

UNIVERSITY OF NAIROBI

INSTITUTE OF DIPLOMACY AND INTERNATIONAL STUDIES

A Comparative Study of Oil Resource Management in Norway and Nigeria: Lessons for Kenya

By

Paulson Erot Tadeo

**A Research Project Submitted in Partial Fulfillment for the Award of The Degree of
Master of Arts in International Conflict Management**

2016

DECLARATION

I _____ hereby declare that this research project is my original work and has not been presented for a degree in any other University.

Signature: _____ Date: _____

PAULSON EROT TADEO

R52/80677/2012

This Project has been submitted for examination with my approval as University Supervisor.

Signature: _____ Date: _____

PROFESSOR AMBASSADOR MARIA NZOMO,

Director, Institute of Diplomacy and International Studies, University of Nairobi.

DEDICATION

This research study is dedicated to my Dad and Mum, Lucas Esinyen and Christine Asekon; and my siblings: Susan Pedo, Mark Ekaru, Mercilline Sunday Akiru, Gregory Lokwayen, Boniface Ejikon and Mariana Kaliba. Thank you for your prayers, encouragement and support throughout my studies. May God 'HIJACK YOU ALL WITH PROSPERITY.'

ACKNOWLEDGEMENT

In the course of my study and writing of this thesis, I received a lot of support from many people to whom I owe profound gratitude. First and foremost, I am grateful to the Almighty God for His unwavering love, inspiration, motivation, guidance, protection and provision in the course of this study. I have reached this far because you've been so faithful to me. Thank you **PAPA** for your new mercies every morning and sufficient grace in