportunities for public consultation at the secondary phase.⁷⁵⁹

Thus, the MPE reserves the right to make the decisions regarding continuation of the project, the way it may proceed and what circumstances or conditions that may be imposed to reduce the risk, or what compensatory and mitigatory measures should be undertaken to counteract potential adverse impacts and thereafter publishes its EIA decisions in the Norwegian Gazette. Essentially, Norway implements the production stage EIAs based on purely scientific, technical and administrative considerations. It is however pointed out that, such lack of consultation could largely impede the assessment of the adequacy of the scientific standards and considerations applied. This may reduce the robustness of consensus required for optimizing safeguards that should benefit the environment.

In furtherance of the aims of consultations to ensure effective environmental safeguards, EIA and SEA directives⁷⁶⁰ were thus modified to reinforce the provisions of Article 6(2) of the EIA Directive to ensure that the public is informed early in the decision-making process in relation to on-shore exploitation and undertaking SEA in connection to off-shore production.⁷⁶¹ It is also pointed out that the two Directives are to a significant extent complementary. The SEA

⁷⁵⁹ See, Henrik Agar-Hensen, “The Exploitation of Norwegian Oil and Gas” in Energy Policy

⁷⁶⁰ See, Articles 3-6 of Directive 2003/35/EC which amends EIA Directive 1985/337/EEC

⁷⁶¹ On the application and effectiveness of the Directive on Strategic Environmental Assessment (Directive 2001/42/EC)

Directive 85/337/EEC on the assessment of certain public and private projects on the environment as amended (OJ L 175,5.7.1985, p.40)

has been categorized as "up-stream" and identifies the best options at an early planning stage, while the EIA is classified as "down-stream" and refers to the projects that are coming through at a later stage.⁷⁶² In theory, an overlap of the two processes has been deemed unlikely even though the possibility of potential areas of overlap in the application of the two Directives may not be precluded.⁷⁶³ The EIA as well as SEA Directives also provide that the public concerned shall be given early and effective opportunities to participate in the environmental decision-making procedures.⁷⁶⁴ Moreover, the importance of carefully timing public participation is emphasised in paragraph 6, Article 3 of Directive 2003/35/EC which amends EIA Directive 1985/337/EEC. And it states that reasonable time-frames for the distinct phases shall be provided, allowing sufficient time for informing the public and for the public concerned to prepare and participate effectively in environmental decision-making subject to the provisions of this Article.⁷⁶⁵

Nevertheless, Article 9 of the EIA Directive 2003/35/EC imposes an obligation on the UK and Norway to specify the rationale for administrative decisions relating to EIAs conducted for the oil industry. In addition, information about the public participation process must be stated as well as the main mitigation measures proposed.⁷⁶⁶ Furthermore, the import of Article 10a of the EIA Directive is that it affords opportunities for members of the public to have access to a review process in law courts or before independent tribunals or panels to challenge the legality of oil and gas decisions affecting the environment.⁷⁶⁷ This provision thus offers considerable

⁷⁶² C. Voigt, ed. *Rule of law for nature: new dimensions and ideas in environmental Law*. (Cambridge University Press, 2013).

⁷⁶³ See, Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on the application and effectiveness of the Directive on Strategic Environmental Assessment (Directive 2001/42/EC) /* COM/2009/0469

⁷⁶⁴ See EIA Directive Article 3(4), See also, Strategic Environmental Assessment (Directive 2001/42/EC) Directive 85/337/EEC on the assessment of certain public and private projects on the environment as amended

⁷⁶⁵ N. Hartley, C. Wood / Environmental Impact Assessment Review 25 (2005) 319–340 321

⁷⁶⁶ See, Article 3(6)(a) of EIA Directive 2003/35/EC

⁷⁶⁷ See, N. Hartley, C. Wood / Environmental Impact Assessment Review 25 (2005) 319–340 321

improvements to the EIA Directive as it also provides that the procedures shall be fair, equitable, timely and not prohibitively expensive.⁷⁶⁸ The directive also stipulates that information regarding judicial procedures is also to be made available to the public. Notwithstanding these appreciable modifications for the reinforcement of public participation procedures during EIAs, a discernible weakness of the provisions is that, the interpretation of the terms “early and effective participation”, are not defined in either the EIA Directive or the SEA Directive but left to the states discretion to transpose into the respective local legislations.⁷⁶⁹

3.2.1.2. Atmospheric Pollution and Climate Change Regulations in the UK and Norwegian Petroleum Regulations

A scrutiny of environmentally protective regulations as sustainable development tools in the UK and Norwegian oil industries entails addressing the atmospheric protection regulations of both jurisdictions. This serves to determine their efficacy for greening the petroleum industry and preventing atmospheric pollution. Such an assessment includes flares and vent regulations applicable to the oil and gas industry in the UK and Norway, as well as international and EU regulations relating to atmospheric protection. In the UK like Norway, the following international regulations are particularly relevant, the Geneva Convention on Long Range Transboundary Air Pollution of 1979 and accompanying Protocols⁷⁷⁰, the Montreal Protocol

⁷⁶⁸ See, Article3(7) EIA Directive 2003/35/EC

⁷⁶⁹ See, Directive 2003/35/EC was seeking to align the provisions on public participation with the Aarhus Convention on public participation in decision-making and access to justice in environmental matters. See also, N. Hartley, C. Wood / Environmental Impact Assessment Review 25 (2005) 319–340

⁷⁷⁰ The Convention on Long-range Transboundary Air Pollution has addressed some of the major environmental problems of the United Nations Economic Commission for Europe (UNECE) region through scientific collaboration and policy negotiation since 1979. The UK signed this Convention in 1979 and it entered into force in 1983. Since implementation, the Convention has been extended by eight protocols that identify specific measures to be taken by operators to cut their air emission pollutants.

of 1987⁷⁷¹, the United Nations Framework Convention on Climate Change (UNFCCC)⁷⁷² and the UN-ECE Protocol on Pollutant Release and Transfer Registers (PRTR).⁷⁷³ Also, relevant to both the UK and Norwegian oil and gas industry are the: EU Commission Decision 2014/738/EU which stipulates the best available techniques (BAT) conclusions for the refining of mineral oil and gas as well as Directive 2010/75/EU on industrial emissions which requires the Commission to organise an information exchange on industrial emissions between Member States, the industries concerned and non-governmental organisations. This is for promoting environmental protection to facilitate the drawing up of BAT reference documents. The Directive came into force on the 6 January 2011. Annex 1 to this Decision 2014/738/EU came into force as at 9 October 2014 and it also outlines the BAT conclusions for the refining of mineral oil and gas.⁷⁷⁴

Furthermore, to facilitate atmospheric protection, the UK Petroleum regulations impose various air quality measures⁷⁷⁵ and the requirements for consent and approvals from the DECC for venting under the Energy Act⁷⁷⁶ and flaring under the PA.⁷⁷⁷ The DECC is also authorised

⁷⁷¹ See, Oil and Gas UK Atmospheric Regulations. This Protocol which entered into force on 1 January 1989, required several EC Regulations to underpin the system to control and monitor use of Ozone Depleting Substances (ODS) and other greenhouse gases (see Ozone Depleting Substances Regulations 2015).

⁷⁷² The UN Framework Convention on Climate Change of 1992, which entered into force on 21 March 1994 and accompanying Protocols, target GHG and CO₂ emissions to expedite global atmospheric protection and sustainable development. The major feature of its most notable Protocol, the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gases (GHG) emissions.

⁷⁷³ As per EC Directive 93/389. The Protocol became international law binding its Parties as at 8 October 2009. As of 7 January 2014, the Protocol had been ratified by 32 countries and the European Union.

⁷⁷⁴ See also, EC Regulation No 744/2010 amending EC Regulation No 1005/2009 with regard to the critical use of halons. The EC Regulation No. 744/2010, of 18 August 2010, sets various cut-off and end dates for all halon critical use applications (located in Annex VI). The cut-off date and end date for halon use in oil, gas and petrochemical facilities is 31 December 2010 and 31 December 2020 respectively. See also, Oil and Gas UK available at:

<http://oilandgasukenvironmentallegislation.co.uk/> Assessed at 15 February 2016

⁷⁷⁵ The Act sets up a framework for the UK to achieve its long-term goals of reducing greenhouse gas emissions by 2050 and to ensure steps are taken towards adapting to the impact of climate change. The Climate Change Act 2008 received Royal Assent on 26 November 2008. This was further updated by the Climate Change (Scotland) Act 2009 which received Royal Assent on August 4, 2009.

⁷⁷⁶ The Energy Act which was passed in November 1976, requires consent for natural gas to be disposed of by flaring or venting and this applies to all onshore hydrocarbon fields as well as offshore fields.

⁷⁷⁷ See, Clean Air regulations like the Clean Air Act. There is also the Climate Change Act of 2008 which committed the UK to reducing CO₂ emissions by 50% in 2030, and up to 80% by 2050. See also, the Carbon Accounting Regulations which introduced the carbon accounting system which is used to monitor compliance with the targets for reducing greenhouse gas emissions introduced by Part 1 of the Climate Change Act 2008

to ensure that licensees eliminate all unnecessary or wasteful flaring and venting of gas.⁷⁷⁸ Operators are required to minimise such flaring and venting by implementing best practice at an early stage in the design of the development and by continuing to improve on these designs during the subsequent operational phase.⁷⁷⁹ Similarly, the Norwegian petroleum regulations⁷⁸⁰ prohibit the flaring and venting of gas exceeding the quantities required for normal operational safety.⁷⁸¹ The MPE expedites atmospheric protection targets in the oil and gas industry via the use of permits and regulatory approvals or licenses just like the UK. However, Norway quite unlike the UK categorises these permits into: Permits essential for the commencement of production in a new field, permits essential for regular operations and permits required because of operational challenges, which include difficulties associated with re-injection of gas into the reservoir. It is pointed out that, the whole point of these categorizations is to further restrict gas flaring approvals in the oil industry to the barest minimum for atmospheric protection⁷⁸². Norway thus grants these gas flaring permits in the form of an aggregate amount of flared gas per quarter and this amount is restricted to what is required for safety reasons to expedite normal operations.⁷⁸³

Moreover, the Norwegian Petroleum Directorate (NPD) by S.29 of the Petroleum Regulations requires an information plan relating to technical solutions, or other solutions for the prevention of environmentally harmful and gaseous emissions. And as concerning new field developments

⁷⁷⁸ See, Climate Change: The U.K. Programme, Department for the Environment, Transport and the Regions, November 2000. Also, the Environment Agency and SEPA do not permit “Open flares” for well tests in the UK. And, the release of unburned gas is prohibited.

⁷⁷⁹ See, the Petroleum (Current Model Clauses) Order 1999. An objective of the Petroleum Act 1998 is to conserve gas, a finite energy resource, by avoiding unnecessary wastage during the production of hydrocarbons from the UKCS. The actual Model Clause may vary depending on when the Block Licence was granted, but in recent licences, flaring is covered by Paragraph 3 of Model Clause 21, and states that the Licensee should not flare any gas from the licensed area or use gas for gas lift except with written consent. This Order came into effect on 15 February 1999.

⁷⁸⁰ See, the provisions of the 5th Commandment of the Norwegian Oil Commandments which provides, “that flaring of exploitable gas on the Norwegian Continental Shelf must not be accepted, except during brief periods of testing.” The Norwegian Ten Oil Commandments’ were approved by the Norwegian Storting (Parliament) on 14 June 1971.

⁷⁸¹ See, Chapter 4 Section 4- 4 Norway Petroleum Act.

⁷⁸² See, Sections: 4-2, 4-3, 5-3 of the Norway Petroleum Act and S.30a of the Petroleum Regulations Norway

⁷⁸³ See S.21 Norway Petroleum Act

and wells, there is an imposition of monthly renewals of gas flaring permits to improve the checks and monitoring efforts of the NPD. More importantly, Norway has undertaken to reduce its overall NOx emissions by up to 23% by 2020 compared with the 2005 level in accordance with the Gothenburg Protocol.⁷⁸⁴ Emissions from the petroleum sector are also directly regulated by conditions included in plans for development and operation (PDOs) and in permits under the Pollution Control Act. Also, Norway in a bid to reduce CO₂ emissions became the first country to operate an industrial-scale carbon capture and storage project via Statoil at the Sleipner oilfield in 1996.⁷⁸⁵ By this process, carbon dioxide is stripped from natural gas with amine solvents and is deposited in a saline formation. The carbon dioxide which is a waste product of the field's natural gas production contains 9% CO₂, more than is allowed in the natural gas distribution network. The underground storage or sequestration averts this problem and enables Statoil to amass savings worth hundreds of millions of euros in carbon taxes, whilst storing about one million tonnes of CO₂ a year at Sleipner.⁷⁸⁶

Essentially, the perusal of the environmentally friendly regulations available in the UK and Norway indicates that while the UK has a more expansive network of regulations and regulatory bodies, Norway however with fewer regulations has adopted a highly innovative approach in driving environment-friendly objectives. This is discernible from its carbon sequestration efforts and through the deliberate restriction prohibition of oil and gas exploration in ecologically sensitive areas for biodiversity preservation. Thus, portraying a greater

⁷⁸⁴ See, the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (known as the Multi-effect Protocol or the Gothenburg Protocol). It is a multi-pollutant protocol designed to reduce acidification, eutrophication and ground-level ozone by setting emissions ceilings for sulphur dioxide, nitrogen oxides, volatile organic compounds and ammonia to be met by 2010. As of August 2014, the Protocol had been ratified by 26 parties, which includes 25 states and the European Union.

⁷⁸⁵ Sleipner Fact Sheet: Carbon Dioxide Capture and Storage Project "Company/Alliance: Statoil Location: Norway, North Sea" Also available at <https://sequestration.mit.edu/tools/projects/sleipner.html>. See also, "Norway: Statoil Hydro's Sleipner carbon capture and storage project proceeding successfully". Energy-pedia. 8 March 2009.

⁷⁸⁶ Statoil and other license partners commenced the injection of 1 million tons of CO₂ per year into sands of the Utsira Formation at the Sleipner field in the North Sea, since 1996.

commitment to the aims of sustainable development than the UK's environmentally protective petroleum regulations.

3.2.2. Sustainable Economic Growth and Petroleum Taxation: The UK and Norwegian Models

This section scrutinizes the UK and Norwegian petroleum regulations to determine their effectiveness in harnessing the utmost benefits from petroleum exploitation, whilst engendering fiscal stability and a green economy in accordance with the aims of goal 8 of the SDGs. Both the UK and Norway have established petroleum taxation models with the clear aims of raising government revenue, eliminating potential distortions of investments which might impair petroleum resource value whilst utilizing incentives to optimize risk allocation between government and multinationals.⁷⁸⁷ Moreover, an assessment of the petroleum taxation approaches in both jurisdictions indicate that both economies have instituted regulatory, physical and economic constraints to deter tax avoidance and at the same time ensure efficient petroleum resource accounting to achieve the SDGs.⁷⁸⁸ For instance, the UK which has a robust tax system for the petroleum industry implements various taxes like the Petroleum Revenue Tax (PRT). This is a field-based tax charged on the profits arising from oil and gas extraction of individual oil fields and excludes the aggregate profits from all oil fields owned by relevant operators.⁷⁸⁹ PRT only applies to fields for which development consent was given before 16

⁷⁸⁷ See, James L. Smith, "Modelling the Impact of Taxes on Petroleum Exploration and Development" WP/12/278 IMF Working Paper, Fiscal Affairs Department. <http://www.imf.org/external/pubs/ft/wp/2012/wp12278.pdf> Accessed at 09/06/16

⁷⁸⁸ See earlier discussions in chapter 1 on synergies across the SDGs, oil exploitation, including petroleum resource accounting and budgetary measures for sustainable economic growth.

⁷⁸⁹ The Petroleum Revenue Tax (PRT) is a direct tax introduced under the Oil Taxation Act of 1975, in the aftermath of the 1973 energy crisis, and was intended to ensure fairer national share of profits from the exploitation of the UK's continental shelf, whilst ensuring suitable returns on the capital investment by oil companies. In 2011/12, the Treasury received £6.53bn in direct revenue from taxes on UK oil and gas production. Available at, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/320222/edu_booklet_aug_13.pdf Accessed at 23 February 2016.

March 1993.⁷⁹⁰ Ring Fence Corporation Tax (RFCT) and the Supplementary Charges are also payable on profits from these fields, however the PRT which is levied at the rate of 50% is deducted when calculating these charges. The Ring Fence Corporation Tax (RFCT) on the other hand is a variation of the Corporation Tax that applies to all companies by way of a "ring fence".⁷⁹¹ In contrast to PRT where each individual field is separately ring fenced on a field by field basis, RFCT includes all oil and gas exploration and production activity carried on by the relevant company.⁷⁹² It aims to prevent profits from oil and gas extraction activities and rights in the UK from being reduced for tax purposes by the setting off losses from other trading activities or by excessive interest payments and applies regardless of when development consent was granted.⁷⁹³ The profits from oil and gas extraction activities and rights are "ring fenced" and treated for tax purposes as a separate trade, so that only losses derived from these activities can be set off against profits from these activities⁷⁹⁴. The Norwegian state regulates petroleum tax via the Petroleum Act and derives economic benefits directly and indirectly from petroleum exploitation partly via its participation through Petoro AS and its shareholding in Statoil ASA.⁷⁹⁵

Moreover, in a bid to encourage development of remaining reserves or new marginal fields, the UK introduced field allowances in 2009 for certain qualifying oil and gas fields to offset against the Supplementary Charge on profits from those qualifying fields. The field allowance incentive recognises that some fields, because of their remoteness, depth, maturity or other

⁷⁹⁰ See, HM Revenue and Customs, "Statistics of Government revenues from UK oil and gas production" PRT is charged on super profits arising from the exploitation of oil and gas in the UK and the UK's continental shelf. After certain allowances, PRT is charged at a rate of 50% (falling to 35% from 1 Jan 2016) on profits from oil extraction. Also available at <https://www.gov.uk/government/statistics/government-revenues-from-uk-oil-and-gas-production--2> Accessed at 21 February 2016

⁷⁹¹ Ibid

⁷⁹² Available at, <https://www.gov.uk/government/statistics/government-revenues-from-uk-oil-and-gas-production--2> accessed at 21 February 2016.

⁷⁹³ Ibid

⁷⁹⁴ Ibid

⁷⁹⁵ See the provisions of Art. 6-7 of the Norwegian Oil Commandments of 1971.

characteristics, are more expensive to develop. Thus, qualifying fields with respect to field allowances include: small fields, ultra-heavy oil fields, ultra-high pressure/elevated temperature fields or remote deep-water gas fields⁷⁹⁶. This economic incentive therefore encourages oil and gas investments in such marginal or challenging fields and boosts economic growth for sustainable development. Furthermore, the UK obtains most oil revenues from oil and gas taxation by imposing annual rental payments on each licence⁷⁹⁷. The UK does not derive economic benefits from oil and gas production via royalties, as the royalty regime was abolished in January 2003⁷⁹⁸. Likewise, Norway has no royalty regime for petroleum activities. By its model joint operation agreement, each of the participants is obliged to pay the direct chargeable taxes, which includes all taxes, duties and levies charged by the authorities for joint operations⁷⁹⁹.

Norway also generates income from petroleum exploitation via direct taxes paid by companies operating within the oil and gas industry. This form of taxation denoted as corporate taxation also applies to the state's incomes from offshore and onshore oil and gas operations. As earlier discussed, due to the oil and gas industry capacity to engender super profits, especially on the Norwegian Continental Shelf, a separate and special petroleum tax scheme is instead adopted for off-shore petroleum income. While the normal corporate tax rate is 27%, which is the same as onshore⁸⁰⁰, the special petroleum tax rate is 51%. To ascertain the basis for both types of

⁷⁹⁶ See also, International Comparative Legal Guides, available at; <http://www.iclg.co.uk/practice-areas/oil-and-gas-regulation/oil-and-gas-regulation-2016/united-kingdom#chaptercontent2> Accessed on 21 February 2016.

⁷⁹⁷ Available at, <https://www.gov.uk/government/statistics/government-revenues-from-uk-oil-and-gas-production--2> Accessed at 21 February 2016

⁷⁹⁸ Her Royal Majesty's Revenue and Customs (HMRC) See, Statistics of government revenues from UK oil and gas production, including data for fields subject to Petroleum Revenue Tax (PRT).

⁷⁹⁹ See, Deloitte, "Oil and Gas Taxation in Norway" Available at, <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Energy-and-Resources/gx-er-oil-and-gas-taxguide-norway.pdf> . Accessed at 21 February 2016.

⁸⁰⁰ See, Deloitte, "Oil and Gas Taxation in Norway" Available at, <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Energy-and-Resources/gx-er-oil-and-gas-taxguide-norway.pdf> . Accessed at 21 February 2016.

taxes, investments are depreciated on a straight line over six years⁸⁰¹. Deductions are available for costs related to exploration, research and development, financing, operations and decommissioning.⁸⁰²

Furthermore, Norway, like the UK adopts tax incentive measures by providing the option of screening-off normal returns from the special petroleum tax rate, known as the “uplift” which amounts to 22% of the investment (5.5% per year for four years). Thus, companies not currently taxable probably due to the absence of income, may carry forward deficits and uplifts with interest. Such companies can also apply for a cash refund of the tax value of their exploration expenses. This has become an important way of funding exploration activities for new entrants on the Norwegian continental shelf and it has served to enhance the sustainable economic growth of the Norwegian petroleum industry.⁸⁰³

Having considered the oil and gas fiscal regulations of both countries, it is needful to stress that the major differences in both regimes pertain to the target driven approaches adopted by both economies to optimise national revenues from oil and gas resources. While the UK promotes the field allowance incentive to encourage development activity on small, high-pressure, high-temperature and deep-water fields, Norway prefers the unique tax refund model that protects operators from 78% of the cost of a dry exploration well. This has ultimately engendered growth and a relative stability of Norway’s fiscal regime.⁸⁰⁴ This is because by charging higher

⁸⁰¹ Norway's income tax on oil and gas profits has two components: A 27 percent tax on profits (the same income tax charged on all businesses in Norway), and a special 51 percent tax on profits from offshore oil and gas production, for a total tax of 78 percent. (All of Norway's oil and gas production comes from offshore federal leases.) For example, the owners of gasoline stations and the two refineries in Norway pay just the 28 percent tax rate, even if they are owned by an offshore oil and gas producer - the profits are counted separately. Available at, <http://www.arcticgas.gov/norway%20%99s-different-approach-to-oil-and-gas-development> Accessed 21 February 2016.

⁸⁰² Available at <https://www.gov.uk/government/statistics/government-revenues-from-uk-oil-and-gas-production--2>

⁸⁰³ See, Licensees may claim up to 78% of an annual cash refund on exploration costs accrued, as far as the costs do not exceed losses. Available at, <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Energy-and-Resources/gx-er-oil-and-gas-tax-guide-norway.pdf> Accessed at 21 February 2016.

⁸⁰⁴ Available at <http://www.infield.com/articles/fiscal-regimes.pdf> Accessed at 21 February 2016.

taxes for new developments, which remain unchanged for decades, investors are provided the incentives to develop new fields.

Thus, oil and gas investors are afforded the stability and confidence required for such long-term, high-risk, capital-intensive investment decisions as oil and gas production. In contrast, the UK has made various modifications to the petroleum tax and fiscal regime, often announcing numerous rates and inconsistent incentives. This resulted in a shocking and chaotic scenario in the UK petroleum industry in 2011 after the Chancellor made the third major tax rise in nine years on the supplementary charge with a 12% increase, subsequently crashing the shares of UK E&P as well as investor confidence⁸⁰⁵. However, because the UK promotes the development of smaller and often unconventional fields, mostly due to lack of recent major discoveries, the UK thus has a far greater number of small and marginal field developments, but a relatively weaker level of exploration activity in comparison to Norway. Notwithstanding these differences in exploratory approaches and incentives, both economies have harnessed and sustained huge economic gains from oil and gas exploitation via efficient tax mechanisms whilst engendering a green petroleum industry.

3.2.3. Integration of Social development strategies in Norwegian and UK Petroleum Law

As earlier argued in the first chapter, forging synergies across the sustainable development goals remain vital to achieving sustainable development and the 2030 Agenda. This section therefore considers the UK and Norway's approaches to securing access rights and social development in the oil industry.

⁸⁰⁵ See, Drilling Finance, "Fiscal Regimes: UK versus Norway", Petroleum Review, June 2012.

3.2.3.1. Public Participation in the UK and Norway Petroleum Rules

Public participation was discussed in the environmental subsection to enhance the role played by EIAs in the protection of the environment. Regarding the social aspects, public participation is thus assessed with a view to empowering local communities. The UK and Norway are parties to the Aarhus Convention which entered into force on 30 October 2001.⁸⁰⁶ By the tripartite pillars of the Aarhus Convention which offers access to environmental information, access to justice and public participation, the UK and Norway are obliged to implement its provisions via the accompanying EC Directives 2003/35.⁸⁰⁷

Moreover, these provisions are relevant for fulfilling social development objectives during oil and gas exploitation. The EC Directive 2003/4/EC on Public Access to Information transposes the first pillar of the Aarhus convention into EU legislation by requiring all public authorities to provide members of the public with access and dissemination of the relevant and available environmental information, including environmental data as it affects oil and gas exploitation.⁸⁰⁸ The information must be provided to any natural or legal person at their request, without them having to prove an interest and at the latest within two months of the making of such request.⁸⁰⁹ The access to justice pillar provides the right to resort to administrative or judicial procedures to contest acts and omissions inimical to environmental protection, thus fostering social development and empowerment. The third pillar of the Convention, relating to

⁸⁰⁶ See, The United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters adopted on 25 June 1998 in Aarhus at the Fourth Ministerial Conference as part of the "Environment for Europe" process.

⁸⁰⁷ See, EC Directive <http://ec.europa.eu/environment/aarhus/legislation.htm> See, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32005D0370>

⁸⁰⁸ The Directive entered into force on 14 February 2003 and the deadline for transposition in Member States was February 2005. Available at <http://oilandgasukenvironmentallegislation.co.uk/legislation-index/eia-and-public-participation-legislation.htm> Accessed at 22 February 2016

⁸⁰⁹ See also, EC Directive 2014/52/EU Directive 2014/52/EU makes provision for improvements to the EIA procedure. Significant changes are also made to Annex 3 and 4 with a new Annex 2a detailing information that needs to be provided when determining whether projects listed in Annex II require an EIA. The new EIA Directive entered into force on 15 May 2014.

public participation, was addressed in Directive 2003/35/EC, and seeks to strengthen the public participation provisions.⁸¹⁰ The Directive as set out in the preamble states that:

“Effective public participation in the taking of decisions enables the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness of environmental issues and support for the decisions taken”.⁸¹¹

Ultimately, the EC Directives as afforded by the Directive 2001/42/EC and the Public Participation Directive (PPD) seek to ensure that the timing and effectiveness of public participation procedures affecting oil exploitation are enhanced. These vital regulations therefore serve to optimize social development goals in the oil and gas industry of both jurisdictions.⁸¹²

3.2.3.2. Human Rights and Social Development in Norway and UK Oil Laws

Essentially, the purport of this subsection is to address human rights, including the extent if any that human rights standards are applicable and operational as tools of social development to foster petroleum industry sustainability in both jurisdictions. It is however clarified that both jurisdictions do not specifically conduct HRIAs, but they do address relevant human rights interests via EIAs authorised for the development of hydrocarbon resources. As earlier discussed, international human rights provisions such as the, Universal Declaration on Human

⁸¹⁰ Regulation (EC) N° 1367/2006 of the European Parliament and of the Council on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies (OJ L 264, 25.9.2006, p.13) entered into force on 28 September 2006 and became of application on 17 July 2007.

⁸¹¹ Ibid

⁸¹² See also the previous subsection on EIAs with the UK petroleum regime favouring more public consultation and impact.

Rights (UDHR)⁸¹³, International Covenant on Economic, Social and Cultural Rights (ICESCR)⁸¹⁴, Maastricht Principles⁸¹⁵ as well as the UN Guiding Principles on Human Rights have influenced the petroleum industry in the fulfilment of economic and social rights obligations in both jurisdictions. The UK and Norway impacts assessment regulations also inculcate human rights norms enunciated in the above named international legal instruments. For instance, the preamble to the ICESR stress that;

...." the obligations and primary responsibility to promote and protect human rights and fundamental freedoms lie with the State, and that States must protect against human rights abuse within their territory"⁸¹⁶.

This position is also endorsed by the Guiding Principles, which extends the obligation to protect and promote human rights to third parties and transnational corporations working extraterritorially.⁸¹⁷ Basically, these guidelines have formed the bedrock for the relevant human rights engendered regulations in the petroleum laws of both jurisdictions. Furthermore, an assessment of the petroleum laws in these jurisdictions portray a distinction in approaches to strengthen the social development pillar in the oil and gas industry.⁸¹⁸ While both jurisdictions via the impacts assessment regulations try to safeguard human rights⁸¹⁹, Norway in comparison

⁸¹³ See Universal Declaration on Human Rights (UDHR) 1948. See also the UN Charter arts 1.3, 56

⁸¹⁴ See International Covenant on Economic, Social and Cultural Rights (ICESCR), G.A. Res. 2200A (XXI), Art. 2(1). (1966). See also, Gillian MacNaughton, Human Rights Impact Assessment: A Method for Healthy Policymaking Health and Human Rights 17/1, June 11, 2015

⁸¹⁵ Although the Maastricht Principles were drafted by a group of experts, and is not per se a legally binding document, it is reflective of current international human rights law and its Principle 3 is instructive as it provides that, "All States have obligations to respect, protect and fulfil human rights, including civil, cultural, economic, political and social rights, both within their territories and extraterritorially"

⁸¹⁶ See the Preamble to ICESR (1966)

⁸¹⁷ See, Guiding Principles on Business and Human Rights, endorsed by the UN Human Rights Council, Res. 17/4, 16 June 2011. Reproduction of the Principles can be found at:

http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf; quote from page 3-4.
Hereinafter 'UNGPs'

⁸¹⁸ See, previous discussions on Implementation of Intra-Generational Equity in Petroleum Exploitation

⁸¹⁹ See previous discussions on the social development integrative strategies. The UK and Norway are both parties to the Arhus Convention, to ensure public participation, access to environmental information and environmental justice, both countries are also parties to the Kiev (SEA) Protocol.

with the UK has more articulate provisions for human rights and environmental protection. For instance, the Norwegian Constitution in Article 110b states;

“...that every person has a right to an environment conducive to good health and to a natural environment whose productivity and diversity are maintained⁸²⁰”.

Accordingly, state authorities in fulfilment of international human rights objectives are expected to issue specific legal provisions for the implementation of these human rights principles within their jurisdictions. Consequently, Norway thus targets the fulfilment of economic and social rights objectives during oil exploitation and goes further to consider succeeding generations, to expedite the aims of social development across generations in the sustainable development of petroleum resources. Ultimately, Norwegian provisions coupled with the SEA requirements and objectives implicitly form the cluster of issues that HRIAs are meant to secure. Norway’s acknowledgment of the environmental and human rights of citizens is further evidenced by S. 6c of the Norway PAA which requires that impact assessments should provide;

“...a description of assumed impacts on employment and commercial activities, as well as expected economic and social effects of the petroleum activities....”⁸²¹

These regulations thus provide the basis for preventing human rights violations during petroleum exploitation in Norway. There are also specific regulations mandated for oil exploitation in the onshore areas such as Svalbard in Norway.⁸²² These provisions stipulate the

⁸²⁰ See, the Norwegian Constitution – Complete Text, Stortinget (Norwegian Parliament) website, The-Constitution <https://www.stortinget.no/en/In-English/About-the-Storting/The-Constitution/The-Constitution/> (unofficial source; in English); Kongeriget Norges Grundlov [Constitution of the Kingdom of Norway] (May 17, 1814, as amended June 18, 2006), Lovdata, <http://www.lovdata.no/all/nl-18140517-000.html> (in Norwegian).

⁸²¹ See S. 6 Norway PAA and S.3-1 of the Act of 29 November 1996 No. 72 relating to petroleum activities which provides; “Prior to the opening of new areas with a view to granting production licences... an assessment shall be made of the impact of the petroleum activities on trade, industry and the environment, and of possible risks of pollution, as well as the economic and social effects that may be a result of the petroleum activities”.

⁸²² See S.57-S.59 Svalbard Environmental Protection Act.

requirements for permits and approvals as well as environmental impact statements highlighting the likely impacts of the proposed oil and gas activity on the environment of existent local communities. The regulations also ensure that the effects are considered during the planning of activities and when a decision is taken to ascertain the precise conditions for carrying out such activities.

Whereas, the UK indicates a preference for more consultations in consonance with the SEA Protocol and various health safety and environment (HSE) regulations. These consultations in the UK tend to promote site visits and meetings between stakeholders to engender legitimacy of EIA and SEA outcomes and allow for the improvement of final decisions of project assessments. The consultations are also meant to encourage local input and more public examination of expert opinions. The rationale for the UK consultations is also to create easy acceptance of the final decisions of such assessments. This is because collaboration in decision making are enhanced by affected parties who should have equal chances to influence final outcomes.

Consequently, the UK implements the protection of human health and safety during oil exploitation, via these HSE, EIA and SEA regulations which embed: economic, environmental and social rights as whilst stressing contingency planning for this purpose.⁸²³ The aim of these UK assessment provisions is thus to tackle and protect in a holistic manner, the social, economic and environmental rights of citizens in oil and gas producing regions. However, a consideration of the earlier cited international legal instruments on business and human rights⁸²⁴, propose the need for HRIAs as they serve as effective and realistic precautionary

⁸²³ See, Article 130 of the Rome Treaty, also the Single European Act 1986, and the Treaty on European Union of 1992 (adopted by the Maastricht Agreement) and the Amsterdam Treaty of 1997, which sets out the following objectives: To preserve, protect and improve the quality of the environment; to contribute towards protecting human health; and To ensure prudent and rational utilisation of natural resources.

⁸²⁴ See, Guiding Principles on Business and Human Rights, endorsed by the UN Human Rights Council, Res. 17/4, 16 June 2011. Reproduction of the Principles can be found at:
http://www.ohchr.org/Documents/Publications/GuidingPrinciplesBusinessHR_EN.pdf;

measures to minimize the impairment of human rights in the petroleum industry of both jurisdictions. Ultimately, such adoption of HRIAs in the petroleum industries of both jurisdictions would provide invaluable opportunities for strengthening the social development pillar during petroleum exploitation to achieve sustainable development.⁸²⁵ Thus, this omission of HRIA stipulations in the Norwegian and UK petroleum laws undoubtedly count as detracting factors which can be improved upon for a more sustainable oil industry.

3.2.4. Adoption of technological innovations in the Petroleum laws of the UK and Norway

As previously argued in the preceding chapters, the adoption of innovative technology is essential for a sustainable and green petroleum industry. This section therefore highlights technological innovations in the petroleum industry of the UK and Norway that have expedited the aims of all three pillars of the sustainable development paradigm. Norway promotes innovative and efficient technologies via the provisions of Section 4-1 of the Norwegian Petroleum Act, while the UK provides for pipelines modifications by Part III of the UK PA without specifying innovative technology, this renders any modification process subject to the “BAT” by virtue of EU Commission Decision 2014/738/EU. This directive approves the best available techniques (BAT) for the refining of mineral oil and gas” which similarly applies to Norway as an EEA state.⁸²⁶ Furthermore, innovative technology has been crucial in ensuring access to unconventional wells and marginal fields in both the UKCS and the NCS. The reason being that the North Sea is quite a challenging terrain for accessing valuable petroleum

⁸²⁵ See earlier discussions on HRIAs for fulfilling intra-generational equity in the petroleum industry.

⁸²⁶ See, “Best Available Technics (BAT)” BAT is defined as “the latest stage of development (state of the art) processes, of facilities or of methods of operation, which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste”. Available at <http://www.oilandgasukenvironmentallegislation.com/Contents/pages/statutory.htm> Accessed on 23 February 2016

stocks.⁸²⁷ Unpredictable and often hostile weather conditions in Europe's North Sea have made drilling in the region particularly hazardous and has been accountable for loss of lives.⁸²⁸ The prevailing conditions aggravate a costly extraction process. It was even asserted in the 80's that costs for developing new methods and technologies to make the extraction process safe and effective, far surpassed "NASA's budget to land a man on the moon".⁸²⁹

An assessment of both the UK and Norwegian oil industries indicate substantial investments in innovative technology to achieve not just local but global sustainable development goals. Scotland in relation to oil and gas investments on the UKCS allocated £10.6 million for a new Oil and Gas Innovation Centre (OGIC)⁸³⁰ to promote innovative technologies in support of enhanced petroleum recovery methods. This is essentially meant to harness the petroleum resources estimated at 24 billion barrels of oil equivalent valued at £1.5 trillion reposed in the North Sea fields.⁸³¹ The center also aims to encourage research in seismic and reservoir characterization, shale gas exploitation, hydrocarbon resource integrity and life extension, decommissioning, production optimization and a host of other vital means of sustainably developing hydrocarbon resources. The OGIC will also support industry aims to increase production and reduce costs in the UKCS by enabling the delivery of crucial and technical

⁸²⁷ The "North Sea" often includes areas such as the Norwegian Sea and the area known as "West of Shetland", "the Atlantic Frontier" or "the Atlantic Margin". The largest UK field discovered in the past 25 years is the "Buzzard" located off Scotland, found in June 2001 with producible reserves of almost $64 \times 106 \text{ m}^3$ (400m bbl) and an average output of $28,600 \text{ m}^3$ to $30,200 \text{ m}^3$ (180,000-190,000 bbl) per day. The largest field found in the past five years on the Norwegian part of the North Sea, is the "Johan Sverdrup" oil field which was discovered in 2010. Total reserves of the field are estimated at 1.7 to 3.3 billion barrels of gross recoverable oil and Johan Sverdrup is expected to produce 120,000 to 200,000 barrels of oil per day. Production date is set for 2018. It is one of the largest discoveries made in the Norwegian Continental Shelf. As of January 2015, the North Sea is the world's most active offshore drilling region with 173 active drilling rigs.

⁸²⁸ The offshore can be a hazardous environment. In March 1980, the 'flotel' (floating hotel) platform Alexander L. Kielland capsized in a storm in the North Sea resulting in the loss of 123 lives

⁸²⁹ See, "High costs, high stakes on the North Sea". Time. 1975-09-29.

<http://content.time.com/time/magazine/article/0.9171.913489.00.html> Retrieved, 23 February 2016. See also, O. Petterson, A. Storli, E. Ljosland, et.al, "The Gullfaks Field," in Giant Oil and Gas Fields of the Decade, 1978–1988, (1992) AAPG Memoir 54, Halbouty, M.T., editor, Tulsa: American Association of Petroleum Geologists, ISBN 0891813330, pp. 429–446 Alex Kemp, The Official History of North Sea Oil and Gas. Volume I: The Growing Dominance of the State; Volume 2: Moderating the State's Role (2011)

⁸³⁰ See, <http://news.scotland.gov.uk/News/-10-6m-for-oil-gas-innovation-9a2.aspx> Accessed at 9 June 2016

⁸³¹ Ibid

solutions to minimize the challenges of drilling in the UKCS.⁸³² Apart from the improvement in recovery rates of petroleum through innovative technology, there also exists appreciable opportunities for carbon capture and storage to reduce CO₂ emissions in the UKCS and NCS. Carbon capture storage technology (CCS) also forms a vital aspect of the sustainable development of petroleum resources.⁸³³ According to the European Commission, some 30% of CO₂ emissions from the power sector could be captured in this way by 2030 and increased to almost 60% by 2050.⁸³⁴

A further use of innovative technology is exemplified at the Wytch Farm onshore field in the UK.⁸³⁵ The farm's use of horizontal drilling has also served to preserve an environmentally sensitive area comprising a stretch of World Heritage Coastline.⁸³⁶ Norway likewise adopts innovative technology in Snøhvit in the Barents Sea and part of the NCS where petroleum drilling is carried out, by avoiding the use of surface installations. The seabed facilities are thus designed to allow trawler fishing despite ongoing oil and gas exploitation. Essentially, the adoption of innovative technology in oil and gas exploitation by both jurisdictions especially in the North Sea as well as in their respective onshore areas has succeeded in achieving discoveries of new oil fields, making unconventional fields more accessible, more cost effective, expedited maximum reuse and recycling of by-products and altogether promoted safer and less time consuming drilling processes whilst reducing adverse ecological footprint to achieve the interests of sustainable development in the petroleum industry.

⁸³² <http://news.scotland.gov.uk/News/-10-6m-for-oil-gas-innovation-9a2.aspx> Accessed at 9 June 2016

⁸³³ See, Robert Eckard, "Enhanced Oil Recovery: Technologies and Global Markets" ISBN: 1-56965-524-3
BCC Research. www.bccresearch.com information@bccresearch.com EGY071B

⁸³⁴ See, Robert Eckard, "Enhanced Oil Recovery: Technologies and Global Markets" ISBN: 1-56965-524-3
BCC Research. www.bccresearch.com information@bccresearch.com EGY071B

⁸³⁵ See, P.W. Cox, and C.M. Hearne, "Redeemed from the Heath: the archaeology of the Wytch Farm oilfield" (1991) Dorset Natural History and Archaeological Society. "Wytch Farm is an oil field and processing facility in the Purbeck district of Dorset, England. It is the largest onshore oil field in western Europe...."

⁸³⁶ See, Robert Eckard, "Enhanced Oil Recovery: Technologies and Global Markets" ISBN: 1-56965-524-3
BCC Research. www.bccresearch.com information@bccresearch.com EGY071B

3.3. Sustainable Use of Petroleum Resources: Extraction Control Measures in Norway and the UK

Having considered in the previous chapters that, the management of the petroleum resource base is vital for prolonging the life-span and utility of finite petroleum resources in accordance with goal 12 of the SDGs, this subsection assesses regulations and strategies adopted in the UK and Norway to achieve the aims of sustainable use and production of petroleum resources.

Norway in Section 4-1 of the Norway Petroleum Act provides for “prudent production”⁸³⁷, which is inherently related to prudent or reasonable use of natural resources, especially finite resources.⁸³⁸ The UK via the DECC’s Energy Development Unit, undertakes field measurements and allocations on the UKCS to maximise the hydrocarbon resource potential and recovery.⁸³⁹

As regarding control of extraction and depletion rates, Norway initially adopted a regulatory approach in the 1980’s to control extraction and depletion of the petroleum resources by mandating a production ceiling of 90million standard cubic metres of petroleum per annum, not necessarily for environmental or resource conservation reasons but to prevent petro-curse and inflation. However, this approach did not achieve sustainable development in Norway and retarded the oil industry.⁸⁴⁰ Due to supervening economic problems, international recession,

⁸³⁷ Section 4-1 Norway PA “Production of petroleum shall take place in such a manner that as much as possible of the petroleum in place in each individual petroleum deposit, or in several deposits in combination, will be produced.... “The production shall take place in accordance with prudent technical and sound economic principles and in such a manner that waste of petroleum or reservoir energy is avoided”.

⁸³⁸ Section 26 of the Norway PA, covers petroleum metering and measurements. Norway keeps consistent track of the petroleum extraction rates to ensure “Prudent Production”.

⁸³⁹ The Petroleum Measurement & Allocation Team is responsible for: Developing the UK regulatory regime for the measurement of oil & gas on the UK continental shelf; Inspecting offshore and onshore installations to ensure compliance with ‘good oilfield practice’ as advocated by “BAT” and as described in DECC’s Measurement Guidelines;

www.gov.uk/oil-and-gas-measurement-of-petroleum Reviewing Licensee’s proposals to ensure that all new field developments (or modifications to existing developments) conform to an agreed Method of Measurement (PON6);

⁸⁴⁰ Erling Roed Larsen, Escaping the Resource Curse and Dutch Disease? When and Why Norway Caught Up With and Forged Ahead of its Neighbours (2004) Discussion Papers No.377, May 2004 Statistics Norway Research Department.

the disintegration of the Norwegian incomes policy and challenges with restructuring of the industrial sector, the imposed oil production limitations policy was discarded in favour of the field production licence scheme.⁸⁴¹

Moreover, as earlier discussed, both the UK and Norway have effective control over the extraction and depletion of their respective oil and gas reserves as they both implement licensing systems, where the state decides on the best or most suitable licensees for oil field allocations. The state also exerts development control over its petroleum resources by deciding which fields should be developed and by means of regulatory powers it mandates the submission of field development plans like in the UK, or plans for development and operations (PDO) in Norway.⁸⁴²

Accordingly, both jurisdictions ensure that the licensees use the “Best Available Technics (BAT)” to guarantee reasonable extraction and sustainable use of the finite hydrocarbon resources to expedite sustainable development goals. For instance, in the early 1990s, there were concerns regarding the safety of the Ekofisk field on the NCS due to subsidence⁸⁴³, deteriorating facilities and poor maintenance. The oil licensee, Conoco-Phillips sought decommissioning permits for parts of the Ekofisk field because of the low production and degraded facilities. However, the Norwegian Petroleum Directorate (NPD) directed Conoco-Phillips to submit a revised PDO in 1994, resulting in the redevelopment of Ekofisk production

⁸⁴¹ Sven Gjednum, “From Oil and Gas to Financial Assets: Norway’s Government Pension Fund (2008)” Also, Tina Hunter, “Legal Regulatory Framework for the Sustainable Extraction of Australian Offshore Petroleum Resources A Critical Functional Analysis”

⁸⁴² See, Chapter 4, S.21-23 of the Norwegian Petroleum Regulations (1997) as amended by Royal Decree 2012. Norway requires that the licensees submit a plan for development and operation (PDO). The process ensures that all relevant arguments for and against the project are known before a decision on development is taken. A PDO/PIO consists of a development plan and an impact assessment.

⁸⁴³ See, J. Geertsma, “Land subsidence above compacting oil and gas reservoirs, Journal of Petroleum Technology, June 1973, v.25 n.6 p.734-743. Subsidence relates to the sinking of land, it may occur after considerable production of oil or ground water and less commonly, gas extraction.

facilities and the use of enhanced recovery techniques.⁸⁴⁴ Subsequently, the enhanced oil recovery technology meant that it was possible for Ekofisk though previously deemed to be at the end of its production life to eventually accumulate a massive boost of up to 50 per cent of accessible oil reserves.

Norway's intervention through NPD to compel Conoco-Phillips to continue production and improve recovery in Ekofisk illustrates the regulatory control that Norway has as part of the broad principle of 'prudent production' under section 4-1 of the PAA and the Petroleum Regulations.⁸⁴⁵ Although Conoco-Phillips wished to close the field, State review of the production potential of the field prevented the closure. Instead, the State directed Conoco-Phillips to employ enhanced oil recovery techniques or innovative technology to maximise the recovery of petroleum from the field.⁸⁴⁶ Norway's initiative has been lauded as the appropriate socio-economic decision. This is because it positively impacted on the sustainable development of Norwegian petroleum resources on the NCF, as doing otherwise would have amounted to avoidable investment failure, resource waste, field abandonment and field sterilization.⁸⁴⁷

Ultimately, the control of petroleum extraction and depletion rates via enhanced recovery methods or prudent extraction techniques for resource optimization and reasonable use have been accountable for the boost in oil and gas recovery in the UK and Norway. Both jurisdictions successfully revitalised their resource base and petroleum industries by ensuring access to unconventional and erstwhile inaccessible or marginal fields. This invariably triggered the

⁸⁴⁴ Norwegian Petroleum Directorate, Fact Pages: Ekofisk (2008), www.npd.no/engelsk/cwi/pbl/en/index.htm at 19 January 2009. 180 Stig S Kvendseth, Ekofisk The First 20 Years (1991), 194. 181 Phillips, 'Norway Reach Agreement on New Platform, Extend Licence' (1994), *The Journal Record*, www.hightbeam.com/doc/1P2-5655454.html at 12 December 2009. 182 Norwegian Petroleum Directorate, Fact Pages: Ekofisk (2008), www.npd.no/engelsk/cwi/pbl/en/index.html at 19 January 2009, and Phillips, note 181 above. 183 Norwegian Petroleum Directorate, note 182 above, 9. 184 The specific techniques included pressure injection and directional drilling. See Norwegian Petroleum Directorate,

⁸⁴⁵ See, S.11 Petroleum Regulations (1997), Norway.

⁸⁴⁶ See, T. Hunter, "Sustainable Socio-Economic Extraction of Australian Offshore Petroleum Resources through Legal Regulation: Is It Possible", 29 *J. Energy & Nat. Resources L.* 209 (2011) [38 pages, 209 to 246]

⁸⁴⁷ Field Sterilization results in serious challenges for extraction and is avoidable through prompt or timely field development.

discovery of new fields and hydrocarbon resource renewal which in the long run serve the interests of sustainable use and sustainable consumption as articulated by Goal 12 of the SDGs.

3.4. Equity, Petroleum Exploitation and How “the Polluter Pays”: The UK and Norwegian Approaches

As previously argued in earlier chapters, equity in its inter or intra-generational dimensions, is a relevant tool to ensure proper distribution of responsibility for social disruptions and environmental harm incurred during petroleum exploitation. As also contended, the reduction of inequities and inequalities in the course of oil and gas exploitation envisages the use of pollution control mechanisms to ensure that the polluter effectively pays for polluting activity. Thus, costs of remediation from oil spills, emissions charges and carbon taxes come within this ambit for curtailing adverse environmental impacts accruing from petroleum exploitation. Moreover, these measures ensure that poverty is not exacerbated nor public health impaired as the case often is when the public bear the brunt of oil and gas pollution. This view also takes cognisance of the fact that, the poor often have minimal adaptive capacity towards climate change or its impacts and should be shielded from negative externalities arising from petroleum exploitation. This subsection therefore assesses the regulatory parameters guiding the core areas of pollution prevention and efficient recycling in the petroleum regulations of the UK and Norway for actualising the aims of sustainable development in oil and gas operations.

The UK and Norway in fulfilment of international agreements like the OSPAR, the Bonn Agreement for Cooperation in dealing with pollution of the North Sea by oil and other harmful substances 1983⁸⁴⁸ have, established pollution control regulations for the oil industry. Moreover, the EU Directive on Integrated Pollution Prevention and Control 96/61/EC (IPPC

⁸⁴⁸ Within the Bonn Agreement (1983) area there are two further interstate agreements which set out provisions for a joint response by the Contracting States and also how state intervention may be utilised when one or the other's interests are threatened. The instrument of accession entered into force on 1 April 2010.

Directive) was formally adopted on 24 September 1996 and applies to both the UK and Norway. The Directive requires Member States, as from 30 October 1997, to ensure that none of the installations listed in Annex I of the Directive (which includes oil refineries) operate without a permit issued in accordance with the Directive. Such permits are to be issued subject to conditions setting, emission limit values for all emissions into the environment based on the (BAT). The IPPC Directive has been enacted in the UK by the Pollution Prevention and Control Act 1999 (PPC Act). This Directive institutes the Integrated Pollution Control (IPC)⁸⁴⁹, IPPC⁸⁵⁰ and Best Practicable Environmental Option (BPEO).⁸⁵¹ In effect, these regulations empower regulatory agencies to enforce compliance, initiate immediate remediation of pollution and impose stiff sanctions for violations or unapproved discharges. There is also the imposition of strict liability for breach of regulations in both the UK and Norway⁸⁵² and the operators are fully responsible for costs in the event of government intervention.⁸⁵³

Similarly, in Norway, discharges of produced water, drill cuttings or chemical residues from drilling operations are governed through permits issued under the Pollution Control Act, by the

⁸⁴⁹ IPC developed out of the realisation that pollution control concentrated in any one environmental media, (water, air, soil, etc.) could often lead to damage in another media and that what was required was an integrated approach to pollution control that considered all media in order to minimise damage to the environment as a whole. The concept was first implemented in UK legislation with the entry into force of part I of the Environmental Protection Act 1990.

⁸⁵⁰ IPPC has a wider ambit than IPC, including the consideration of waste reduction and recovery, energy efficiency, prevention of accidents and site restoration. IPPC also takes into account more environmental impacts than IPC and requires comprehensive information on which to base the permit conditions and limits. IPPC has now fully replaced IPC in the UK.

⁸⁵¹ The BPEO concept evolved from the recognition of the need for co-ordinated pollution control but with wider implications. The BPEO requires a systematic approach to decision taking in which the practicality of all reasonable options is examined and in which environmental impact constitutes the overriding factor in final decision making.

⁸⁵² See, Art. 7-3, para. 1 of Norway PA. The UK also imposed special rules for pollution caused by an offshore installation via the Offshore Pollution Liability Agreement of 1975. The OPOL Agreement was introduced as an interim measure during the negotiation phase of the Convention of Civil Liability for Oil Pollution Damage resulting from Exploration for and Exploitation of Seabed Mineral Resources.

⁸⁵³ The OPOL agreement thus goes into effect if any operator defaults on paying clean-up costs, with a current cap of US\$120 million. The OPOL Agreement is a voluntary oil pollution compensation scheme that provides guarantees of payment for claims up to US\$120 million for all members of OPOL to “provide an orderly means for compensating and reimbursing any Person who sustains Pollution Damage and any Public Authority which incurs costs for taking Remedial Measures as a result of a Discharge of Oil from any Offshore Facility.” Although membership in this organization is voluntary, however, it is a license requirement to either be a member or have the same liability coverage provided for by OPOL. Currently all operators in the UK are members of OPOL.

Norwegian Environment Agency.⁸⁵⁴ Likewise, oil and gas wastes, effluents and discharges require treatment and oftentimes necessitate deposition below the seabed as hazardous waste to avoid the liabilities imposed for oil pollution damage.⁸⁵⁵ The provisions in Chapter 7 of the Norway PAA are instructive on this point as they apply to liability for oil pollution damage (Art. 1-4, para. 6). Pollution damage under the PAA also refers to “damage or loss caused by pollution because of effluence or discharge of petroleum from a facility, including a well, and costs of reasonable measures to avert or limit such damage or such loss, as well as damage or loss as a consequence of such measures” and “damage or loss incurred by fishermen as a consequence of reduced possibilities for fishing⁸⁵⁶”. It is also remarkable that Norway in the bid to minimise oil and gas pollution and in keeping with the OSPAR Convention established a zero-discharge target for hazardous substances released through petroleum activities in 1997.⁸⁵⁷ This target has been achieved for chemical additives or releases. In Norway, just as in the UK, operators are strictly liable for dealing with acute pollution resulting from their own activities⁸⁵⁸ and must maintain appropriate levels of emergency preparedness and response.⁸⁵⁹

Another significant area of interest regarding pollution control strategies and recycling in the oil and gas industry relates to decommissioning and the regulatory approaches adopted in both

⁸⁵⁴ The Norway Pollution Control Act (PCA) stipulates under Article 2, (Item 5) that efforts are to be made to prevent any occurrence or increase of pollution and to limit any pollution that does occur; that the costs of preventing or limiting pollution are to be met by the person responsible for the pollution....”

⁸⁵⁵ Disposal of waste products is regulated by the Norwegian Pollution Act. The diverse types of waste must be classified and transported to the correct type of onshore waste disposal facility. Hazardous waste and industrial waste must be reported to the authorities. As the disposal of waste can cause pollution, the waste disposal facility must have a licence to receive waste products under Chapter 3 of the Pollution Act. The waste disposal facility must pay a fee to the Treasury to cover the costs related to procedures and control activities.

⁸⁵⁶ See, Art. 7-1, para. 1), which also provides that ships used for stationary drilling are deemed a facility; ships that store petroleum in conjunction with production facilities are regarded as part of the facility, as are ships for transport of petroleum when loading from the facility results in pollution. (Art. 7-1, para. 2).

⁸⁵⁷ Available at <http://www.norskpetroleum.no/en/framework/petroleum-act/> Accessed at 26 February 2016

⁸⁵⁸ Liability for pollution damage is governed by Chapter 7 of the Petroleum Act, which states that licensees are strictly liable for pollution damage, i.e. they are liable regardless of fault.

⁸⁵⁹ Also, the Norwegian Clean Seas Association for Operating Companies (NOFO), which is owned by several operators and licensees on the NCS, also administers and maintains preparedness and response resources including personnel, equipment and vessels. NOFO has five bases along the coast, at Stavanger, Mongstad, Kristiansund, Træna and Hammerfest. In addition, NOFO equipment is permanently deployed on some fields. NOFO has a total of 16 offshore recovery systems and carries out joint exercises every year.

the UK and Norway to ensure sustainable development. The decommissioning of offshore oil and gas installations and pipelines on the UKCS and likewise the NCS is governed by the OSPAR Convention. Furthermore, the UK decommissioning process is regulated by the PA and the Energy Act 2008 as well as the Offshore Production and Pipelines (Assessment of Environmental Effects) Regulation 1999 as amended. The 1999 Regulations implemented the EC Directive 1997/11/EC on the assessment and effects of certain public and private activities on the environment. The process usually commences with the service of a Section 29 notice to a licensee. The Secretary of State through DECC authorises a S.29 notice in accordance with the PA for the submission of a decommissioning programme.⁸⁶⁰ The DECC thus undertakes effective measures by the adoption of the S.29 and S.34 notice for a decommissioning programme to ensure that the public or taxpayer does not bear the burden or costs of such decommissioning projects.⁸⁶¹

The position in Norway is quite similar as the licensees must provide a decommissioning plan to the Ministry of Petroleum and Energy (MPE) before the cessation of petroleum activities.⁸⁶² The MPE has a wide discretionary power to decide what happens to the installations, facilities and pipelines after the end of petroleum activities, this can range from outright removal or recommendations for alternative use. The Norwegian state can also choose to take over the installations or facilities. The licensees and owners of the installation, facilities and pipelines ultimately bear the decommission costs and are jointly liable for damage or inconvenience caused by the decommissioning, regardless of fault, wilful misconduct or negligence.

⁸⁶⁰ A decommissioning programme sets out the measures to decommission disused installations and/or pipelines, and will describe in detail the work implications. Once the decommissioning programme is approved, following DECC's review of the details including the cost estimates, the section 29 notice-holders are legally obliged to carry it out on a joint and several liability bases. If a programme is not carried out or its conditions are not complied with, the Secretary of State may, by written notice, require remedial action to be taken. Failure to comply with any such notice is an offence and the Secretary of State can carry out the remedial action and recover the costs from the person to whom the notice was given.

⁸⁶¹ See Sections 29-34 UK Petroleum Act.

⁸⁶² Section 43 of the Norway PA relating to Decommissioning plan. “The decommissioning plan which is to be prepared pursuant to the Act section 5-1, shall consist of one part dealing with disposal and an impact assessment. The decommissioning plan may contain proposed disposal of several facilities. See also Ss.44-45 of Norway PA.

Basically, this regulation of decommissioning procedures is a crucial approach for ensuring sustainable development of the UK and Norwegian oil and gas industry. This is because it conforms with the paramount agenda of sustainable development on all pillars as it ensures not just the protection of the environment by guaranteeing proper means to prevent pollution from redundant oil and gas infrastructure or installations, it also goes a step further to safeguard economic growth by shielding government expenditures from unwarranted expenses. Ultimately this approach secures public protection as an equitable and social development imperative to prevent the general public from dealing with the dangers, nuisance, or inconvenience which may accrue from such abandoned facilities.

Notwithstanding these forgoing safeguards in favour of the environment to ensure pollution controls in the oil industry operating on the NCS and UKCS, the major drawback with the UK offshore regulations is in its enforcement. Authors have argued that though the DECC is charged with oversight functions encompassing economic growth, environmental protection and social development of the petroleum industry, its primary focus remains economic growth.⁸⁶³ The DECC's bid to encourage prompt exploitation of the petroleum resources for national economic gains via the issuance of petroleum licenses with limited time-frames, has also been fraught with conflict of interests as environmental protection concerns are sometimes relegated in favour of economic objectives.⁸⁶⁴ Furthermore, the DECC made only very few prosecutions in breach of the 1971 "Prevention of Oil Pollution Act".⁸⁶⁵ The DECC has also

⁸⁶³ See, Jeremy Rowan-Robinson, "Environmental Regulation of The UK Offshore Oil And Gas Industry" Journal OF Energy & Natural Resources Law Vol 18 No 3 2000

⁸⁶⁴ See the first subsection relating to the overview of the Petroleum industry, the UK petroleum licences and PEDLs

⁸⁶⁵ Jeremy, Rowan-Robinson, (id) It was noted that in the first 30 years of oil and gas operations on the UKCS there were only five prosecutions under the Prevention of Oil Pollution Act 1971.

been criticized for employing insufficient inspectors to oversee offshore installations and operations.⁸⁶⁶

Moreover, to enforce these inspections they tend to be reliant on the offshore oil operators for transport to such facilities as they are usually difficult to access. This dependence for access impinges on the possibility of unannounced visits or spot checks and affects the quality of regulation and inspection. Although there have been marked improvements through increased aerial surveillance to monitor oil spill contingency planning⁸⁶⁷, there is however a heavy reliance on the oil industry to monitor itself and voluntarily make reports for accidental discharges, or the level of oil concentrations in produced water as well as spill incidents.⁸⁶⁸ Such a subjective approach to monitoring is likely to be counterproductive as it impacts directly on the adequacy of control measures to enforce environmental protection and sustainable development of the UK oil industry.⁸⁶⁹

3.4.1. Green Taxes and Tariffs in the UK and Norwegian Petroleum laws

Having considered the importance of green taxes and accounting measures as core tools of optimizing equity to minimize polluting behaviour and restrain consumption patterns that escalate carbon impact on the environment in Chapter 1, this section deals with the regulatory provisions available in the UK and Norwegian oil and gas provisions which target green taxes

⁸⁶⁶ See the Petroleum (Production) (Seaward Areas) Regulations 1988, SI 1988 No 1213, Sched 4, model clause 23(9). 11 Marine Conservation Society, Press Release 'Government "oil rigs watchdog" is toothless, blind and lame', 21 October 1996. Department of Trade and Industry, Energy Report (1998), para 4.19. 4 Ibid, para 4.17. Considering that there were some 220 fixed and floating platforms in the North Sea. It was claimed that from 1990-1994 there was only one inspector. Although the number of inspectors subsequently rose to eight, it still reflects a lack of adequate supervisory personnel

⁸⁶⁷ See, Jeremy Rowan-Robinson, "Environmental Regulation Of The UK Offshore Oil And Gas Industry" Journal OF Energy & Natural Resources Law Vol 18 No 3 2000 "During 1997, over 300 hours of flying time were spent on 55 'dedicated' rig patrols"

⁸⁶⁸ See, G Picton-Turberville, 'Decommissioning of Offshore Installations: The Legal Aspects' [1998] OGLTR 221.

⁸⁶⁹ The PEDLs or petroleum licenses constitute the principal mechanisms of environmental control. Also, the model clauses provide for direct action and/or revocation in the event of default. However, the DECC faces a challenge in imposing sanctions. This is because, Revocation or the "threat thereof" of the petroleum license, though possible as an economic sanction, which could prove effective, merely revoking a licence for any spill incident would unfortunately raise serious issues of proportionality.

or carbon taxes⁸⁷⁰ and other environmental protection levies.⁸⁷¹ Essentially, the UK and Norway have instituted various instruments to curb greenhouse gas emissions. Norway for instance has the carbon tax⁸⁷² and the Greenhouse Gas Emission Trading Act.⁸⁷³ These are Norway's most important cross-sectoral climate policy instruments for cost-effective cuts in greenhouse gas emissions.⁸⁷⁴ Both instruments apply to the petroleum industry, while other sectors either must take part in emissions trading or pay the carbon tax.⁸⁷⁵ Similarly, the UK and Norway via EU and EEA obligations conform to the EC Directive relating to the EUETS.⁸⁷⁶ More so, this directive in accordance with climate action indicators for goal 13 of the SDGs, stipulates obligations on reporting of emissions whilst imposing penalties for carrying out unauthorised activities, under-reporting or failure to report emissions prior to 2013. The EUETS thus amends the Green House Gas Trading Regulations Scheme of 2005.

Moreover, there remains the climate change levy (CCL) in the UK.⁸⁷⁷ It is an environmental tax on downstream activities and is chargeable on taxable supplies of taxable commodities,

⁸⁷⁰ A carbon tax is a tax levied on the carbon content of fuels. It is a form of carbon pricing. Carbon taxes offer a potentially cost-effective means of reducing greenhouse gas emissions. See, I. Bashmakov, et al. "6.2.2.2.1 Collection Point and Tax Base". In B. Metz; et al. *Policies, Measures, and Instruments. Climate Change 2001: Mitigation*. Contribution of Working Group III to the Third Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK, and New York, N.Y., U.S.A, 2001.

⁸⁷¹ P. Hoeller, and M. Wallin, OECD Economic Studies No. 17, Autumn, 1991. Energy Prices, Taxes and Carbon Dioxide Emissions (PDF). OECD website. (1991) Staudt, A.; et al. (2008). "Understanding and Responding to Climate Change" (PDF). U.S. National Academy of Sciences.

⁸⁷²Norway was one of the first countries to impose a carbon tax in 1991. This is levied on all combustion of gas, oil and diesel in petroleum operations on the continental shelf and on releases of CO₂ and natural gas, in accordance with the CO₂ Tax Act on Petroleum Activities.

⁸⁷³See the Norwegian ETS 2005-2007 which applies to CO₂ emissions, covers 51 installations accountable for 10-15 % of total GHG emissions, includes industry (energy facilities above 20 MW, refineries and some others).

⁸⁷⁴ Norway is a member of the European Union Emissions Trading System (EU ETS), also known as the European Union Emissions Trading Scheme. EUETS is the world's largest trading scheme and was launched in 2005 to fight Global warming. See also, Denny A. Ellerman, B.K. Buchner, "The European Union Emissions Trading Scheme: Origins, Allocation, and Early Results". Review of Environmental Economics and Policy 1 (January 2007 (1): 66–87.) doi:10.1093/reep/rem003.

⁸⁷⁵Norway's CO₂ tax started at a high rate of US\$51 per tonne of CO₂ on gasoline, with an average tax of US\$21 per tonne. It is also claimed to be the highest amongst OECD member states. See, Annegrete Bruvoll; Bodil Merethe Larsen, "Greenhouse gas emissions in Norway Do carbon taxes work?" (2002) (PDF). Statistics Norway, Research Department. p. 28. OECD (1998).

⁸⁷⁶Commission Regulation (EU) No 389/2013 of 2 May 2013

<http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:122:0001:0059:EN:PDF> 2 Directive 2009/29/EC
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0063:0087:EN:PDF>

⁸⁷⁷The Climate Change Levy (CCL) is a tax on energy delivered to non-domestic users in the United Kingdom. Its aim is to provide an incentive to increase energy efficiency and to reduce carbon emissions. It was introduced on 1 April 2001 under the Finance Act of 2000.

which are supplies of commodities used as fuels for lighting, heating and power by business consumers. The applicable areas or taxable commodities include: electricity, natural gas as supplied by a gas utility, petroleum and hydrocarbon gas in a liquid state (including LPG) and solid fuels. In a nutshell, the adoption of these strategies in the UK and Norwegian petroleum regulations appear as cost effective measures to curb carbon externalities on the environment and reduce emissions for the benefit of sustainable development in these jurisdictions.

3.4.2. Sovereign Wealth Funds: Any lessons from the UK and Norway?

As initially argued in the previous chapters, equity, specifically denoted by inter-generational equity forms a fundamental objective of sustainable development to preserve the opportunities and options of future generations. Whereas, oil funds or petroleum based sovereign wealth funds form crucial tools of engendering equity in petroleum wealth distribution across generations. This subsection therefore considers the UK and Norwegian petroleum rules to identify equity's influence via sovereign wealth funds.

Norway's Government Pension Fund or oil fund was established in 1990.⁸⁷⁸ This was in line with the Storting or parliamentary decision to counteract the impact of the fall in oil prices and stabilize the economic effects of oil price fluctuations.⁸⁷⁹ Norway's fund constitutes a re-investment of portions of the large surplus generated by the Norwegian petroleum sector.⁸⁸⁰ This is mostly created from taxes on oil companies, but also involves funds generated from oil

⁸⁷⁸ The Government Pension Fund (Norwegian: Statens pensjonsfond Utland, SPU) is a fund into which the surplus wealth produced by Norwegian petroleum income is deposited. The fund was renamed in January 2006 from "Petroleum Fund of Norway".

⁸⁷⁹ Norway's Oil Fund attracts the surplus wealth produced by Norwegian petroleum income. As of the valuation in June 2011, it was the largest sovereign wealth fund in the world.

⁸⁸⁰ Since 1998 the fund has been allowed to invest up to 40 percent of its portfolio in the international stock market. In June 2009, the ministry decided to raise the stock portion to 60 percent. In May 2014, the Central bank Governor proposed raising the rate to 70 percent. See also, Mohsin, Saleha (7 May 2014). ["Norway Wealth Fund Wins Labor Backing to Buy New Asset Classes"](#). Bloomberg.

exploration licenses and Norway's direct financial interest accruing from dividends in the partly state-owned subsidiary Statoil.⁸⁸¹ Norway succeeded in securing current revenues from the petroleum sector which it estimated to be at its peak period since 2004⁸⁸² to save it from the impacts of decline in future decades.⁸⁸³

Quite unlike Norway, the UK is yet to establish a pension fund or sovereign wealth fund from hydrocarbon resources.⁸⁸⁴ Even though there has been some speculation about the possibility of instituting a pension fund from the exploitation of shale gas, that situation is yet to materialize.⁸⁸⁵ Notwithstanding, on this issue of the preservation of the interests of succeeding generations via sovereign wealth funds from oil revenues, Norway proves to be far ahead of its oil exploiting contemporaries on the North Sea. This includes the UK that has no substantive wealth fund from hydrocarbon resources.⁸⁸⁶ Consequently, such absence of petroleum generated wealth funds in furtherance of the equity indicator of sustainable development places the UK on less than equal footing in comparison with Norway. Norway's petroleum industry thus reflects a more sustainability engendered approach for the benefit of future generations.

3.5. Conclusion

This chapter accomplishes a comparative assessment of the petroleum regulatory regime of the UK and Norway. Notwithstanding their disparate jurisdictional backgrounds, the outcome of

⁸⁸¹ As of 29 January 2016 its total value was NOK 6.974 trillion (\$802.6 billion), holding one percent of global equity markets. With 1.78 percent of European stocks, it is also claimed to be the largest stock owner in Europe

⁸⁸² See, <http://www.mining.com/web/peak-oil-impacting-norwegian-and-saudi-2013-production/> Accessed at 13 June 2016. Norway's petroleum production peaked in 2004 at 4.54 million bpd, but by 2011 production had fallen to 3.8 million bpd. According to the Oljedirektoratet (Norwegian Petroleum Directorate), in 2012 companies operating in Norwegian waters made 14 discoveries totalling 709 million barrels of oil.

⁸⁸³ <http://www.swfinstitute.org/fund-rankings/> accessed at 09/03/2015

⁸⁸⁴ Available at; <http://www.spectator.co.uk/2008/04/why-hasnt-britain-got-a-sovereign-wealth-fund/> Accessed at 28 February 2016

⁸⁸⁵ Available at; <http://www.theguardian.com/environment/2014/nov/10/uk-proposes-shale-gas-sovereign-wealth-fund> Accessed at 28 February 2016

⁸⁸⁶ Ibid

this comparison indicates that, the evolving pattern in the oil and gas regulations of both economies is that which is geared towards the achievement of a sustainable oil and gas industry in accordance with the three-pillar paradigm of sustainable development. This chapter realistically demonstrates that such sustainability prone regulatory objectives are due to the considerable points of commonality in both oil and gas regimes. This nexus includes international law and EU law pertaining to the oil and gas industry, which expedite sustainable development of hydrocarbon resources and a green economy. Indeed, the substantial influence of international law successfully obliterates gaps that could have arisen from jurisdictional differences between both states.

Ultimately, the chapter finds that a core point of commonality between both the UK and Norway that has been fundamental to achieving sustainable development of their petroleum industries remains the optimization of goals 16 and 17 of the SDGs relating to multi-stakeholder participation. Clearly, both states succeed in operationalizing this integral aspect of the SDGS by co-opting national and regional collaboration, inclusive societies and ensuring international platforms and partnerships as essential means of implementing sustainable development. This is evident from both jurisdictions plethora of environmental and social partnerships, ranging from the Public Participation Directive (PPD) Arhus Convention, SEA collaborations as directed by the Kyiv Protocol, the OSPAR, including pollutions controls partnerships like the UNECE-LRTAP, the Montreal Protocols, the Kyoto Protocol, OPOL pollutions liability agreements, including the EUETS carbon trading schemes. All of these agreements and collaborations have served to optimize reporting and compliance mechanisms which remain essential indicators of goal 17 towards achieving sustainable development.⁸⁸⁷

⁸⁸⁷ See Goal 17, Indicator, 17.16.1 of the Sustainable Development Goals.

Another crucial factor of success evidenced by both jurisdictions remains the elevated level of innovation and dynamism employed in tackling all three pillars of the sustainable development paradigm. These serve to engender growth and multifarious synergies across the SDGs for oil industry sustainability. This is manifest in the progression of partnerships that initially tackled a single environment media for protection such as the EU Pollutions Control Directive, which evolved into the Integrated Pollutions Control Directive, (IPC) and eventually expanded into the EU Directive on Integrated Pollution Prevention and Control (IPPC Directive) to anticipate and accommodate all environment media in the fight against pollution. Such dynamic and innovative approaches adopted by the UK and Norway evidently serve as the essential launch-pads for securing a green economy in the context of sustainable development.

In a nut shell, this assessment evokes the deduction that, regardless of jurisdictional backgrounds, regulatory parameters within the oil and gas industry can be positively impacted by international instruments to achieve sustainable development in states. This is especially valid when dynamic and nuanced approaches are adopted to accommodate the evolutive nature of sustainable development. This therefore forms a basis for the proceeding chapter, which advocates lessons and approaches for the Nigerian oil and gas regulatory regime to actualize the sustainable development goals during petroleum exploitation.

Chapter 4

Sustainable Development Goals and Petroleum Exploitation in Nigeria: Harmonizing Regulations or Policies from the UK, Norway and International Law

Introduction

Having deliberated on the considerable influence of regulatory and policy approaches to trigger successes or challenges in an industry as complex and multifaceted as the petroleum industry, this chapter pinpoints the areas where the SDGs, including regulatory inputs from the UK, Norway and international law can optimize a green oil industry in Nigeria. Consequently, this chapter advocates the infusion of sustainability tenets evident from the UK and Norwegian jurisdictions. The envisaged harmonization therefore targets all three pillars of the sustainable development paradigm to enable a green petroleum industry in Nigeria.

Furthermore, this chapter expounds on realistic measures for the improvement of Nigerian petroleum regulations in consonance with the sustainable development tools identified in this thesis. These tools as introduced in the first chapter, set out the conceptual or regulatory framework for operationalizing sustainable development during petroleum exploitation, whilst catalysing viable synergies for sustainable development instead of recurrent trade-offs. Similarly, chapter 2 buttresses the sustainable development discourse in the Nigerian oil industry by clarifying the points of similarity and divergence with the SDGs. Chapter 2 further highlights the integral weaknesses in the Nigerian petroleum regulations in terms of the identified tools for measuring and implementing sustainable development in oil producing states.⁸⁸⁸ Whereas, chapter 3 articulates the dynamic and innovative approaches adopted by the

⁸⁸⁸ See Chapter 2, Petroleum Resource Exploitation in the Niger-delta: A Perusal of Law and Challenges to Sustainable Development Goals?

British and Norwegian oil regulations towards bridging the gap between petroleum exploitation and the achievement of sustainable development goals.⁸⁸⁹

Accordingly, this fourth chapter considers the viability of infusing foreign oil and gas regulatory approaches into the Nigerian rules and proposes legal transfers, transpositions or legal transplantation for fulfilling these aims in a developing petro-state like Nigeria. This chapter also examines how this legal transfer option can surmount the pervading challenges evident in the Nigerian political, economic, industrial and social climate to guarantee desired outcomes and achieve sustainable development. Moreover, the idea of legal transplants,⁸⁹⁰ legal fusion, or legal transpositions⁸⁹¹ as a feasible means of triggering law reforms in states is not exactly novel as authors argue that many jurisdictions have mixed legal systems which often reflect the migration of law from diverse sources.⁸⁹² Such migration of law has subsequently served to engender legal reforms provoked through seepage, imitation, inspiration, reception or imposed reception of the desired legal ideas.

Notwithstanding criticisms of the idea of legal transplants as posited by Legrande, who stressed that legal transplants are impossible,⁸⁹³ Orucu contends, likewise this thesis, that law does indeed move, connect, disconnect, change, and contribute to change.⁸⁹⁴ This is mostly because the movement of legal institutions and ideas is trans-border and forms an essential part of legal development.⁸⁹⁵ Consequently, this chapter purports that, the further development of Nigerian

⁸⁸⁹ See, Chapter 3, Sustainable Development, Petroleum Law and Policy of Other Jurisdictions: Salient Contributions from the UK and Norway

⁸⁹⁰ See, Alan Watson, *Legal Transplants: An Approach to Comparative Law* (Edinburgh: Scottish Academic Press, 1974).

⁸⁹¹ Esin Orucu, Law as Transposition 206 International and Comparative Law Quarterly, R. Sacco, 'Legal Formants: A Dynamic Approach to Comparative Law (Instalment H1 of II)' (1991) 39"Am J Comp Law, 395.

⁸⁹² Esin Orucu, Law as Transposition 206 International and Comparative Law Quarterly, R. Sacco, 'Legal Formants: A Dynamic Approach to Comparative Law (Instalment H1 of II)' (1991) 39"Am J Comp Law, 395. See also, Esin. Orucu, The Judge and Jurist in Scotland: On the Verge of a Second Renaissance {2003} A Second Renaissance In Scotland 91

⁸⁹³ P Legrand, 'The Impossibility of Legal Transplants' (1998) 4 MJ, 111

⁸⁹⁴ Esin Orucu, "Law as Transposition" 206 International and Comparative Law Quarterly, R. Sacco, 'Legal Formants: A Dynamic Approach to Comparative Law (Instalment H1 of II)' (1991) 39"Am J Comp Law, 395.

⁸⁹⁵ See E. Orucu, *Ibid.* Also, Berkowitz, Pistor, and Richard say, 'The existing formal legal order in most countries around the world was shaped by transplanting formal legal systems that have evolved in the late eighteenth and early nineteenth centuries', with these formal legal orders being derived during the nineteenth and early twentieth centuries. D Berkowitz, K

petroleum laws to ensure alignment with sustainable development objectives can greatly benefit from the transmigration of ideas, rules or institutions, including partnerships for sustainable development. This lends credence to the general axiom that the amount of innovation in law is small, therefore borrowing and imitation is pivotal for legal change. However, legal change is crucially contingent upon a proper consideration or assessment of the special needs, circumstances or regulatory requirements of the receiving state to ensure a coordinated integration, as a ‘one-size fits all’ model of legal configuration is hardly plausible.

Moreover, the proposition for the transposing or infusing of Nigerian rules with UK inspired petroleum regulations is predicated on the fact that, the Nigerian legal system is already significantly influenced by the UK Common law due to its colonial origins. Thus, this transposition can benefit from the existent platforms to circumvent intractable challenges. Certainly, the Nigerian regulatory framework is a product of directly imposed legal rules or a reception of transfers comprising the English common law, doctrines of equity and Statutes of General application.⁸⁹⁶ Similarly, most of the petroleum regulatory provisions are directly inspired or even borrowed from corresponding English statutes. These already established structures need not be discarded but can instead be bolstered to expedite the SDGs via the reception of contemporary, foreign petroleum rules of the UK and Norway to green oil exploitation or trigger better synergies for sustainable development in Nigeria.

Likewise, this legal heritage further entrenches the desirability and viability of transforming the Nigerian oil and gas legal framework via elements of sustainable development incorporated in international legal instruments. This is crucial for Nigeria to not only optimize urgent oil sector reforms but also to achieve the SDGs. Whilst it is pertinent to acknowledge the

Pistor and J-F Richard, 'Economic Development, Legality, and the Transplant Effect', Law and Development Paper No 1, CID Working Paper No 39, Mar 2000, Center for International Development at Harvard University at [ICLQ vol 51, April 2002 pp 205-223]

⁸⁹⁶ See previous discussions in chapter 2, on the Overview of the Nigerian Regulatory Framework

uniqueness of every legal system and jurisdiction due to specific peculiarities like cultural, social, economic, geographical, political or even religious differences which ultimately influence the outcomes or effectiveness of transplanted or imported rules within a legal system,⁸⁹⁷ it is however submitted that, sustainable development remains a dynamic and at the same time, a malleable concept. Consequently, it accommodates and requires innovative approaches which can be reproducible in countries, including developing states. Nonetheless, such replication ought to be tailored to country specific contexts via intervention of law and policy as advocated in this research.

Albeit, this chapter will provide recommendations targeted at driving the sustainable development agenda in the Nigerian petroleum industry. The chapter also notes the potential role of law “enforcers”⁸⁹⁸ to fine tune the foreign rules with the realities of the Nigerian oil industry to achieve a smooth transmission and reception of reforms that can expedite sustainable development goals in the Nigerian context. More importantly, such tuning is reliant on taking cognizance of the likely challenges that could impact on the outcomes of the imported rules. Thus, the tripartite areas targeted for reforms to guarantee cohesion of the mix of Nigerian and foreign rules to achieve sustainable development objectives include: environmental protection regulations, economic growth regulations and social development regulations.

Another requisite factor strenuously advocated in this research, as it represents a bulwark for the 3 mutually reinforcing pillars of sustainable development is the issue of sustainable governance. This is because sustainable governance of the oil industry remains a game-

⁸⁹⁷ For an analysis of mixed systems see Esin Orucu, “A Theoretical Framework for Trans-Frontier Mobility of Law”, in Trans frontier Mobility of Law 5, 7-16 (R. Jagtenberg et al. eds., 1995); Esin Orucu, Mixed and Mixing Systems. - A Conceptual Search, in Studies on Legal Systems: Mixed and Mixing 335, 345 (Esin Orucu et al. eds., 1996).

⁸⁹⁸ Ibid. Such law enforcers or translators include: industry regulators, law interpreters such as judges, jurists, law teachers, and in this research, partners for sustainable development such as NGOs, civil society or international finance and development agencies, etc.

changer, fully capable of making or marring oil industry reforms to actualize the SDGs. Similarly, a crucial ancillary component to optimize governance, includes, embracing multi-stakeholder partnerships and international collaboration. This is strongly advocated in the research as a vehicle to efficiently drive the sustainable development agenda. More importantly, these proposed partnerships are considered in terms of their efficacy on both a national, regional and globalized scale to engender sustainable governance of the oil industry and simultaneously forge synergies across the broad spectrum of sustainable development goals to achieve designated targets in an oil industry context.

Thus, the chapter commences with a discussion of the envisaged reforms targeting Nigerian oil industry governance. These reforms embrace the challenges in the Nigerian oil industry traversing: regulatory upgrades, corruption controls, compliance and enforcement mechanisms, whilst recommending multi-stakeholder and international partnerships as vital catalysts or agents for the desired restructuring. The chapter thereafter discusses specific reforms that can optimally align petroleum exploitation in Nigeria with sustainable development objectives via: strengthening of the environmental and social development regulations, including the efficacy of technological innovation in achieving the SDGs. The chapter also assesses reforms towards the sustainable use of petroleum resources in Nigeria and appraises how equity can be reinforced in the Nigerian oil industry via the polluter pays principle and the optimization of sovereign wealth funds.

4.1. Sustainable Development and Governance of the Nigerian Petroleum Industry: Any Room for International Partnerships?

In accordance with earlier deliberations regarding the exigency of regulatory and governance reforms in Nigeria for securing sustainable development in the oil industry, this section further

amplifies international alliances for oil industry governance. The section thus appraises the utility of such international collaboration in tackling governance challenges in the Nigerian petroleum industry. Indeed, to fulfil these aims, this section evaluates the extent if any, that, International partnerships for sustainable development, including multi-stakeholder collaboration typified by international organisations for combatting corruption can expedite sustainable oil industry governance in Nigeria.

4.1.1. Oil Industry Governance in Nigeria: Tackling Corruption Via International and Multi-Stakeholder Collaboration

Preceding arguments posited sustainable governance and corruption controls as incontrovertible elements and facilitators of sustainable development. This subsection recaps earlier issues relating to oil sector corruption and irregularities in the Nigerian petroleum industry with a view to proffering feasible solutions for sustainable development in Nigeria. Evidently, the genesis of endemic corruption in the Nigerian oil industry flows from the innately complex character of the global petroleum industry. More so, the industry is extremely financially liquid, generating humongous revenues, whilst affording multifarious interactions between government officials and investors.⁸⁹⁹

Furthermore, the oil sector in Nigeria as administered by the NNPC is supremely opaque, affording excessive covert and overt discretionary powers to the Minister and other public officers, thus aggravating an already convoluted situation. Also, petroleum or crude commodity is subject to substantial price volatility, reliant on sophisticated price mechanisms, including varied conversion ratios, hence accommodating hordes of cases of mammoth scale corruption. These cases accruing from the sector encompass global financial and crude commodity flows, cutting across agents and actors with multiple jurisdictions, rendering tracking of highly

⁸⁹⁹ See, Chapter 2 on the Governance challenges in the Nigerian oil Industry.

complex, covert or fraudulent transactions, problematic. The foregoing substantiates why, the capacity of Nigeria as a developing state, with undue petroleum reliance and weak institutions, to single-handedly curb such global scale corruption obtainable in the petroleum sector seems highly improbable.

Consequently, it is argued that, oil industry sustainability and governance in Nigeria can be reinforced via the competence of international partnerships and multi-stakeholder engagement. This position is similarly re-iterated by the UN, in the 2004 UN Convention Against Corruption,⁹⁰⁰ the OECD Anti-Bribery Convention⁹⁰¹ and particularly Goals 16 and 17 of the SDGs, which stress the importance of engendering transparent and sustainable governance, especially in developing states via international partnerships. This is obviously predicated on the fact that, erstwhile efforts at solutions to corruption controls in developing states, that wholly relied on such states with poor governance institutions to resolve their governance challenges have been futile. In this vein, it has been argued that, “[A]ny putative remedies to petroleum sector corruption that focus their attention solely, or even primarily, on the developing world are destined to fail”.⁹⁰² This observation is mostly hinged on technical, capacity and governance limitations experienced by developing states.

Furthermore, the OECD in proposing a global approach towards tackling corruption, identifies the necessity of exposing areas and tools of illicit cash flows, whilst paying requisite attention to both supply (the IOCs) and demand (public official) sides of oil industry corruption, nationally and internationally.⁹⁰³ It is in deciphering or decrypting these shady areas that the

⁹⁰⁰ See, Cap.1. Art. 1(b) General Assembly resolution 58/4 of 31 October 2003 United Nations Convention against Corruption.

⁹⁰¹ See, the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (1999).

⁹⁰² Longchamp, Olivier, and Nathalie Perrot. "Trading in corruption: Evidence and mitigation measures for corruption in the trading of oil and minerals." U4 Issue (2017).

⁹⁰³ See, 2016 Data on Enforcement of the Anti-Bribery Convention Special focus on International Co-operation. Available at; <https://www.oecd.org/daf/anti-bribery/Anti-Bribery-Convention-Enforcement-Data-2016.pdf> See also, OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions. (2009) Available at: <http://www.oecd.org/corruption/oecdantibriberyconvention.htm>

EITI as an international partnership, becomes relevant through engendering petroleum sector transparency affecting all areas of the oil industry value-chain comprising: Petroleum Contracts and Licensing, Revenue in-flows and out-flows, Petroleum Accounting, Taxation, Budgeting and Procurements, including Expenditures on development goods or projects.

4.1.1.1. Governance Reforms and Corruption Controls: Securing the Nigerian Oil Industry Value Chain for Sustainable Economic Growth

As already stressed, oversight and accountability along the petroleum industry value chain remains crucial to the achieving of sustainable development in Nigeria. In a further bid to achieve the aims of sustainable governance of the Nigerian oil industry, the government proposed the Petroleum Industry Bill (PIB). The draft reform Bill proposes transparency and elimination of discretionary contracts awards and license allocations which the current PA engenders via excessive petroleum ministry fiat.⁹⁰⁴ In other words, steps towards passage of the over-protracted Bill into Law should be expedited as a core step in the reforms process. The Petroleum Industry Bill which has lagged over 10 years since its proposal via the Oil and Gas Reform Implementation Committee (OGIC) in 2008, has been mostly stalled by political controversies with the Nigerian parliament needlessly prevaricating over its passage.⁹⁰⁵

The Bill essentially seeks to repeal the extant Petroleum Act to enhance regulation and efficient management of the oil and gas sector. The Bill thus targets principal areas of the industry affecting governance of oil exploration, exploitation and production including, awards of petroleum contracts.⁹⁰⁶ Moreover, considering that the earlier identified challenges experienced in the Nigerian petroleum industry, especially regarding the awards of acreages

⁹⁰⁴ See, S. 2, of the Petroleum Act (PA), Chapter 2 on Economic and Corruption Challenges

⁹⁰⁵ The reform was instigated under the President Obasanjo administration in 2000. See, Awele Okigbo, "Nigeria: Petroleum Industry Bill History, Objectives, Institutions, and Controversies" Nextier Advisory Policy Brief. 2012.

⁹⁰⁶ Awele Okigbo, "Nigeria: Petroleum Industry Bill History, Objectives, Institutions, and Controversies" Nextier Advisory Policy Brief. 2012

constitute fall-outs from the influence of earlier military dictatorships and inept civilian governments since the inception of petroleum exploitation in Nigeria, reforms towards wresting control of the oil industry from governmental and political dominance would be most welcome. As obviously, such reforms would produce the platforms for the operation of free and transparent processes across the petroleum industry value chain for sustainable development.

Evidently, the idea of Contracts and Licensing reforms in the oil sector is not new, as the examples from Angola, Brazil and even Indonesia, show that the Nigerian oil industry has everything to gain from actively and sincerely implementing oil industry reforms. However, a major constraint is that, Nigeria requires capacity development in securing these reforms to engender sustainable development. Thus, technical affiliations with international partners to optimize bid rounds, promote international best practice and select the most profitable contracts from bidders would be a right step towards achieving core improvements in oil industry productivity and economic growth. Likewise, in the bid to improve licensing rounds, Nigeria can undertake a multi-stakeholder participation approach, including co-opting other producing states participants such as the USA, UK, Norway, Brazil and even Indonesia⁹⁰⁷ with emerging economy status, to observe and share ideas on practical steps towards optimizing information technology and technical capacity for improving transparency of bid rounds. This also engenders goal 17, towards international partnerships in sustainable governance of the oil industry.

⁹⁰⁷ Apparently, Indonesia has likewise experienced struggles with political and cultural influence in its industry, including corruption and transparency in its oil industry. However, it has begun to secure better EITI rankings of its oil industry. <http://www.nortonrosefulbright.com/knowledge/publications/113978/corruption-scandal-shakes-indonesias-oil-and-gas-industry> See, Stop talk of KKN Archived 26 October 2014 at the Way-back Machine.. The Jakarta Post (24 August 2001). Robin Bush, Nahdlatul Ulama and the Struggle for Power Within Islam and Politics in Indonesia, Institute of Southeast Asian Studies, 2009, ISBN 9812308768, page 111

i. Petroleum Contracts and Licenses Transparency

As previously highlighted, petroleum contracts and licensing transparency remain vital arms of corruption prevention in the oil industry. The NNPC as a state owned or national oil company oversees the upstream and downstream sectors of the oil industry, with full autonomy over contracts authorization. More so, the significant level of bureaucratic bottlenecks, ineptitude and opacity evident in conducting business in a developing petro-state like Nigeria, fosters considerable time and over-head costs. This is inimical to economic growth objectives and discouraging to potential investors.

Erstwhile Nigerian efforts at tackling and improving petroleum licensing and contracts procedures, resulted in the NNPC's creation of an electronic portal and database system NIPEX.⁹⁰⁸ NIPEX aims to modernize and engender a more transparent bids and procurements process in the oil sector. However, challenges still abound as the process remains obscure. Investors and contractors are still unable to self-monitor the process and report irregularities.⁹⁰⁹ Thus, funding and capacity training towards system upgrades, to guarantee a more transparent and functional NIPEX electronic portal to international standards is essential. Similarly, investments quotations and bidding thresholds can be reviewed upwards to unclog approval process bottlenecks. This can help in fast-tracking approvals processes and reflect durations consistent with global industry average of 6-9 months, as also obtainable in the UK and Norway, instead of the 24 months average prevalent in Nigeria. More importantly, such measures would lessen undue third-party go-betweens and bureaucratic interference to engender efficient bids reviews whilst cutting avenues for bribery and corruption.

⁹⁰⁸ The Nigerian Petroleum Exchange (NIPEX) is a Division of NAPIMS, a Corporate Service Unit of NNPC. NIPEX is supposed to be an electronic one-stop transaction centre to improve on value procurement in the oil and gas industry whilst endeavouring world-class contracting processes in Nigeria.

⁹⁰⁹ See, Alexandra Gillies, "Reforming Corruption Out of Nigerian Oil? Part Two: Progress and Prospects" U4 Brief, 2009. See also, A. Gillies, "Obasanjo, the donor community and reform implementation in Nigeria." The Round Table 96, no. 392 (2007): 569-586.

ii. Petroleum Industry and Public Procurements Transparency

Nigeria has also made some efforts towards effecting reforms and resolving procurement challenges by enacting the Public Procurement Act of 2007. The objectives of the Act include: monitoring and oversight of public procurement, harmonizing the existing government policies and practices by regulating standards, including, developing the legal framework and professional capacity for public procurement in Nigeria and for related matters.⁹¹⁰ More so, the Act seeks to stream line public procurements by means of improving technical support and transparency. In furtherance of these aims, a Due Process office was established to eliminate corrupt practices and irregularities. These included: over-invoicing, awards for non-existent contracts, diversion of public funds and non-performance of awarded contracts.⁹¹¹ These areas were broadly targeted by establishing procurement boards in relevant government agencies and parastatals to optimize monitoring and reporting of procurements, in a bid to secure compliance with the objectives of the Public Procurement Act.

Even though the Due Process offices and Procurement boards apparently registered some successes at eliminating “ghost contracts”, non-existent or bloated contracts in several government agencies, the oil industry still requires more concerted efforts to engender process transparency. Thus, Reforms towards better funding, equipping and training of due process officers to tackle corruption, decrypt covert procurements processes or transactions in the NNPC to improve transparency is required.

iii. Petroleum Revenues Transparency

Nigeria’s efforts to improve petroleum revenues transparency comprising: revenue in-flows (government’s oil incomes) and expenditure resulted in the establishment of the Nigerian Extractives Industries Transparency (NEITI) Act of 2007. This partnership with the EITI

⁹¹⁰ See, Public Procurement Act, (2007) ACT No. 14

⁹¹¹ Okonjo-Iweala, Ngozi, and Philip Osafo-Kwaako. "Nigeria's economic reforms: Progress and challenges." (2007).

entailed that Nigeria was obliged to publish petroleum revenues and expenditures annually. At its inception, NEITI covered huge gaps by a multi-stakeholder collaboration of experts, civil society, corporate and government agents and unearthed several financial irregularities via its audit spanning 1999-2004. However, post the President Obasanjo administration that initiated and fully supported the NEITI, the agency has been inactive, with its inertia resulting in sporadic audit reports. This could be attributable to a lack of funding and technical capacity, heightened by the severely opaque Nigerian oil industry that they must contend with.

Nevertheless, a resuscitated NEITI wields a lot of potential for sustainable development in Nigeria and indeed the oil and gas sector. More so, current global realities regarding sustainable development of the oil sector envisages service delivery that is widely and easily accessible. NEITI requires considerable funding and capacity development to achieve world class and authentic oil sector audits. This can serve to improve public access to petroleum revenue data, engender quality debates and more accountability to block lee-ways or avenues for corruption in the oil sector. However, this initiative appears susceptible to the political will of respective government administrations, as the compradors or persons with vested interests in preserving a weakened or comatose NEITI may be the bane of such a brilliant initiative. Reason being that, the fight against corruption often seals off the sources of patronage enjoyed by the powerful beneficiaries or cabals of power in the Nigerian oil industry and would most likely be resisted.⁹¹²

⁹¹² See, former President Goodluck Jonathan's claim of a cabal that was accountable for the loss of 1.4 Trillion Naira Oil subsidy funds that should have benefited the poor Nigerian masses. Available at: <https://www.premiumtimesng.com/news/3205-jonathan-defends-oil-industry-cabal-says-they-re-good-guys.html> See also, Obasanjo Finally Unveils 'My Watch', the Book Jonathan Cabal Never Wanted Nigerians to Read, Available at: http://sharpedgenews.com/index.php?option=com_k2&view=item&id=3473:obasanjo-finally-unveils-my-watch-the-book-jonathan-cabal-never-wanted-nigerians-to-read&Itemid=692

iv. Petroleum Revenues: Taxation Reforms

Earlier discussions regarding the pivotal roles of tax and fiscal regulations in the Nigerian oil industry to expedite economic growth objectives for sustainable development involved the Petroleum Profits Tax Act (PPTA).⁹¹³ It is herein clarified that the purpose of tax mechanisms raised in this sub-section is not to exhaustively assess all taxation matters affecting oil and gas business in Nigeria or the PPTA, as that would greatly exceed the scope or objectives of this research topic. However, the Petroleum Act (PA) and the Petroleum Profit Tax Act (PPTA) were addressed to determine their capability to promote economic growth of the petroleum industry via its capacity to eliminate petroleum resource dependence (petro-curse phenomenon)⁹¹⁴, engender GDP growth and stimulate expansion of other sectors of the economy.

Albeit both regulations, the PA and PPTA were observed to have performed poorly in securing the stated objectives.⁹¹⁵ Accordingly, it is posited that, the PPTA which fails to optimize Nigeria's revenue generation potential through efficient petroleum taxation and pricing mechanisms requires alterations to effectively achieve the aims of goal 8 of the SDGs affecting sustainable economic growth of the oil industry. Instituting tax reforms to provide sufficient safeguards and prevent tax evasion constitutes a key step towards achieving goal 8 and economic sustainability. Evidently, tax evasion is an intricate or complex issue directly affecting policy making and it is not the purpose of this section to undertake a lengthy examination. However, because of the interlinkages between taxation and economic growth in the oil industry, including, the high positive impacts it bears on GDP, Nigeria needs to make

⁹¹³ Petroleum Profit Tax Act (PPTA) 1959 with amendments in 1967, 1970, 1973 and 1979

⁹¹⁴ See Chapter 2 on Economic growth indicators of sustainable development in the oil industry

⁹¹⁵ See previous discussions in the 2nd Chapter on the PPTA under Economic growth regulations in Nigerian Petroleum laws

regulatory adjustments that will eliminate opportunities for tax evasion. Reason being that, tax evasion ultimately triggers undue petroleum resource dependence or rentier state problems.⁹¹⁶

Moreover, it is quite apparent that the Nigerian inland revenue officers (FIRS), generally have insufficient training in the particularities of the petroleum industry and the complex calculations used to determine royalties, deductions, and the PPT under the petroleum contracts and MOU frameworks.⁹¹⁷ Ultimately, the lack of competent regulations, including clumsy enforcement via inexpert DPR and FIRS officers promotes tax evasion. Recurrently, IOCs interpret the porous tax rules in extremely favourable contexts to achieve tax avoidance undeterred and unopposed. Thus, to achieve sustainable development just like the UK and Norway have done, Nigeria must institute petroleum tax reforms.⁹¹⁸

Nigeria like many other oil producers such as the UK and Norway, obtains much of its oil revenues from oil taxation and by the imposition of annual rental payments on oil leases or licenses.⁹¹⁹ However, the Nigerian PPTA remains flawed as it engenders deficits due to the employment of inefficient and retrograde fiscal schemes like the royalty system.⁹²⁰ It is also stressed that successful oil and gas producing economies like the UK⁹²¹ and Norway⁹²² have

⁹¹⁶ See, James L. Smith, "Modelling the Impact of Taxes on Petroleum Exploration and Development" WP/12/278 IMF Working Paper, Fiscal Affairs Department. <http://www.imf.org/external/pubs/ft/wp/2012/wp12278.pdf> Accessed at 09/06/16. Also, the rentier state theory has been discussed in earlier chapters.

⁹¹⁷ See, Thurber, Mark C., Ifeyinwa M. Emelife, and Patrick RP Heller. "NNPC and Nigeria's oil patronage ecosystem." *Working paper# 95, Program on Energy and Sustainable Development* (2010): 1-52.

⁹¹⁸ See, Macroeconomic indicators for the petroleum sector, 2015. Available at; <http://www.norskpetroleum.no/en/economy/governments-revenues/> Accessed at 29 July 2016. See also, See, The Total Tax Contribution of the UK Oil & Gas industry "The oil and gas sector is the UK's largest corporation tax payer, contributing 16.4% of total Government corporation tax receipts - more than many other significant industries combined" Also, the North Sea oil revenues from taxation constituted 35% of the year 2011 Corporate tax receipts. Available at; <http://www.pwc.co.uk/services/tax/insights/total-tax-contribution-of-the-uk-oil-gas-industry.html> Accessed at 29 July 2016

⁹¹⁹ Available at, <https://www.gov.uk/government/statistics/government-revenues-from-uk-oil-and-gas-production--2> Accessed at 21 February 2016

⁹²⁰ See previous discussions in chapter 2 on Economic growth petroleum regulations in Nigeria which addresses the Royalty fiscal system.

⁹²¹ Carole Nakhlé, *Petroleum Taxation Sharing the oil wealth: a study of petroleum taxation yesterday, today and tomorrow* (Routledge 2008), p. 40

⁹²² Ole Andreas H. Engen, *The development of the Norwegian Petroleum Innovation System: A historical overview* (TIK

discarded their royalty regimes⁹²³ in favour of the profits-based tax which is more effective in achieving economic growth objectives for sustainable development than a gross-based royalty.⁹²⁴ It is however submitted that, the political intricacies and peculiarities of the Nigerian governmental structure might create challenges in the discarding of royalty schemes as the oil-producing communities which also benefit from royalties paid by the IOCs may revolt against its cessation. Nevertheless, such protests may be averted if some reasonable part of the derivable profits are repatriated back to the oil producing regions.

Furthermore, the enforcement and expertise required to fully harness petroleum tax revenues which often involve sophisticated technology and personnel for effective tracing, tracking and deciphering of operator accounts to prevent tax evasion and other inconsistencies is still largely absent in Nigeria.⁹²⁵ Whilst acknowledging these limitations which account for Nigeria's preference for the royalty scheme, it is suggested that, Nigeria can invest more in efficient technologies and training of personnel to tackle and frustrate petroleum tax evasion. This is because, such reforms measures enable the transition into the more economically viable profits-based tax system for sustainable economic growth and development.

-Centre 2007), p. 12. See also, *Philip Daniel, Michael Keen, Charles McPherson, The Taxation of Petroleum and Minerals: Principles, Problems and Practice* '(Routledge 2010), p. 109

⁹²³ Royalties were simple to administer and generated early revenues for the government. However, they were regressive, non-neutral and not targeted on economic rent. The royalty rate was fixed at 12.5 per cent on the gross revenues of each field with a deduction for conveying and treating costs, it ended in 1989 in Norway, while the UK abolished its Royalty regime in January 2003. See also, Anar Isayev, Oil and Gas Tax Law in the UK and Norway.

http://www.academia.edu/7108804/Oil_and_Gas_Tax_Law_in_the_UK_and_Norway

⁹²⁴ Larry Persily, Norway 's different approach to oil and gas development '(Alaska Natural Gas Transportation Projects, September 7, 2011) Also available at:

<http://www.arcticgas.gov/norway%20%99s-different-approach-to-oil-and-gas-development> accessed November 2014

⁹²⁵ See earlier discussions in previous chapters on petroleum resource accounting and budgetary measures for sustainable economic growth.

v. NNPC Crude Sales Reforms

As stressed in chapter 2, NNPC crude oil sales remains a very opaque area. However, with the benefit of the NEITI audits, declining oil revenue patterns are observable. NEITI indicates that, the total revenue streams diminished from \$68.442 billion in 2011 to \$24.791 billion in 2015 representing a 63.78% decline.⁹²⁶ Moreover, NNPC Crude Sales of 2015, as publicized by NEITI was 153.24 million barrels of crude oil. NNPC delivered 37% to PPMC its marketing subsidiary, as unprocessed crude for exports, 57% for offshore processing; and 6% as Refineries deliveries. NNPC however treated these transactions as 100% Sales to itself, further entrenching itself as both Seller and Buyer of the Federation's Crude, with executive fiat to determine: production or withholding costs, payment rates, tariffs and final remittances to the Nigerian Central Bank.⁹²⁷ As earlier pointed out, these opaque, uncertain, bureaucratic and altogether dysfunctional approaches to NNPC crude sales and products marketing, engenders an extremely insecure terrain for investors, heightens patronage or corruption and renders the NNPC an awfully unprofitable and non-performing entity.

To engender reforms towards this area, there is thus a severe need for regulatory and governance restructuring to actualize regime clarity or transparency and eradicate excessive bureaucracy. This can enhance profits, security of investments and sustainable development of the oil industry. In as much as it has been argued that, "Nigeria's dysfunctional equilibrium in the oil sector will be difficult to dislodge".⁹²⁸ Especially as an appraisal of the NNPC has been a revelation of how corruption, bureaucracy and non-market pricing⁹²⁹ regimes for oil sales

⁹²⁶ This substantial drop in revenue flows was adducible to factors comprising: Fall in global prices of crude oil in 2015, Instability in the Niger Delta, Production and Crude losses due to destruction of production facilities and pipeline breakages, Crude Theft and militancy.

⁹²⁷ See, NEITI Audit Report for Oil and Gas 2015. Available at: <http://www.neiti.gov.ng/index.php/neiti-audits/oil-and-gas/category/174-2015-audit-report>

⁹²⁸ See, Thurber, Mark C., Ifeyinwa M. Emelife, and Patrick RP Heller. "NNPC and Nigeria's oil patronage ecosystem." *Working paper# 95, Program on Energy and Sustainable Development* (2010): 1-52.

⁹²⁹ Non-market pricing generates profitable opportunities to arbitrage between controlled and free or black markets, with public officials able to dispense access to these opportunities as a means of patronage. Implementation of controlled pricing regimes is inevitably byzantine and bureaucratic, with multiplied opportunities for corruption before anything can be achieved.

reinforce each other. More so, these conditions worsen intermittently in the event of fuel scarcities in Nigeria, as the NNPC battles respective political administrations for domination or control of its commercial operations. This is invariably unavoidable in a polity where serving Presidents can operate as defacto ministers of petroleum resources.

Nonetheless, concrete reforms to improve NNPC's chances as a commercially viable entity would entail curtailing the conflict of interests' scenarios where it can operate as both buyer and seller. NNPC can thus be reconstituted as a private company, listed on the stock exchange and empowered to re-invest its own generated revenues without state interference and bureaucratic encumbrances. Thus, NNPC should be able to negotiate joint venture arrangements with IOCs, generate its revenues and be independent of incessant cash-calls and the capacity to capriciously retain or misappropriate government funds. That way, it can be more functional as a regular profit making corporate entity. More so, a separate, independent company can be empowered to manage petroleum assets and optimize investment strategies with the IOC's, independent of the NNPC. This serves to limit the capacity constraints imposed on the NAPIMS as an NNPC subsidiary and similarly encumbered with bureaucratic and political interferences. Moreover, the DPR can be better empowered to generate its own revenues, to effectively exercise its oversight functions.

The foregoing recommended approaches indeed draw parallels from the Norwegian model which is functional and more economically viable. The points of commonality are: NNPC like the Norwegian Statoil or (NOC) can operate as a private company which is commercially vibrant, and likewise listed on the stock exchange. An independent petroleum ministry such as the Norwegian MPE can also be instructive as an autonomous body to determine policy and contemporary guidelines in accordance with international best practice for the Nigerian oil industry. While an empowered DPR can be tailored after the Norwegian Petroleum Directorate

(NPD) which is a more proactive and quasi-independent regulator, unlike the DPR. More so, a sustainability endeared and reformed NAPIMS could capture the policy patterns adopted by Norway's state-owned Petoro AS, a listed company under the Norwegian stock exchange, which optimizes Norway's stakes and interests via efficient management of Norway's oil and gas assets.⁹³⁰

However, the main challenges that may be experienced in these targeted areas of regulatory reforms, would invariably be, translating the reforms from paper or written mandates to actions in the Nigerian industry context. Albeit, the pertinent issue remains, how these functional approaches that have secured all three pillars of the sustainable development paradigm in Norway, including triggering several synergies across the SDGs can survive the Nigerian economic and political climate? Indeed, the targeted reform areas aim at capacity strengthening of the severely weakened regulators comprising: an underperforming DPR due to NNPC's towering influence and interference caused by regulatory gaps and inconsistencies. And an extremely opaque, stunted NNPC that ultimately cannot function as a truly economically workable, corporate entity due to: inchoate regulations, excessive bureaucratic interference and systemic corruption. Notwithstanding, this grim scenario which is symptomatic of acute patronage tendencies and political intrigues from past and subsisting governments, it is posited that the earlier recommended reforms are still a possibility. Nevertheless, purely "paper" regulatory reforms are insufficient to tackle the complex challenges of the Nigerian oil industry. Other relevant reform areas should embrace: compliance and enforcement actions, including, broader policy measures affecting market reforms.

Undeniably, petroleum market reforms can allow for market liberalization, bargaining parity and operation of free market forces of demand and supply, rather than persistent government

⁹³⁰ See Chapter 3 for details of the Norwegian oil industry business model.

imposition of subsidies, or artificially influencing oil prices or products.⁹³¹ Indeed, it is trite that market reforms can foster oil sector transparency and competition, which is crucial for a sustainable oil industry. It has even been further proposed that a reform strategy that has had success in other developing country contexts is the encouragement of emerging new markets in parallel to established ones, as this can effectively undermine the capacity of entrenched patronage interests to block reforms.⁹³²

4.1.1.2. Oil Industry Governance Reforms: Compliance and Enforcement Mechanisms

Furthermore, the fight against corruption and financial crimes or malpractices in the oil sector requires the concentration of efforts to expose bribery, fraud or other manifestations of corruption, including enforcing appropriate sanctions. In this regard, the Nigerian government instituted two anti-corruption agencies to achieve these aims, although it is clarified that the scope of these agencies extends beyond the oil industry. They include: The Economic and Financial Crimes Commission (EFCC)⁹³³ and the Independent and Corrupt Practices Commission (ICPC).⁹³⁴ Both agencies have been accountable for the prosecution of high profile Nigerian political figures, bureaucrats and technocrats. These include: state governors for embezzlement of public funds, former Speaker of the House of Representatives, the past Group Managing Director (GMD) of the NNPC, Andrew Yakubu, from which the EFCC recovered the sum of \$9.8 million (USD).⁹³⁵ Likewise, the previous petroleum minister and former OPEC President, Allison Diezani-Madueke was charged on various counts of money

⁹³¹ This is a broad area, the details of which extend beyond this research.

⁹³² See, Thurber, Mark C., Ifeyinwa M. Emelife, and Patrick RP Heller. "NNPC and Nigeria's oil patronage ecosystem." *Working paper# 95, Program on Energy and Sustainable Development* (2010): 1-52.

⁹³³ See, the Economic and Financial Crimes Commission (EFCC) (Establishment) Act, 2004

⁹³⁴ See, the Corrupt Practices and Other Related Offences Act, 2000. Act No.5

⁹³⁵ The past NNPC Group Managing Director (GMD) was charged with money laundering and other financial crimes. And the EFCC recovered \$9.8 Million USD, £750,000 and unnamed amount of Naira. Available at:

<https://www.premiumtimesng.com/news/top-news/223100-efcc-uncovers-billions-cash-home-ex-nnpc-gmd.html>

laundering affecting \$115 Million (USD).⁹³⁶ Notwithstanding the sensational achievements, especially in terms of corruptions prosecutions, the anti-corruption efforts of these agencies have been blemished by controversies and allegations. These range from abuse of office, to engendering the political objectives of the prevailing administration in subjugating political opposition, including bribery and corruption.

Nevertheless, it is argued that these agencies have enormous potential for securing needed oil sector reforms via partnering or instituting collaboration networks with international anti-corruption agencies and actors. These actors could include: The OECD Anti-Bribery Convention parties such as the UK and Norway, including the US Foreign Corrupt Practices Act (FCPA) enforcement Agencies as in the earlier cited Halliburton and Kellogg scandal.⁹³⁷ For instance, such a collaboration was also evident in securing the arrests and subsequent prosecution of former Nigerian governors: James Ibori and Diepriye Alamieseigha of the Niger-Delta region who were charged in both the UK and Nigeria with several counts of money-laundering or theft of oil monies and public funds accruable from petroleum resources.⁹³⁸ The collaboration involved the Nigerian EFCC, the Interpol, the UK Metropolitan Police, including the Crown Prosecution Service. The UK law enforcement agents authorized raids on the London offices of the ex-governor's legal and financial associates Bhadresh Gohil, Daniel Benedict McCann and Lambertus De Boer. Also, damning evidence retrieved by the UK police and furnished at the trial included computer hard-drives evincing details of

⁹³⁶ The EFCC allegedly, filed money laundering charges of \$115 Million (USD) against the former Minister and recovered jewellery worth £28 Million (British Pounds) at a raid conducted on her residence. Available at: <http://punchng.com/diezani-loot-efcc-arraigns-rivers-ssg-fo-allegedly-laundering-n750m/>

⁹³⁷ Reuters "Kellogg Brown & Root LLC Pleads Guilty to Foreign Bribery Charges and Agrees to Pay..." Washington, 11 February 2009

⁹³⁸ Scandals related to financial crimes, money laundering and embezzlement of state funds and oil monies were uncovered by the UK financial crimes agency against: James Ibori ex-governor of Delta State, with headlines captioned, "James Ibori pleads guilty to fraud and money-laundering charges in the UK: Police to repatriate stolen assets after former governor of Nigeria's oil-rich Delta state changes initial plea" Available at: <https://www.theguardian.com/global-development/2012/feb/27/james-ibori-pleads-guilty-fraud> Accessed at: 2 May 2018. Also related is the Alamieseigha ex-governor of Bayelsa State case. See, Rory Carroll, "Nigerian state governor dresses up in drag to escape £1.8m money-laundering charges in UK" available at: <https://www.theguardian.com/world/2005/nov/23/hearafrica05.development>

numerous off-shore companies, managed for James Ibori by Gohil. These accomplices to Ibori's financial crimes and theft of oil funds accruing up to N40 billion (\$266 million) from the Niger-Delta were subsequently sentenced to a total of 30 years imprisonment.⁹³⁹

Altogether, such international partnerships as stressed in this case, serve as the vital tools for exposing and curtailing financial crimes and corrupt acts of foreign associates of public officers, investors or IOCs who often constitute the supply side of corruption in the oil sector. Moreover, efficient networking with these international actors, FCPA⁹⁴⁰ and the OECD can move investigations forward in Nigeria to identify and apprehend the demand side of the corrupt act, money-laundering or receiving of bribes, who are normally the: government officials, public officers, regulators or relevant government agents.

To further showcase the immense potential of the OECD Anti-Bribery Convention to tackle both the demand and supply sides of corruption in the oil industry, an unprecedented turn of events relating to a corruption trial of industry giants has commenced in Milan. The trial in Milan tackles the supply side of the alleged bribery and corruption against former senior executives of ENI (AGIP) and Shell.⁹⁴¹ This also prompts another trial in Nigeria to tackle the demand side of the alleged bribery and corruption. Both cases proceed from events in 2011 when Shell and ENI supposedly transferred \$1.3 billion (€1 billion) into a Nigerian government bank account. These transactions were made as both companies needed to acquire the rights to an oil field designated as OPL245. Per relevant valuations, OPL245 was worth \$3 billion, the alleged bribe was paid to Malabu Oil owned by a former Nigerian petroleum minister Dan

⁹³⁹ Shirbon, Estelle "Britain freezes assets of former governor". Reuters (IOL). Independent News & Media. 17-12-2007. See also, Simon Tomlinson, "[Former Wickes cashier who became governor of oil-rich Nigerian state jailed for 13 years as judge says £50m fraud figure may be 'ridiculously low'](#)". *Daily Mail*. London. 16 April 2012.

⁹⁴⁰ S. Sansoni, "Dirty Oil" in Forbes, (2003) available at <http://www.forbes.com>, accessed 8 June 2018. See also, Office of the US Trade Representative (2006) National Trade Estimate on Foreign Trade Barriers, Washington DC 11 Bloomberg (2007) "US Expands Bribery Probes, Targeting Nigeria and Kazakhstan" available at <http://www.bloomberg.com>,

⁹⁴¹ See, Martina Schwikowski, "Shell, Eni Oil Executives On Trial For Graft in Nigeria" DW (13 May 2018) Available at: <https://www.dw.com/en/shell-eni-oil-executives-on-trial-for-graft-in-nigeria/a-43753219>

Etete and served as a conduit for the outstanding funds.⁹⁴² Both companies also paid up bribes amounting \$310 million USD to expedite the acquisition of acreages. It has been further argued that, "[T]his [corrupt] deal with Shell and ENI cost the people of Nigeria a sum as high as its public health expenditure in 2017".⁹⁴³ Altogether, the OECD Convention and enforcement procedures of member countries thus gives teeth to the agreement and makes the possibility of heavy penalties or criminal sanctions for curtailing oil industry bribery and corruption towards sustainable development in Nigeria realistic.

In a nutshell, international partnerships for control of corruption as envisaged by the UN Convention Against Corruption, are supremely advocated as tools to amplify focus and efforts on international and local anti-corruption regulations. Similarly, partnerships are recommended for funding, training, including human and technical capacity development to optimize: prosecution of money laundering offences, ensure assets repatriation of corrupt public officials, engender public awareness to effectively support accountability mechanisms. These are identified as essential to eliminate entrenched corporate corruption in the oil sector and remain crucial to achieving sustainable development in the Nigerian oil industry.

4.2. Sustaining Oil Exploitation in Nigeria: Integrating the Environmental Protection Pillar via International Regulations and Partnerships

Considering that the integration principle for sustainable development of petroleum resources has been discussed in detail in previous chapters, this section proffers ways of improving the earlier identified shortcomings in the Nigerian petroleum regulations by highlighting measures to achieve better synchronisation of environmental objectives and social development goals across the SDGs. This section thus employs initiatives articulated at international law, the UK,

⁹⁴² See, Martina Schwikowski, "Shell, Eni Oil Executives On Trial For Graft in Nigeria" DW (13 May 2018) Available at: <https://www.dw.com/en/shell-eni-oil-executives-on-trial-for-graft-in-nigeria/a-43753219>

⁹⁴³ Ibid

and Norwegian petroleum regulations. The section also clarifies possible areas where the input of international organisations can engender better integration of all pillars of the sustainable development paradigm to achieve the SDGs in the Nigerian petroleum industry.

4.2.1. Accessing Environmentally Sustainable Pathways: Approaches from International law, the UK and Norway

In progressing prior discussions, this subsection expatiates on how the environmentally protective rules echoed in international law, the UK and Norway can influence the environmental impacts assessment and atmospheric protection laws in Nigeria. The overall essence of this assessment is thus to portray how and to what extent the flawed Nigerian environmental rules, can be reinforced by a synergy of best international practices and environmentally friendly regulations to achieve sustainable development goals in the Nigerian petroleum industry.

4.2.1.1. Nigerian Environmental Impacts Assessment Regulations: Moving the Reforms Agenda Forward

Evidently, the discussions in Chapter 2, clarify that Nigeria has a legal framework providing for environmental protection via EIAs. Nevertheless, salient areas of the EIA regulations need to be strengthened and improved. A significantly ignored area in terms of environmental assessments for the oil industry includes strategic environmental assessments (SEA). Nigeria certainly needs to modify the petroleum rules, especially EGASPIN to incorporate SEAs which are currently lacking in the extant regulations. The incorporation of the SEA is recommended to cover off-shore/up-stream exploration and production activities as this area remains technically unplanned for. Such a deficiency serves to potentially undermine the aims of goal 14 targeting protection of aquatic eco-systems. Moreover, in optimizing the aims of holistic

environmental planning and the Best environmental practices (BEP), envisaged reforms can co-opt regional participation or multi-stakeholder collaboration as advocated by goal 17 of the SDGs.

Thus, instituting multi-stakeholder SEAs with international partners to engender synergies for environmental protection in the offshore oil producing areas, envisages partnering with international organisations such as the UNEP for technical and knowledge assistance and other oil producing states along the Gulf of Guinea.⁹⁴⁴ This collaboration can comprise of “newcomers” and established oil producers such as: (Sao Tome and Principe, Angola, Cameroun, Gabon, Ghana, Equatorial Guinea and Chad) to foster regionally coordinated and integrated SEAs. Such a collaboration could not have been realistic previously. This may be adducible to varied factors comprising: a dearth of experience towards SEA arrangements which were still evolving at the onset of exploratory activities in the 60’s, fiscal or technical incapacity and the fact of Nigeria’s predominantly onshore oil production. Indeed, Nigeria’s foray into offshore production is relatively recent, especially in terms of the quantum of crude production per day.⁹⁴⁵ Also, apart from Angola, the others are relatively emerging oil producers in terms of oil discoveries and production capacity. More so, the governance platforms were severely lacking, due to political and civil unrests in some of these states.⁹⁴⁶

⁹⁴⁴The Gulf of Guinea Region comprises the West and Central Africa coast made up of Nigeria, Ghana, Chad, Cameroun, Equatorial Guinea, Angola, Sao Tome and Principe, Gabon, and Congo, which are considered developing countries. Also, these countries are either currently producing offshore oil or are exploring for oil offshore

⁹⁴⁵ See, NEITI Audit Report for Oil and Gas 2015. Available at: <http://www.neiti.gov.ng/index.php/neiti-audits/oil-and-gas/category/174-2015-audit-report>

⁹⁴⁶ See, Adrian Gonzalez, “Petroleum and its Impact on Three Wars in Africa: Angola, Nigeria and Sudan” Journal of Peace, Conflict and Development www.peacestudiesjournal.org.uk Issue 16, November 2010.

Nonetheless, regional SEAs collaboration remains a strategic option for oil producing states in Africa with proven oil reserves of 132.1 billion barrels.⁹⁴⁷ Likewise, the West African sub-region, is a repository of approximately 50 per cent or 60 billion barrels, with much higher offshore oil and gas prospects.⁹⁴⁸ Indeed, the proven oil reserves of Nigeria and Libya are higher than those of the US, China, Brazil, India and other petro-states such as Azerbaijan and Mexico.⁹⁴⁹ Moreover, an envisaged IOC migration towards offshore production by 2020 predicates the need for an organised multi-level collaboration towards regional SEAs.⁹⁵⁰ Such regional SEA arrangements are already prevalent amongst oil producers on the North Sea as observed in the comparative appraisal of the Norway and UK oil regulations in chapter 3. This has better served to optimize environmental protection of the North Sea offshore producing areas. In effect, these statistics signify the relevance of the Gulf of Guinea oil producing areas as global energy suppliers for some time to come, thereby evoking the need to adopt precautionary measures to avoid the mistakes that accrued to the despoliation of the Niger-Delta.

Ultimately, a regional collaboration would engender a framework or protocol to tackle environmental protection of the off-shore regions. Such an agreement should articulate specific provisions tailored after the Best Environmental Practices offshore guidelines (BEP) and the Best Available Techniques (BAT) to cover: projects/risks categorizations, all SEA/EIA phases (screening, scoping, baseline data including environmental statements), seismic surveys, siting of oil installations, contingency planning measures, drilling discharges and E&P wastes

⁹⁴⁷ Raj Verma, “Is Africa the new Persian Gulf? Not yet” LSE IDEAS, Available at: <http://blogs.lse.ac.uk/ideas/2012/12/is-africa-the-new-persian-gulf-not-yet/>

⁹⁴⁸ Ibid.

⁹⁴⁹ See, Damian Mane, “Emergence of the Gulf of Guinea in the Global Economy: Prospects and Challenges” IMF Working Paper. (2005) WP/05/235.

⁹⁵⁰ Raj Verma, “Is Africa the new Persian Gulf? Not yet” LSE IDEAS, Available at: <http://blogs.lse.ac.uk/ideas/2012/12/is-africa-the-new-persian-gulf-not-yet/>

minimization strategies. Also, the SEAs should adequately cover relevant provisions regarding: decommissioning, compliance and enforcement mechanisms.

Furthermore, this research posits that, such international collaboration creates the platforms for international finance institutions and donor agencies to be effective in monitoring compliance with environmental requirements overlaid in funding agreements. This is because much of the funding for such oil and gas development projects in developing states are contingent on environmental and social sustainability conditionality imposed on the respective clients' states and IOCs. Thus, the earlier identified UNEP, World Bank and Equator Banks standards or projects/risk categorizations and their incumbent actions highlighted in chapter 1 become particularly relevant.⁹⁵¹ More so, the similarity of projects categorizations in these instruments fosters correlation of protective measures, determination of safety measures, adequacy of impacts assessments for easier identification of safeguards and thresholds, affecting environmental risk areas of oil exploration projects. Currently, such viable industry collaborations in Nigeria, apart from other World Bank infrastructure projects, include, IFC financing and funding towards the strengthening of the financial sector in Nigeria and funded gas projects like 7 Energy⁹⁵² and Azura-Edo.⁹⁵³ These were concluded with low environmental and social externalities.⁹⁵⁴ Another important multi-stakeholder alliance which comprised the Nigerian government, the IOCs, UNEP and IFIs involves the \$1Billion USD escrow fund for the clean-up and remediation of Ogoniland.⁹⁵⁵ The collaboration relies on the UNEP's expert

⁹⁵¹ See, the UNEP/IE guidelines, the World Bank Environmental guidelines for the oil and gas industry and the Equator Principles, discussed in chapter 1.

⁹⁵² See, IFC, "IFC: A Long-term Partner for Oil and Gas" World Bank Group, Oil and gas sector Sheet. Available at: <https://www.ifc.org/wps/wcm/connect/c19955004ae1ba43a8d3aa34fbf4cc68/oil-gas.pdf?MOD=AJPERES>

⁹⁵³ See, Chris Ochayi, "Azura-Edo power gets World Bank support" Vanguard News, January 2016. Available at: <https://www.vanguardngr.com/2016/01/azura-edo-power-gets-world-bank-support/>

⁹⁵⁴ See, IEG, "IFC IN NIGERIA: 1998-2007 - AN INDEPENDENT COUNTRY IMPACT REVIEW" Available at: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+cg/resources/guidelines_reviews+and+case+studies/ifc+in+nigeria+an+independent+country+impact+review

⁹⁵⁵ A. Ekperusi, "Ogoni cleanup: Government, HYPREP, MOSOP and the rest of Us" Available at: <https://www.thecable.ng/ogoni-cleanup-government-hyprep-mosop-rest-us>

team's projected time-frames of 25-30 years to restore Ogoniland to a pristine condition. All stakeholders are thus optimistic that the targets would be met towards rehabilitating one of the world's most unfortunate cases of oil induced environmental despoliation.

The research further argues that the desirability of a regional SEAs approach becomes more evident as the rules, guidelines and procedures of the international funding and development institutions become simultaneously applicable to all the collaborating states parties. Undoubtedly, this can engender uniformity in the application, monitoring and enforcement of environmental safeguards in the off-shore and mid-shore oil and gas locations. Similarly, these measures would serve to protect the region from adverse impacts of oil exploitation and optimize reporting on actions involving the relevant E&P areas. This is a more efficient or capacity maximizing measure towards EIA/SEA implementation in developing states as it accommodates bottom-up and top-down strategies. Thus, the respective states can enforce reporting and data acquisition relating to offshore production and the extent of protection efforts undertaken by the IOCs licensed under their respective jurisdictions, in partial fulfilment of their funding obligations. Likewise, clarification of the adequacy of specific preventive or protective steps towards offshore environment protection, implemented by each of these states for sustainable development of the region is eventually made possible.

Other scope for environmental reforms towards sustainable development of the oil industry is considered in respect of onshore areas. The research places importance on the modifying of the EGASPIN to mandate EIA permits and approvals for all stages of petroleum production. Thus, the pre-commencement phase should impose development consent for all significant petroleum

infrastructure.⁹⁵⁶ The ambit of such permits should also comprise onshore pipelines and other oil and gas installations, which is lacking in the current rules.⁹⁵⁷ Furthermore, pre-commencement phase regulations should articulate detailed guidelines to gather the most information from EIA proponents or oil and gas producers before oil exploration to achieve effectiveness and robustness of the EIA screening phase. The rules should also target better coordination of scoping stages to accommodate not just project pollution impacts or pollution control requirements, but to identify the overall probable environmental impacts, to drive precautionary and best industry approaches as deducible from BEPO.⁹⁵⁸ EIA rules should also be modified to facilitate monitoring of proponents by regulators whilst ensuring increased representative or quality consultations.⁹⁵⁹

Furthermore, there should be modifications imposing stipulations for clear outlines of alternative sites for the proposed project in the event of negative outcomes of the EIA. The research stresses the stipulation of alternative sites in EIA regulatory reforms as proactive criteria for environmental protection, which remains lacking in the extant EIA rules. Moreover, the confidentiality of EIA reports for the Nigerian oil industry should be discouraged. The reports should be more accessible, simplified and easily verifiable to ensure timely and adequate reviews.⁹⁶⁰ This is because the effectiveness or essence of EIAs for the oil industry is to ensure efficient integration of the assessment findings to influence project decision making and its incorporation at the earliest planning stages to optimize environmental protection goals for sustainable development.

⁹⁵⁶ See, *Oronto Douglas V. Shell Petroleum Development Company Ltd. & Ors* (1998) (Unreported) CA/L/143/97

⁹⁵⁷ See Previous discussions on Nigerian EIA regulations in chapter 2.

⁹⁵⁸ See Chapter 3 on the Best Environmental Practice (BEP) and Best Environmentally Protective Option (BEPO) guidance documents applicable in the protection of onshore/offshore oil producing areas embracing the UKCS and the NCS.

⁹⁵⁹ See. C. Wood, *Environmental Impact Assessment: a Comparative Review*, (Harlow, Prentice Hall, 2nd edition 2002). See also, H. Abaza, 'Strengthening future environmental assessment practice: an international perspective', in N. Lee and C. George (eds) *Environmental Assessment in Developing and Transitional Countries*, (Chichester, 2000)

⁹⁶⁰ See, R. Bissett, 'Methods of consultation and public participation', in N. Lee and C. George (eds.) *Environmental Assessment in Developing and Transitional Countries* (Chichester, 2000)

Equally, at exploration and production (E&P) phases, EIAs should be imposed in relation to effluents or discharges accruing from hydrocarbon drilling. Thus, EIAs should be imposed for all chemical and petrochemical discharges, not just for produced water but for drilling muds, as these areas are lacking in the extant rules. Also, EIA should be made compulsory for the removal and transfers of all E&P wastes to alternative sites for disposal or treatment to better incorporate the aims of goals 14 and 15 towards aquatic and terrestrial ecosystems protection. This approach has been adopted in the UK and Norway and it has proved effective in curbing environmental damage via erstwhile undetected E&P wastes in these states.⁹⁶¹ Even though Nigeria may not yet be able to achieve zero chemical discharges like Norway, due to technological limitations, the imposition and enforcement of EIAs for the listed discharges would still substantially protect the environment and eventually strengthen all mutually reinforcing pillars for sustainable development of the Nigerian oil industry.

In addition, EIAs should be mandated for the final phase of oil and gas production which affects decommissioning and abandonment of petroleum installations. This is because it remains an efficient means of ascertaining the risks such abandonment would pose to the environment and public whilst identifying safe removal procedures or permanent sealing of such installations. This will also address measures to minimize the activities of vandals on abandoned petroleum infrastructure, which if overlooked inadvertently cause extreme pollution. It is likewise posited that, achievement of the foregoing can be better executed with expert partnerships. Indeed, international financial institutions, donor and development agencies can also define specific provisions in funding treaties and agreements to clarify the available forms of technical assistance, capacity development, including measures towards industry innovation as a

⁹⁶¹ See, Chapter 2a, S.6 and S.22 of the Norwegian Petroleum Regulations 1997 (as Amended by the Royal Decree of 2012 No. 729)

package deal to better optimize synergies across the SDGs from the commencement of funding negotiations. This serves to entrench and operationalize sustainable development at the contracts source than as a half-hearted addendum which can be cursorily dispensed with.

Likewise, international collaboration is endorsed towards NGO and civil society participation in Nigeria. This is because international partnerships can and often buttresses NGO capacity towards ensuring EIA transparency, performance, independent reporting and more accountability. Overall, the import of these international and multi-stakeholder collaboration referenced in this section, serves to highlight areas where development agencies, international finance institutions and developing petro-states can co-operate, to facilitate synergies across the SDGs while securing compliance with environmental conditionality superimposed in oil and gas projects for sustainable development.

However, a pertinent observation is that, these international partners, in as much as they constitute core agents for oil industry reforms towards sustainable development, they still cannot subjugate Nigeria's role in the implementation of environmental or social goals. They may all too well experience challenges, due to Nigeria's development constraints in terms of human and technical capacity that could result in a less stringent application of their safeguard policies. For instance, the World Bank has been known to grapple with securing states' compliance of their safeguards conditionality. This was the scenario in the '90s Chad-Cameroun Pipelines Case concerning an escrow fund of \$3.7 Billion USD for 1070km pipelines and development of 300 oil wells, co-funded by the World Bank and the IFC which unfortunately recorded high negative environmental and social externalities. This eventually

resulted in the inglorious exit of the IFC from the project due to mounting NGO pressure and consequential embarrassment.⁹⁶²

Arguably, the Bank might not appear vigilant in monitoring environmental aspects of projects to its conclusive stages and may whittle down aggressive monitoring of such projects after its commencement, which in the long run undermines full compliance with environmental or social safeguards.⁹⁶³ Similarly, critics of the Bank purport that, the execution of World Bank funded projects in Lagos, Nigeria allegedly disrupted environments and communities.⁹⁶⁴ Also, that though the government relocated displaced citizens, not much was done about securing access to lost livelihoods. Indeed, civil society and NGO groups like the Amnesty International have accused the World Bank of failing to fully monitor the effects of its sponsored projects in Nigeria, as more reliance is placed on paper compliance without real-time or on the spot checks.⁹⁶⁵

Moreover, the IFI's emerging competition from the BRICS⁹⁶⁶ countries (Brazil, Russia, India, China and South Africa) who can facilitate development funding without environmental or social conditionalities also portends the possibility of trade-offs or discounting of strict environmental stipulations in funding instruments. In other words, the increased likelihood of a milder application of these World Bank or Equator Banks safeguards to protect the Bank's economic interests and guarantee business continuity becomes a factor to contend with.

⁹⁶² See, Susanne Breitkopf Urgewald," The Chad Cameroon Petroleum Development and Pipeline Project: Risky Business" (September 2000) Available at: <http://www.ciel.org/Publications/IFCCSChadCameroon.pdf>

⁹⁶³ See, Sarah Steffen, "World Bank failed to protect the poor, research shows" (DW, 2015) Available at: <https://www.dw.com/en/world-bank-failed-to-protect-the-poor-research-shows/a-18388491>

⁹⁶⁴ Ibid.

⁹⁶⁵ See, Sarah Steffen, "World Bank failed to protect the poor, research shows" (DW, 2015) Available at: <https://www.dw.com/en/world-bank-failed-to-protect-the-poor-research-shows/a-18388491>

⁹⁶⁶ James Fontanella-Khan, Brics Nations Threaten IMF Funding | Financial Times, March 29, 2012. Available at: <https://www.ft.com/content/a3b88472-7982-11e1-8fad-00144feab49a> See also, Raj Desai and J. Vreeland, "What the New Bank of BRICS is All About" - Brookings Institution Available at: <https://www.brookings.edu/opinions/what-the-new-bank-of-brics-is-all-about/>

To circumvent these challenges, ensure environmental sustainability and obtain lasting solutions to oil production in the Niger-Delta, it is recommended that Nigeria cannot afford to be passive, complacent or abdicate responsibility for securing environmental protection during oil exploitation conducted within its jurisdiction. Nigeria thus needs to be vigilant via effective regulations, governance and enforcement of international best practices and standards towards attaining ecosystem protection goals, within the considerable platforms afforded by these partnerships. This constitutes the only sustainable path which other oil producers, established and emergent tread on, with specific reference to Nigeria's contemporaries, Norway and UK. Ultimately, the immense, accruable benefits of oil production tampered by eco-system sustainability and achieving of the SDGs far outweigh the short-term gains of harnessing oil revenues along with enormous environmental costs, as the Ogoniland case starkly portrays.

4.2.1.2. Nigerian Atmospheric Protection Regulations: Reforms Ideas from the UK and Norway

Having previously considered the weaknesses in the Nigerian atmospheric regulations, this sub-section considers appropriate reforms measures to strengthen the Atmospheric Regulations in Nigeria. Earlier deliberations on the SDGs, the Paris Agreement in concurrence with the CBDR principle, envisage that developing states like Nigeria, need to target a multi-lateral approach towards atmospheric protection and climate action. Also, the thrust of the "Paris Agreement" when paired alongside the SDGs (especially goals 13 and 17) infers a need for Nigeria to develop comprehensive national strategies and optimize partnerships to significantly reduce greenhouse gas emissions during oil exploitation. Moreover, a Nigerian national strategy towards controlling emissions from its oil industry constitutes a core aspect of

transparent planning measures, which foster accountability regarding specific steps towards carbon reporting, to ultimately engender mitigations during oil exploitation.⁹⁶⁷

Furthermore, it is recommended that, Nigeria adopts petro-business strategies that harmonize with national strategies, towards effectively implementing Agenda 2030 and the Long-Term Low Greenhouse Gas Emission Development Strategies to 2050, called for in the Paris Agreement.⁹⁶⁸ Thus, the Nigerian government and oil companies could consider their current resources, infrastructure investments, future fossil-fuel demand, technology, research and development, to identify strategies that can cushion the effects of a gradual transition and adaptation process to prevent energy poverty. Likewise, a collaboration between companies, governments, academia and civil society in promoting innovation such as large-scale Carbon Capture technologies, can contribute to the policies and actions needed for effective, proactive, technology-based pathways at eco-systems protection in the Niger-Delta whilst strengthening efforts towards climate action.

A more specific and expedient regulatory reform measure for Nigeria as part of its National strategy, would be the immediate amendment of the Associated Gas Act.⁹⁶⁹ The essence is to improve its efficacy in the prevention of atmospheric pollution. Such a reform measure is inevitable as the Act's effectiveness is undermined by the Associated Gas Re-Injection (Continued Flaring of Gas) Regulations⁹⁷⁰ which justifies the need for expedited modifications. The alterations should encompass the Act's title which portrays complete disregard for core

⁹⁶⁷ “Pathways to deep decarbonization,” Deep Decarbonization Pathways Project (September 2015); “More energy, lower emissions: Catalyzing practical action on climate change,” Oil and Gas Climate Initiative (October 2015); “Paris Agreement,” FCCC/CP/2015/L.9/Rev.1, Art. 7.9. See also, “Paris Agreement,” FCCC/CP/2015/L.9/Rev.1, Art. 4.

⁹⁶⁸ “A post-Paris overview and analysis of BP’s climate reporting,” Share Action (April 2016); “The Heat is On,” Critical Resource (November 2015). See, “Paris Agreement,” FCCC/CP/2015/L.9/Rev.1, Art. 7.9. See also, “Paris Agreement,” FCCC/CP/2015/L.9/Rev.1, Art. 4. “Making the energy sector more resilient to climate change,” International Energy Agency (2015).

⁹⁶⁹ See, Sections 1-6 of the Associated Gas Re-Injection Act of 1979

⁹⁷⁰ See, [S.1. 43 of the Associated Gas (Continued Flaring of Gas) Regulations 1984.] under sections 3 and 5

environmental objectives affecting atmospheric protection, climate change mitigation and carbon emissions reduction as subsumed in Goal 13 of the SDGs. More so, the provisions which altogether recommend continued gas flaring should be amended to be more in sync with the aims of sustainable development. It is thus imperative that Nigerian atmospheric protection regulations which appear lenient or grossly inadequate to tackle gas flaring and climate change mitigation be upscaled in terms of guidelines reflecting international best practice and standards.

Moreover, other reforms towards atmospheric protection can involve taking a cue from the more robust UK and Norwegian petroleum regulations. This entails the imposing of a formal permits process incorporating EIAs, quality control checks whilst adopting the BAT (Best Available Technology) in oil and gas exploitation to harness, purify and re-inject associated gas to minimize carbon emissions in the interest of a sustainable and green oil industry. Ultimately, for the Nigerian atmospheric protection regulations to be successful on all three pillars of the sustainable development paradigm, the grossly environmentally harmful, socially menacing and economically regressive problem of gas flaring in the Nigerian petroleum industry must be discarded or at least carry heavy obligations to pose as deterrents in cases where operators wish to activate exemption clauses.

Notwithstanding, it is pointed out that, a major hurdle towards efficient performance of gas regulatory reforms remains the complex problem of inadequate or unprofitable gas markets regimes to engender investments in associated gas. Gas regulations and policy reforms could indeed be more productive if Nigeria can optimize a core petro-business strategy by commencing upgrades in its gas pricing. This would prove more commercially viable and attractive to securing investments and ultimately discourage gas flaring, atmospheric pollution

and engender goal 13 towards climate action. It would at the same time generate considerable revenues for Nigeria whilst levelling energy poverty and huge power generation challenges in Nigeria. Therefore, concerted efforts to establish goal synergies across the SDGs, driven by competent regulations, strong institutions, to achieve genuinely competitive gas markets, including participation of indigenous gas producers will add value and secure oil industry sustainability. Indeed, these are measures that can more cumulatively and holistically off-set atmospheric and gas flaring challenges, as the associated gas would cease to be wasted, but instead recycled for sales to engender productivity in the Nigerian gas sector.

4.2.2. Oil Exploitation in Nigerian Petroleum Laws: Enhancing Social Development Tools

Social development tools targeting: improved public consultations, enhanced environmental awareness, access to environmental information and access to justice are addressed in this section. Also, human rights impacts assessment is further considered as a crucial means of human rights protection in the Niger-delta to trigger social development in oil producing areas.

4.2.2.1. Engendering Public Consultations and Access to Justice in Nigerian Oil Laws

As earlier discussed, social development tools evident from the Nigerian Petroleum rules are contained in the EIA provisions and the EGASPIN. Both instruments make provisions for public participation.⁹⁷¹ However, the major limitation of these provisions is that they fail to truly empower the public in demanding international environmental standards during oil and gas production. Nigeria has failed to harness these crucial social development tools of prompt access to environmental information, adequate public consultations and access to justice. Nevertheless, this situation can be remedied to ensure more meaningful and effective participation. Ultimately, Nigeria can improve on its oil and gas law by amending

⁹⁷¹ See, especially S.22 (1) (b), also S.26 of the EIA Act which provides for the report of an EIA to be published, other regulations are silent on participation

environmental regulations to guarantee access to non-technical summaries of project EIAs and SEAs in the petroleum industry.⁹⁷² Thus, Nigerian petroleum policy or regulatory adjustments should ensure the optimization of impacts assessments to specifically aid and inform the public on aspects of oil exploitation that are environmentally degrading. This may also be achieved via oral consultations. Such participatory strategy promotes the aims of Goal 16 towards participatory or inclusive societies, facilitates appropriate consensus and informed choice on what aspects of the oil and gas project should be improved on and what should be abandoned in the interest of sustainable development.

Moreover, regulatory adjustments to obviate the need to show personal interest and proof of damage before accessing environmental information should be expunged from the Nigerian rules. Similarly, the problematic requirement of “locus standi” before commencement of legal actions or judicial review to enforce environmentally protective measures as earlier addressed in the *Oronto Douglas case* should be discarded to facilitate access to justice. These foregoing measures towards reforms would thus ensure that the public is suitably equipped to make meaningful decisions which prevent environmentally harmful and unsustainable patterns of oil exploitation.⁹⁷³ Notwithstanding these laudable regulatory approaches to ensure social development reforms already practiced in more developed states like the UK and Norway, the success of these measures in Nigeria are however dependent upon progress in basic education which needs upgrading in the Niger-delta.⁹⁷⁴

Furthermore, because of the interlinkages between environmental protection and social development to guarantee sustainable development of petroleum resources, this section

⁹⁷² See Principles 40-41 of Rio +20

⁹⁷³ See also the previous subsection on EIAs with the UK petroleum regime favouring more public consultation during impacts assessments.

⁹⁷⁴ See S.3 Agenda 21 on Combating Poverty via provision of education, health care and restoration of degraded resources.

reiterates the Nigerian challenge of poor environmental awareness as the major bane to meaningful participation of local populations in environmental decision making. It is thus proposed that in the interest of sustainable development, environmental awareness campaigns or training need to be intensified in the oil producing regions to truly empower the indigenes.⁹⁷⁵ This can halt the disruption of the people's lifestyle due to oil pollution, improve the standard of living and expedite steps towards poverty eradication.⁹⁷⁶ Such awareness creation and social upgrades can be achieved through specific governmental policies in collaboration with civil society groups and the private sector to eliminate the social problems created by environmental devastation in the Niger-delta.⁹⁷⁷ Accordingly, clearer articulation of environmental policies that encourage multi-stakeholder collaboration should be expressed in the Nigerian petroleum regulations. Thus, partnerships to improve the Niger-delta environment on an extensive scale should be instituted between regulators, local communities, corporations engaging in E&P, petroleum transportation and their distribution chains to increase environmental consciousness and protection. This is the norm in the UK and Norway and it is recommended for Nigeria as the appropriate means to achieve or optimize consensus, better monitoring and performance of environmental standards in the oil industry.⁹⁷⁸

Notwithstanding, government could go a step further to engender environmental awareness by instituting fiscal or tax incentives towards corporate entities engaging in extensive public awareness schemes and consultations, including towards IOCs involved in more sophisticated surveillance and training programmes for host communities. This is because these efforts can

⁹⁷⁵ See, Earlier subsection on EIAs for more on environmental awareness creation. See also, Rio+20, Agenda 21, Rio Declaration.

⁹⁷⁶ See chapters 1 on the social development tools and chapter 2 on the social problems in the Niger-delta due to oil pollution and environmental devastation. See also, Principle 30, Rio+20

⁹⁷⁷ See Principle 13 of Rio+20. Which endorses the provision of adequate opportunities for people to influence their lives and future, participate in decision-making and voice their concerns as fundamental steps to achieving sustainable development.

⁹⁷⁸ See Chapter 3, "Sustainable Development Indicators in Petroleum Law and Policy of Other Jurisdictions: Salient Contributions from the UK and Norway"

reduce sabotage of oil installations and serve as preventive measures against oil pollution which constitute endemic challenges triggered by oil exploitation projects in the Niger-delta. More importantly, such a strategy can encourage indigenes of the oil-producing regions to place a higher value on securing corporate and governmental commitments to environmental protection for the benefit of succeeding generations.⁹⁷⁹ Certainly, it is a more sustainable approach than the forfeiture of the local fishing or farming occupations due to pollution induced displacement and awarding of purely monetary compensation for environmental damage. This is because the monetary reimbursements without commensurate environmental rehabilitation merely fosters mass exodus from the region as the dilapidated environment can no longer sustain livelihoods.

It is therefore posited that the foregoing measures will thus facilitate social development goals whilst promoting the enforcement of petroleum law and policy by sociological re-orientation and effective sanctions via regulatory amendments to optimize compliance. Thus, the unsustainable pattern of fiscal compensation for environmental damage without restoration of the environment should be discouraged as it is inconsistent with the sustainable development goals and jeopardises sustainable livelihoods.⁹⁸⁰ Ultimately, the foregoing measures towards environmental awareness for ensuring meaningful participation will thus assist indigenes in making informed choices regarding the adequacy of environmental protection safeguards during oil exploitation. Likewise, the investment in environmental awareness and social development in Nigeria can greatly enhance public ability to reasonably determine the competence of safety measures, spills and emergency response actions, as well as the suitability

⁹⁷⁹ See the Rio Declaration and Agenda 21, See also, C. O. Opukri and I. S. Ibaba, "Oil induced environmental degradation and internal population displacement in the Nigeria's Niger Delta". (2008) Journal of Sustainable Development in Africa, vol. 10(1), pp.173-193, Also, I. Izeze, "Fresh Lawsuits For Niger Delta Oil Spills: Rethinking Shell's Arrogance Of Impunity" Available at: <http://saharareporters.com/2016/03/14/fresh-lawsuits-niger-delta-oil-spills-rethinking-shell%20%99s-arrogance-impunity-ifeanyi-izeze> Accessed at: January 15, 2017

⁹⁸⁰ See Principle 30 of Rio+20

of environmental rehabilitation measures in the event of incidents. It will also substantially curb the problems of pipelines vandalism by uninformed Niger-delta indigenes who consider vandalism a bargaining tool or a means of expressing grievance against the government and IOCs.⁹⁸¹

4.2.2.2. Underpinning Social Development in Nigerian Petroleum Laws: The HRIA Pathway

In the earlier chapters, the issue of HRIA as an indisputable tool for optimizing social development in the oil and gas industry was addressed. Its importance in terms of eliminating gaps and ensuring adequate public, private, including corporate and state protection of human rights during oil and gas exploitation was articulated in line with international law provisions.⁹⁸² Essentially, more industry specific instruments like the OECD Guidelines For Multinational Enterprises,⁹⁸³ the UN Framework for Business and Human Rights which target IOCs and transnational oil companies, were used to highlight the utility of HRAs as effective tools to optimize motivation and efforts towards corporate respect for human rights and fulfil human rights obligations "to act with due diligence to avoid infringing on the rights of others and to address adverse impacts that occur" from their corporate activities.⁹⁸⁴

Moreover, owing to HRAs value as a social development tool and empowerment strategy to actualize sustainable development goals, it is important that Nigeria makes adequate policies

⁹⁸¹ See, Ambily Etekpe and P. Okolo, "Oil Pipeline Vandalization and the Socio-Economic Effects in Nigeria's Niger Delta Region" Article in SSRN Electronic Journal · November 2010 DOI: 10.2139/ssrn.1723169 Available at, https://www.researchgate.net/publication/228275767_Oil_Pipeline_Vandalization_and_the_Socio-Economic_Effects_in_Nigeria's_Niger_Delta_Region Accessed at, December, 2016

⁹⁸² See earlier discussions on HRIA in Chapter 1

⁹⁸³ Organisation. For Economic. Co-Operation & Development. (OECD), OECD Guidelines for Multinational Enterprises 3 (2011 ed.) available at <http://www.oecd.org/daf/inv/mne/48004323.pdf>.

⁹⁸⁴ See, United Nations, The U.N. "Protect, Respect and Remedy" Framework for Business and Human Rights, Bus. & HUM. RTs. RESOURCE CENTRE (Sept. 2010), <http://www.reports-and-materials.org/Ruggie-protect-respect-remedyframework.pdf>.

to promote human rights via HRIAs. This provides viable means of eroding inequities and inequalities that culminate in human rights abuses during oil exploitation as evident in the *Ogoni and Serac cases*.⁹⁸⁵ Even though it may be argued that the UK and Norway, likewise some other oil producing states lack HRIAs in their petroleum laws, it is however pointed out that, HRIAs are needful in Nigerian rules to expedite better protection for indigenes of oil producing regions. This is because HRIAs in Nigeria would be a proactive measure to secure positive social interests in consonance with Health and Safety (HSE) rules and maintain adequate human rights safeguards in oil exploitation.

Ultimately, to be more proactive towards ensuring human rights protection in the oil industry, Nigeria now more than ever, needs to work closely with IOCs to undertake HRIAs in oil development projects to ensure compliance with the relevant human rights instruments.⁹⁸⁶ This, approach can positively optimize assessment of the direct results and impacts of the petroleum operations in relevant oil producing areas. Also, Nigeria's investment in HRIAs will be essential in tracking the implementation of strategies, policies and procedures for oil and gas development projects. More so, Nigeria can be better alerted towards potential danger signals at the assessment levels and can determine the efficiency of management processes. Indeed, these HRIAs will pay-off as boosts towards policy co-ordination to clarify challenges and opportunities for improvements, whilst properly articulating areas for corrective measures, before commencement of the petroleum projects to avoid repetitions of the Ogoniland saga.

Moreover, it becomes essential for Nigeria to promptly modify its policy and regulations to incorporate international standards that will engender environmental protection, public health

⁹⁸⁵See the, *African Commission on Human and Peoples' Rights. The Social and Economic Rights Action Center and the Center for Economic and Social Rights v. Nigeria*, A, Comm. No. 155/96, 2001. (*Ogoniland Case*) See also, Judgment No. ECW/CCJ/JUD/18/12, (December 14, 2012) at paras 15- 121. Universal Declaration of Human Rights (UDHR) etc.

⁹⁸⁶See, The Universal Declaration of Human Rights (UDHR), The international Covenants on Civil and Political Rights, the International Covenants on Economic, Social and Cultural Rights, Likewise, international standards such as the ILO Conventions and Declarations, the UN Global Compact principles, the OECD Guidelines for Multinational Enterprises, etc.

and safety including the well-being of industry personnel. Accordingly, Nigerian petroleum regulations need to be amended to institute a distinct health and safety regulatory regime in line with the recommendations of the Petroleum Act which proposes that the minister make regulations “for the safe working....”⁹⁸⁷ This is because “safe working” is vacuous and relatively unenforceable as well as inadequate in dealing with the high-level of oil industry accidents in Nigeria. Similarly, the adoption of stiff penal sanctions like corporate manslaughter or corporate homicide charges against corporate entities would also serve as credible steps to curb the relentless polluting behaviour of oil and gas operators in the Nigerian oil industry that has led to numerous fire disasters and needless deaths.⁹⁸⁸ Also, stiffer penal sanctions like corporate manslaughter charges would act as proper checks for the government regulators who need to be more proactive and accountable in their enforcement of rules and guidelines to achieve a sustainable petroleum industry.

4.2.3. Reinforcing Technological Innovations in Nigerian Petroleum Laws

In the previous chapters, the importance of innovative technology as a necessary appendage to the three-pillar paradigm for the sustainable development of petroleum resources was addressed. Likewise, its efficacy for optimizing the SDGs in developing countries. This subsection therefore discusses the extent to which Nigerian oil and gas rules can be influenced by international, UK and Norwegian regulatory provisions to foster the adoption of innovative technologies in the industry.

As apparent from the second chapter, Nigerian oil and gas provisions are lacking in guidelines or standards which impose innovative technologies for the sustainable development of

⁹⁸⁷ See S.9(1)(b)(i) of the Nigerian Petroleum Act 1969

⁹⁸⁸ See the landmark Ogoniland Case as well as the SERAC cases against Nigeria discussed in greater detail in earlier chapters.

petroleum resources.⁹⁸⁹ Indeed, the gaps culminating in technological and infrastructure failures including the abysmal lack of innovation towards adopting environmentally sound technologies are even more glaring when the Nigerian scenario is compared alongside industry best standards and goal 9 of the SDGs. Essentially, the challenges highlighted by chapter 2 which entail a catalogue of environmental and social problems in the Niger-delta, could have to a considerable extent been eroded by employing the improvements made possible by science and technological innovation.

Nevertheless, moving forward in terms of reforms requires adopting appropriate responses to tackle environmental and social problems associated with oil exploitation. This envisages, concrete steps towards oil industry infrastructure upgrades. Such innovative upgrades can more specifically facilitate petroleum resource efficiency, foster cleaner operational mechanisms and engender ecosystem sustainability, which encapsulates the essence of Goal 9, relating to the adoption of environmentally sound technologies to foster development aims.

Even more crucial in the oil industry context is the necessity of enhancing industrial processes whilst securing holistic measures towards environmental protection, prudent use of petroleum resources and ensuring minimized CO₂ emissions.⁹⁹⁰ It is thus posited that in tandem with Principle 9 of the Rio Declaration or Goal 9 of the SDGs, it behoves Nigeria to adopt environmentally sound technologies with a caveat that its application should be people friendly. Bearing in mind that technology can have both positive and negative impacts, especially in oil exploitation contexts which can impose negative environmental and social externalities, as in

⁹⁸⁹ See previous discussions on technological innovations in Nigerian petroleum regulations.

⁹⁹⁰ See Goal 9 of the SDGs, targets 9.4. See also, Principle 9 of the 1992 Rio Declaration, advocating for States to cooperate in capacity-building for sustainable development by exchanges of scientific and technological knowledge, and by enhancing the development, adaptation, diffusion and transfer of technologies, including new and innovative technologies”

the Niger-delta scenario. The adoption of innovative technology must thus be geared towards the prevention of environmental and social risks in oil producing areas, because eventually, the worth of technology remains subject to the value or benefit it adds to society.⁹⁹¹

However, determining the appropriateness of such innovative technologies and accompanying benefits for oil producing communities would require some level of public engagement or dialogue comprising experts, civil society, indigenes as well as oil industry regulators and IOCs. This obviously translates into increased participation or consultations and more governmental transparency, including information sharing on the proposed innovation. Often, developing petro-states would largely consider the cost-benefits associated with such innovation, including the ease or extent to which such innovative technology may be subsumed within broader national goals and programmes. Invariably, the overwhelming factor remains the risks such costs might pose towards attracting or deterring oil and gas investors, thus aggravating the likelihood of recurrent subordination of environmental or social goals to economic interests. Arguably, all the foregoing comprises threats or hurdles against the enactment of innovative technologies in Nigerian oil laws, as ultimately, a state's prerequisite to pursue innovative technologies in its oil industry via its national oil company (NOC) or IOCs comes with political undertones. Similarly, such decisions are susceptible to the extent of political will towards sustained and progressive commitments to strengthening the environmental and social pillars for oil industry sustainability.

Other reforms could entail the infusion of Nigerian petroleum rules with specific guidelines and provisions on equipment specifications which stipulate the best available technology (BAT) as the applicable standards for oil and gas development. This is because equipment

⁹⁹¹ See, Environmentally Sound Technologies (ESTs) Available at: <http://www.unep.or.jp/ietc/publications/freshwater/fms7/2.asp> Accessed at 25 January 2018

stipulations allow for transparency in verifying compliance with the rules and engenders performance of the prescribed environmentally protective measure whilst promoting sustainability in the industry. More so, equipment stipulations extend beyond deterrence to the means of achieving compliance as appropriate techniques or technologies are clarified. Although as pointed out, such regulatory reforms requiring BAT may encounter enforcement problems in Nigeria due to funding challenges and the very high costs or expertise required to develop and maintain oil industry specific innovative technology like carbon sequestrations and other enhanced oil recovery techniques.

To bridge these gaps in fostering innovative and environmentally sound technology for sustainable development, international partnerships and collaboration would be a considerable asset. An example of the utility of such a collaboration is typified in the UK firm, 2Co Energy's award towards a £5 billion power station and carbon-capture-and-storage project at Hatfield, near Doncaster in 2009. This collaboration involved the EU's substantial funding of £164m with technology giant Samsung, adopting a 15% stake in the project.⁹⁹² Nigeria thus requires such cooperation in the form of financial, technological and technical support to facilitate this development goal, especially in terms of achieving the stated targets of goal 9 in the context of oil industry sustainability, by 2030. However, in negating a business as usual approach and for Nigeria to be prolific in this area, national efforts towards increased investments and financial commitments from petroleum revenues for research and capacity development must be prioritized. Likewise, identifying cost effective and expert collaboration towards innovation in enhancing oil recoveries with negligible adverse externalities, needs to be intensified. More so, petroleum contracts and international partnerships that target ecosystem remediation and eliminating of adversative environmental impacts from oil exploitation should be sought at the

⁹⁹² "Samsung backs £5bn Hatfield carbon-capture project". bbc.co.uk. Retrieved 2012-06-19.

licensing and pre-exploration stages to expedite consistency in the restoration and sustainability of the Niger-delta environment whilst promoting sustainable livelihoods in the region.

4.3. Ensuring Sustainable Use of Petroleum Resources in Nigerian Petroleum laws

Earlier discussions considered the high relevance of sustainable use of petroleum resources to fulfil sustainable development goals, this section therefore provides useful insights on how Nigerian petroleum regulations can be improved by elements or patterns of sustainable use of hydrocarbon resources discernible from international law, the UK and Norwegian regulations.

4.3.1. Management of the Petroleum Resource Base in Nigerian Petroleum laws

Previous deliberations on the management of the petroleum resource base identified the utility of operationalizing sustainable use of petroleum resources via regulatory controls over the extraction and depletion rates of fields. Such an accomplishment as earlier proposed is only feasible through the adoption of prudent extraction techniques and enhanced recovery methods to prolong the lifespan and utility of petroleum resources in the interest of sustainable development.⁹⁹³ This similarly falls in line with arguments in the preceding section affecting the adoption of environmentally sound and innovative technologies.⁹⁹⁴ Indeed, the Nigerian oil regulations can further be strengthened to prevent a colossal waste of hydrocarbon resources during oil exploitation by stipulating concrete rules or guidelines promoting enhanced recovery, field revitalization or prudent extraction methods to avoid unsustainable consumption and use of petroleum resources.

⁹⁹³ See previous chapters on sustainable use of petroleum resources.

⁹⁹⁴ See, previous section on the integration of innovative technology.

Undoubtedly, prudent recovery methods in favour of sustainable use of petroleum are commonplace issues on the North Sea. This is illustrated in the earlier cited Norwegian example where Conoco-Philips was constrained to continue field development activities at Ekofisk to prevent waste of crude reserves, investment failure, field abandonment and field sterilization. This gap thus requires regulatory and governmental intervention for sustainable use of resources. Accordingly, Nigerian petroleum regulations should be amended to incorporate explicit terms in the petroleum licences and field development plans, with directives to ensure prudent extraction in consonance with the BAT for enhanced petroleum recovery and development of unconventional wells and marginal fields which would otherwise go fallow.

Furthermore, the Nigerian Petroleum Drilling regulations which provide modalities for fields and wells abandonment in S.36 of the Regulations and decommissioning only after obtaining approval from the DPR is inadequate as it is silent on development of technology and research to determine the maximum or minimum depletion levels of oil fields before decommissioning.⁹⁹⁵ This is counter-productive to the aims of sustainable use of petroleum resources. More so, detailed guidelines underpinning measurement techniques and equipment stipulations including, a clarification of the specific technologies adopted, constitute the means by which regulators optimize opportunities to decipher the extraction and field depletion levels for necessary governmental action. These also boost government efforts towards accurate reporting and regulatory or increased financial involvement to ensure sustainable and prudent consumption of petroleum resources. This was all too evident from the Ekofisk case, where Norway's directives and guidelines served to boost and guarantee optimum recovery and utility of finite petroleum resources from the NCF.⁹⁹⁶ It is however conceded that peculiar Nigerian factors like undue dependence on the multinationals for essential information or data regarding

⁹⁹⁵ See Petroleum Drilling Regulations S. 39.

⁹⁹⁶ See previous discussions on the Norwegian intervention at Ekofisk field on the NCS and likewise the UK at Wytch farm on the UKCS, which resulted in a massive boost of accessible reserves and increased life span of the reserves.

the quantities of crude extracted will impede the successful implementation of such a regulatory mandate. This is because technological limitations of government regulators, capacity limitations and reliance on the IOCs for access to records or fields to ascertain and effectively control depletion or extraction rates, exacerbates regulatory complications, or undermines enforcement as the veracity of those records maybe compromised and can thus stall proactive efforts towards sustainable use and management of petroleum resources. Hence this research advocates the need for Nigeria to devote funds towards the development of research and investment in measurement and detection technologies to optimize sustainable use of petroleum resources as an oil industry sustainability imperative.

4.4. Upgrading Nigerian Petroleum Laws: Buttressing Equity for Sustainable Development

Deliberations in the first chapter centred on the ways of operationalizing equity as an element of sustainable development in the oil industry context. The research at this juncture will consider equity in both the intra-generational and inter-generational dimensions to ascertain positive measures by which these abstract terms may be transposed into tools of sustainable development for driving the 2030 Agenda in the Nigerian oil industry. Likewise, appropriate steps towards optimizing oil industry reforms in Nigeria via the strengthening of equity, will adopt strategies from the oil regulations of the UK, Norway and international law.

4.4.1. The Intra and Inter-Generational Equity Elements

Following from earlier chapters, the appraisal of intra-generational equity and its operationalization in the oil industry identified the relevance of the polluter pays principle both as a proactive or precautionary measure towards preventing polluting behaviour and as a tool for remediating pollution in the event of its occurrence. This section will therefore deliberate on the ways and means to expedite these objectives in the Nigerian oil industry for the

attainment of the sustainable development goals. Moreover, inter-generational equity in the oil industry as considered in this research, identified ingenious approaches such as the creation of oil-sourced petroleum wealth funds to benefit future generations, in the event of a decarbonized future or depletion of petroleum resources. This section will however consider the Nigerian scenario, to determine measures for moving reforms forward and boosting the Nigerian sovereign wealth funds for the benefit of future generations.

4.4.1.1. Reinforcing the Polluter Pays Principle and Intra-Generational Equity in Nigerian Petroleum Regulations

As argued in preceding chapters, the integration of pollution control measures in environmental legislation is an essential aspect of environmental protection and intra-generational equity during oil exploitation. This subsection therefore considers pollution controls and improving the Nigerian petroleum regulations via the operationalization of the polluter pays principle. The essence is to ensure that initiators of pollution bear the brunt of such polluting behaviour or activity. This sub-section also considers reforms in the area of emergency preparedness. Likewise, advocated are green taxes as a pollution deterrent and as a tool of the polluter pays principle, to operationalize sustainable development in oil producing states. Green taxes are however differentiated from the earlier discussion on efficient petroleum taxation for GDP growth which is an economic growth indicator of sustainable development in the oil industry.⁹⁹⁷

Essentially, green taxes are a feasible means of controlling polluting behaviour in oil producing states. This is because fossil fuels production and use have tendencies for considerable carbon impact on the global environment therefore justifying the use of green or carbon taxes for

⁹⁹⁷ See previous section on economic growth parameters for the sustainable development of petroleum resources

curbing indiscriminate fossil fuels use. This serves to optimize environment protection and equity, especially as the impacts of climate change are all-encompassing, affecting both indiscriminate users and even non-users of fossil fuels, or the poor who more prudently use petroleum products as a necessity.⁹⁹⁸ Similarly, as clarified in chapter 1, climate change imposes a heavier burden on the poor who are less equipped to cope with the costs implications of climate adaptations or mitigations as their options are more limited. In this vein, the UK and Norway for instance, have instituted instruments like the Carbon Tax Act to control carbon emissions as a climate change mitigation measure.⁹⁹⁹

Furthermore, as steps towards curbing pollution, the federal government of Nigeria recently jettisoned the Nigerian fuel subsidy to discourage polluting behaviour and minimise carbon footprint on the environment.¹⁰⁰⁰ Nevertheless, a lot remains to be achieved in terms of adequacy of preventive measures to avert pollution by oil producers. It is however clarified that due to extant Nigerian problems like poverty, under-development, petro-curse syndrome, rentier state issues, corruption and misappropriation of petroleum revenues, the imposition of such carbon or green taxes would be highly problematic and strongly resisted by the public. This is largely due to a perception that the dividends from oil exploitation have so far been elusive and hijacked by the political elite, thus green taxation would be deemed a disguise to aggravate poverty or impoverish hapless masses.

Although it is possible for Nigeria to decipher appropriate mechanisms to apply such green taxes on the polluter or product users to diminish polluting behaviour, the reality is that, the

⁹⁹⁸ See previous detailed discussions on Green taxes as a realistic tool for pollution control in Chapter 1.

⁹⁹⁹ P. Hoeller, and M. Wallin OECD Economic Studies No. 17, autumn, 1991. Energy Prices, Taxes and Carbon Dioxide Emissions (PDF). OECD website. (1991) Staudt, A.; et al. (2008). "Understanding and Responding to Climate Change" (PDF). U.S. National Academy of Sciences.

¹⁰⁰⁰ Available at: <http://www.premiumtimesng.com/business/195743-nigeria-scaps-fuel-subsidy-cuts-petrol-price-to-n85-per-litre.html> Accessed at 8 September 2016

costs of such taxation do eventually filter down to all persons within the society, including the poor. Thus, to pursue and maximize the aims of sustainable development, the Nigerian government or local authorities can be more involved in the planning and provision of essential services like transportation, health care, welfare, agriculture and energy to foster better synergies towards costs optimization of petroleum products, as this better serves the aims of intra-generational equity. Undoubtedly, improved government involvement towards community services even-out or achieve equity of distribution in oil producing states, which is vital as these areas constitute the avenues where environmental or carbon taxes impact on the incomes of the poor. It is further clarified that reforms should strive to provide: realistic, cost effective, environmentally friendly alternatives to the carbon sources being targeted by heavy taxes. This is essential to avoid exacerbating poverty and under-development in the region.

Another positive step for Nigeria would entail better planning and coordination of emergency preparedness schemes for the oil industry. Evidently, the Nigerian petroleum rules require policy or regulatory adjustments to stipulate funding schemes or fiscal contributions from oil and gas operators which can optimize emergency response in the event of operational incidents or equipment failure which result in oil spills. These funding schemes are differentiated from civil liability regimes accruing from pollution by oil tankers. For instance, Art. 7-3, para. 1 of Norway PA and the UKPA stipulate special rules for pollution caused by offshore installations via the Offshore Pollution Liability Agreement of 1975 (OPOL). This served to guarantee emergency preparedness and prompt response to oil pollution incidents to ensure environmental and community protection. Such a funding arrangement is currently lacking in the Nigerian regulatory framework and is partly accountable for the slow and shoddy response to spills incidents in the Niger-delta. Although Nigeria need not replicate the OPOL Agreement, Nigeria however can engage in regional collaboration with other states producers

in the Gulf of Guinea region as earlier proposed under EIA reforms, for improved SEA arrangements.¹⁰⁰¹ Essentially, such partnering can optimize planning and costs towards efficiency of emergency response efforts.

Further reforms in the Nigerian oil industry can target the improvement of policies addressing funding safeguards, to ensure prompt response to oil spills incidents in oil producing areas. This can substantially protect the public and indigenes of the region from bearing the severe impacts of oil pollution.¹⁰⁰² Similarly, these operate as precautionary measures for oil spill prevention and constitute pollution deterrents to government or private operators who must maintain or secure the fund. This measure would at the same time ensure that the polluter pays and shield the people and their means of livelihood from the dire impacts of oil pollution. Another bold reform towards holding polluters more accountable would entail the imposition of strict liability provisions on oil producers for breach of pollution control measures. This is more in line with global standards and best practices, even though absent in the Nigerian rules. It can also be effective in guaranteeing higher levels of compliance with international best practices in the industry, more so when the IOCs understand the possible import of its enforcement in their home jurisdictions.

¹⁰⁰¹ See, Section 4.2.1.1. on EIA reforms.

¹⁰⁰²The OPOL Agreement thus goes into effect if any operator in the UK or Norway defaults on paying clean-up costs, with a current cap of US\$120 million. The OPOL Agreement is an oil pollution compensation scheme that provides guarantees of payment for claims up to US\$120 million for all members of OPOL to “provide an orderly means for compensating and reimbursing any Person who sustains Pollution Damage and any Public Authority which incurs costs for taking Remedial Measures as a result of a Discharge of Oil from any Offshore Facility.”

4.4.1.2. Strengthening Inter-Generational Equity in Nigeria: The Instrumentality of Sovereign Wealth Funds

As previously advocated in earlier chapters, the possibility of achieving all objectives of the sustainable development agenda remains elusive without inter-generational equity. In accordance with this premise, the issue of sovereign wealth funds from petroleum resources has been addressed as a vital link in fulfilling inter-generational equity considerations for the benefit of succeeding generations. This subsection therefore considers the adequacy or otherwise of the fledgling Nigerian sovereign wealth fund and its capacity for enhancement by the flourishing Norwegian example.

Evidently, Nigeria in a bid to achieve sustainable development goals, established a sovereign wealth fund by the Sovereign Wealth Fund Act of 2011.¹⁰⁰³ As also clarified, the fund was set up as a depository of the surplus income produced from Nigeria's excess oil reserves. However, earlier arguments portrayed that the aims of sustainable development in Nigeria cannot be effectively tackled by the marginal \$1 billion USD in seed capital allocated to the fund, with just 32.5% earmarked for future generations. This low allocation appears counterproductive to the aims of intergenerational equity, more so when Nigeria is ranked amongst the top 12 oil producers in the world.¹⁰⁰⁴

In further contrast with the Nigerian scenario, Norway, with a far smaller population of 5.2 million people which corresponds to about 2.8% of Nigeria's 186 million people has a sovereign wealth fund worth, \$922 billion USD. Apparently accruing to about 23,641% of the \$3.9 billion balance in Nigeria's aggregated oil revenue funds.¹⁰⁰⁵ This translates to

¹⁰⁰³ See previous detailed discussions in chapter 1 on the objectives and implications of the Nigerian Sovereign Wealth Fund and its establishment Act (NSIA) 2011

¹⁰⁰⁴ Sovereign Wealth Fund Rankings by Sovereign Wealth Fund Institute

¹⁰⁰⁵ NEITI "The Case for A Robust Oil Savings Fund for Nigeria" NEITI Occasional Paper Series. 2, JULY 2017 Available at: <https://eiti.org/sites/default/files/documents/neiti-ops2-180717.pdf> Accessed 26 January 2018.

approximately \$185,000 USD saved for every Norwegian in the event of petroleum depletion, while Nigeria's inconsistent, paltry savings spread across its large population translates into just \$8 USD per person, which is indeed the lowest of all oil-based Sovereign Wealth Fund (SWF) ratios. Presently, Norway's funds have grown from \$381 million USD at the inception of the fund in 1990, to \$1.035 Trillion USD.¹⁰⁰⁶ Although the Nigerian SWF has managed to grow from its \$1billion seed investment in 2012 to \$1.5billion USD at present, as the years 2012-2013 did not record any savings, despite soaring oil prices.¹⁰⁰⁷ This figure is dwarfed in comparison to dividends from the Norwegian SWF, which exceeded and doubled the total earnings accruing from petroleum in 2013 despite very high oil prices, also tripling earnings from the Norway's oil sector in 2016.¹⁰⁰⁸

Evidently, the situation in Nigeria is rather different as the Sovereign Wealth Funds have not been as prolific. In view of the considerable shortcomings plaguing the Nigerian SWF¹⁰⁰⁹, it is thus conceded that quick fix schemes towards reforms would be futile. Apparently, the Nigerian scenario is more complex with varied political undertones which exceed the scope of this research. However, a summary of these political complications relates to the power tussle between the 36 state governors and the federal government of Nigeria.

The thrust of the wrangling is that, oil producing states contend that a compulsory deduction of excess crude sales into the wealth funds disregards the revenue sharing formula articulated by the Constitution, concerning the devolution of 13% mineral derivatives to the oil producing states.¹⁰¹⁰ Adding that, the federal government cannot unilaterally adopt centrist approaches

¹⁰⁰⁶ See, Linaburg-Maduell Sovereign Wealth Fund Institute Rankings for 2018. Available at: <https://www.swfinstitute.org/sovereign-wealth-fund-rankings/> Accessed on 26 January 2018.

¹⁰⁰⁷ See, The Nigerian Sovereign Investment Agency's annual reports; www.nsia.gov.ng

¹⁰⁰⁸ See, EITI Rankings and Reports of 2016.

¹⁰⁰⁹ See further details in Chapter 2 relating to the Nigerian Sovereign Wealth Funds.

¹⁰¹⁰ See, previous discussions in Chapter 2, 2.4.3. relating to economic inclusion for sustainable development as an intra-generational equity measure for improvement of the Niger-delta. See also, Emmanuel Ojameruaye, "Resolving The Nigeria Sovereign Wealth Fund Debacle" Available at: <http://chatafrik.com/articles/nigerian-affairs/resolving-the-nigeria-sovereign-wealth-fund-debacle#startOfPageId963> Accessed at, 2 May, 2018.Ho

towards instituting sovereign wealth funds. The states however opine that the federal government may invest in wealth funds from its own share of revenues, after the constitutionally approved sharing formula is complied with, to enable the 36 states to institute wealth funds of their own, should they so desire. It is however opined that, apart from the Bayelsa State in Nigeria which currently operates a sovereign wealth fund,¹⁰¹¹ other oil producing states have been unproductive in this area. However, if more oil producing states can be proactive in this regard and adopt the Bayelsa example in instituting regional SWF's, there would be better protection of the interests of future generations. Nevertheless, the probable challenge with state's instituting SWFs would be the political will of state's governors to timeously constitute, set-up and effectively manage such wealth funds, within the constitutionally set 4-year governorship terms, especially in view of governors' poor track records in administering public funds.¹⁰¹²

Notwithstanding, a credible reforms agenda towards the sovereign wealth funds should tackle key issues affecting the legal validity and governance of the wealth funds, the means of triggering access to the funds, as well as the application and use of the funds. This research therefore proposes that governance issues relating to the constitutionality, legal validity or the questions concerning the authority and capacity of the Sovereign Wealth Fund (SWF) to be a repository for excess oil revenues be speedily determined or resolved at the Supreme Court. This is because the state governors and local authorities have considered the Nigerian SWF

¹⁰¹¹ The Bayelsa State Sovereign Wealth Fund is worth about \$1.5 Billion USD. Like the Nigerian SWF, it was established in 2012. Apparently, in terms of growth and management, the Bayelsa fund appears to be doing better. See, the Linaburg-Maduell Sovereign Wealth Fund Institute Rankings for 2018. Available at: <https://www.swfinstitute.org/sovereign-wealth-fund-rankings/>

¹⁰¹² Many of the Niger-Delta states governors have been embroiled in national and international scandals related to financial crimes, money laundering and embezzlement of humongous state funds and oil monies. Examples include: the James Ibori ex-governor of Delta State Case, with headlines captioned, "James Ibori pleads guilty to fraud and money-laundering charges in the UK: Police to repatriate stolen assets after former governor of Nigeria's oil-rich Delta state changes initial plea" Available at: <https://www.theguardian.com/global-development/2012/feb/27/james-ibori-pleads-guilty-fraud> Accessed at: 2 May 2018. Also related is the Alamyieseigha ex-governor of Bayelsa State case. See, Rory Carroll, "Nigerian state governor dresses up in drag to escape £1.8m charges in UK" available at: <https://www.theguardian.com/world/2005/nov/23/hearafrica05.development>

unconstitutional, a political contraption or relic of the previous administrations hence lacking in constitutional capacity to be a repository of federated funds.¹⁰¹³ These contentions thus raise the need for judicial intervention at the nation's Apex court, so as not to detract from a reforms process towards the strengthening of the Nigerian Sovereign wealth fund.

Moreover, erstwhile efforts towards out of court settlement between the 36 state governors, the local councils and the federal government have failed and resulted in a stalemate on grounds of the legal interpretation of the SWF.¹⁰¹⁴ Whereas, the federal government purports that the SWF is duly constituted as a repository for proportions of petroleum revenues by virtue of its enabling Act or NSIA, the state and local government contend that a constitutional amendment is required to pay government revenues into other accounts aside from or exclusive of the Federation account as articulated by S.162 the constitution. Basically, S. 162. (1) of the Federal Constitution of Nigeria (FCN) provides, "The Federation shall maintain a special account to be called "the Federation Account" into which shall be paid all revenues collected by the Government of the Federation....".¹⁰¹⁵ The SWF is thus considered by the State government and local government stakeholders as an aberration which is unsubstantiated by the Federal Constitution.

Evidently, an amendment of S. 162 of the Constitution would be expedient to accommodate the SWF as part of the Federal government's repository. This is essential to validate and justify further remittances into the SWF for the benefit of future generations. Ultimately, a failure to effect immediate constitutional modifications will perpetually create controversy and defy lasting solutions, which will stall continued deposits into the SWF. It is however clarified that

¹⁰¹³ See, The Linaburg-Maduell Institute of Sovereign Wealth Fund Rankings for Nigeria. Available at: <https://www.swfinstitute.org/swfs/excess-crude-account/>

¹⁰¹⁴ See, The Vanguard Newspapers, "Sovereign Wealth Funds for critical infrastructure" January 9, 201612:36 Amin News, Oil & Gas Summiteer Available at: <https://www.vanguardngr.com/2016/01/sovereign-wealth-funds-for-critical-infrastructure/> Accessed 2 May 2018.

¹⁰¹⁵ See, S.162 (1) of the Federal Constitution of Nigeria, 1999.

a constitutional amendment is no easy task as the process of securing constitutional alterations is governed by S.9 of the Constitution.¹⁰¹⁶ S.9 of the FCN requires 2/3 majority of both Houses of Assembly, including a further 2/3 majority of the 36 States' Houses of Assembly. Arguably, the fiercely political nature of the sovereign wealth funds, which is made even worse due to the discontent between the non-oil producing regions and the oil-producing states which harbour deep-seated sentiments about the whole country unfairly benefitting from their petroleum resources or natural heritage, without the non-oil regions having to suffer the accompanying environmental impacts or compulsory land acquisitions. This potentially complicates the entire process of constitutional reforms. More so, the level of suspicion between stakeholders remains very high.

Moreover, the regional and local government representatives allege that government expenditures are not transparent and cite the earlier stated problems of poor accountability in the SWF's administration. Nonetheless, for these allegations to cease, and for instilling necessary confidence in the credibility of the Fund and its administration, the Act should thus be modified to dissociate government expenditures from oil revenues. This is because, continued reliance on the SWF to fund the national budget contrary to its fiscal guidelines and mandate, negatively impacts on the economy as well as the Fund's growth, causes revenue volatility, escalates the resource curse syndrome and rapidly depletes the stock of petroleum resources which altogether compromises the options and prospects of future generations. This it does by attenuating all three pillars of the sustainable development paradigm. While the preservation of the reserve funds on the other hand can significantly enhance Nigeria's capital balance and improve investor confidence. Indeed, such a desired boost can potentially attract

¹⁰¹⁶ See, S. 9. (1) – (3) of the Federal Constitution of Nigeria. (2) “An Act of the National Assembly for the alteration of this Constitution...shall not be passed ...unless the proposal is supported by the votes of not less than two-thirds majority of all the members of that House and approved by resolution of the Houses of Assembly of not less than two-thirds of all the States”.

investments and foreign capital, which when prudently managed can provide infrastructure upgrades, welfare and development opportunities for future generations of Nigerians.

4.5. Conclusion

Having considered the pivotal issues affecting sustainable development within the context of petroleum exploitation in Nigeria, this chapter proposes recommendations which are crucial for attaining the sustainable development goals in the Nigerian oil and gas industry. These recommendations traverse the integration of all three pillars of the sustainable development paradigm, anchoring on interlinkages between environmental protection, economic growth and social development regulations in sync with technological innovations for the greening of petroleum exploitation in Nigeria.

Moreover, the chapter recommends that, Nigeria needs to seek relevant synergies across the SDGs and oil exploitation to engender petroleum industry sustainability. These synergies which must correlate EIAs, SEAs, including HRIAs to attain eco-system sustainability goals, must at the same time interlock atmospheric protection regulations with climate action goals for a diminished carbon emissions trajectory in Nigeria. An integration of sustainability focused petroleum regulations is thus recommended for Nigeria, to serve as the fulcrum towards influencing sustainable use of petroleum resources and the polluter pays principle to tackle inequities and poverty eradication in the Niger-Delta. The chapter also posits that, Nigeria has better chances of success at achieving the SDGs via the instrumentality of international, regional and national collaboration. These are posited as essential for culling corruption and boosting regulatory enforcement mechanisms in Nigeria, whilst optimizing oil industry governance and attaining environmental goals, via regional SEAs collaborations.

Thesis Conclusion

Sustaining oil exploration and exploitation in the context of sustainable development has formed the crux of discussions and arguments posited in this research. The research has considered sustainable development from its origins, conceptualization and eventually, its operationalization in an oil industry context. It has also deliberated on the substantial negative impacts accruing from unsustainable oil exploitation patterns in the Niger-Delta and chiefly identifies key elements for the development of a policy and legal framework for sustainable oil and gas production, applicable to a developing state such as Nigeria.

Consequently, this thesis analyses from its introduction and first chapter, the hallmarks and conceptual framework of sustainable development as articulated in international legal instruments and goes further to outline essential governance and substantive tools that drive sustainable development goals in a vibrant petroleum industry. These have been carefully expressed as prerequisites to fulfilling the integration principle anchored on the three-pillar paradigm of sustainable development.

These tools are typified by governance/institutional tools which comprise: clear and efficient oil industry regulations, International and multi-stakeholder partnerships, transparency and accountability mechanisms, green taxation and sovereign wealth funds. On the other hand, the substantive tools embrace: EIAs, SEAs and HRIAs. Also, pollution controls, innovative technology, access to information, justice and public participation are deemed just as relevant.

Furthermore, the research clarifies the undisputed relevance of international partners for sustainable oil industry governance in oil producing states to control corruption whilst enhancing the competence of environmental and social reforms in developing petro-states. More so, these tools and partnerships form tangible platforms targeting synergies across eco-

systems protection, climate action policies and EIAs/SEAs regulations to achieve a sustainable oil industry.

Moreover, the research appraised the efficacy of economic growth tools and regulations achievable through efficient budgeting, optimization of incentives and tax mechanisms whilst advancing the crucial role of social development tools articulated by meaningful realization of access rights in the petroleum industry. These access rights as epitomized by access to environmental information, access to justice and public participation in consonance with HRIAs fulfil social development aims. In other words, this research directly focuses on the competence of sustainable development in promoting social development tools that address more inclusive and participatory approaches to oil exploitation.

Also buttressed in this thesis, are vital elements involving sustainable use of petroleum resources comprising, prudent extraction, control of field extraction/depletion rates and enhanced recovery methods for accessing mature or inaccessible fields. In addition, the research advocates that inequities or inequalities of power and distribution amongst those of present generations can be eroded via the polluter pays principle to ensure efficient controls against polluting behaviour and unsustainable consumption. The research similarly proposes sovereign wealth funds from petroleum resources to safeguard the interests, options and opportunities of future generations as crucial to achieving sustainable development in the oil and gas industry.

Furthermore, the second chapter highlights the Nigerian challenges, capacity limitations, regulatory or policy gaps which remain key culprits in the Niger-delta petroleum induced imbroglio. The second chapter likewise weighs up the considerable oil industry governance and environmental challenges posed by incompetent regulations, weak institutions, failure or deficiency of accountability mechanisms and the heavy economic burdens imposed by a

marginally performing national oil company (NNPC). These challenges which were further complicated by oil booms, successive military juntas and corruption, in “post-oil” Nigeria, similarly gave rise to inflation, significant inequalities, or huge disparities between the rich and the poor. Altogether, these constitute endemic issues in Nigeria, that starkly portray the avoidable templates of petroleum induced, unsustainable development and petro-curse, that justifies the need for urgent reforms.

The third chapter entails a comparative scrutiny of the UK and Norwegian sustainability inclined oil regulatory framework which has engendered a green petroleum industry in both states despite their disparate jurisdictional backgrounds. These buttress the research hypotheses regarding the possibility of viable improvements in the Nigerian petroleum industry and regulatory framework via positive influence of international law, as already operational in the UK and Norwegian petroleum regulations. These are argued as viable prototypes, capable of transplantation towards advancing the sustainable development goals in Nigeria.

The fourth chapter of the thesis advocates ways and measures to positively influence Nigerian petroleum law and policy. These are proposed as regulatory and policy reforms to guarantee sustainable development of the oil sector in Nigeria. Thus, the fourth chapter argues for Nigeria’s realignment with international law obligations evident in sustainability endeared approaches from the UK and Norway. It thus resolves the research questions on all points to illustrate the ways and means by which oil exploitation in Nigeria can ensure poverty eradication and foster achievement of the SDGs.

Moreover, the fourth chapter expatiates on approaches by which international organisations such as the: UNEP, OECD, EITI, the World Bank as well as international finance institutions can optimize reforms processes towards sustainable development in petro-states and specifically Nigeria. These international partnerships are posited as sustainability agents that

can afford competent alliances towards the actualization of the SDGs in the Nigerian oil industry. These partnerships are thus argued as crucial for reinforcing environmental and social protection in Nigeria and regionally during oil exploitation. Likewise, the utility of these partnerships and their contemporary foray towards strengthening of accountability and transparency mechanisms, to curb oil sector and transnational corruption in developing countries is assessed.

Altogether, this research has argued for the realization of the sustainable development agenda in the Nigerian oil industry context via an approach that positions the Niger-Delta environment and its indigent and marginalized communities at the core of development goals. The research argues that it is possible for oil producing developing states to broaden their focus from a purely economic, petro-markets based growth, anchored primarily on boosting the GDP with the assumption that the realizable impacts automatically benefits the environment and society, since the opposite or unintended effects can become the reality as evident from the Nigerian scenario.

The research further posits that, sustainability geared oil industry reforms are crucial, inevitable and the way forward for Nigeria. That these reforms must articulate regulatory and policy interventions that emphasize broader opportunities which optimize pro-poor opportunities for participation, contribution and empowerment in the management of the Niger-Delta environment to engender sustainable livelihoods and efficient use of natural resources.

Undoubtedly, the research has demonstrated that, even though the platforms afforded by the sustainable development agenda as further expressed in the sustainable development goals may appear imperfect and imprecise in some areas and occasionally incipient, in the sense of an absence of a hierarchical arrangement of the SDGs which could arguably improve states'

prioritization efforts across the goals, nevertheless, from a developing petro-state perspective, the SDGs present a launch-pad, albeit rudimentary.

Certainly, the SDGs proffer runways, even credible avenues towards environmental protection, poverty eradication, social development and sustainable use or consumption of petroleum resources. Moreover, the SDGs advocate equity from both inter and intra-generational dimensions and indeed, inter or intra-state perspectives. They also remain relatable, at least from a developing petro-state perspective as the SDGs acknowledge the limitations such as: governance, financial, technical and other forms of capacity constraints and proposes international and multi-stakeholder platforms for their amelioration. More so, sustainable development, including the 2030 Agenda affords the differentiation that crucially serves as a life-line for developing petro-states to better plan, organize, strategize or “get their act together” as they confront the looming and somewhat inevitability of a decarbonized future, or peaking and depletion of petroleum resources.

In a nutshell, sustainable development as proposed in this thesis is diametrically opposed to a business as usual approach to oil exploitation in the Niger-delta. Sustainable development in this research therefore resonates the call for regulatory and policy reforms in the Nigerian oil and gas laws to effectively halt an impending economic, environmental and social crisis in not just the Niger-Delta but Nigeria at large. It urges the need to reinforce crumbling governmental and national structure, strengthen weakened political institutions whilst stressing the need for proper investment of petroleum resource wealth for the benefit of present and future generations.

The foregoing therefore constitutes compelling and urgent actions which are imperative for Nigeria to expedite oil industry reforms towards achieving sustainable development. More so, the speedy achievement of sustainable development goals in Nigeria via its currently most

viable and valuable export can only trigger a host of positive impacts in Africa. This is obviously linked to the Nigerian population demographic which is an estimated 190 million people.¹⁰¹⁷ Indeed, the recent 2014-2016 crash in oil prices that triggered a recession in the Nigerian economy reverberated across Africa and similarly impacted negatively on other African economies.¹⁰¹⁸ Thus, sustainable development in Nigeria, ultimately engenders the attainment of African and global sustainable development goals to benefit the planet and forthcoming generations.

¹⁰¹⁷ See, UN Department of Economic and Social Affairs: Population Division, available at: <http://countryometers.info/en/Nigeria> Accessed at 15/06/17

¹⁰¹⁸ See, The World Bank Special Focus 1, “With the Benefit of Hindsight: The Impact of the 2014-16 Oil Price Collapse” Available at: <http://pubdocs.worldbank.org/en/910311512412250749/Global-Economic-Prospects-Jan-2018-Topical-Issue-oil-price-collapse.pdf> Accessed at 15/06/2017

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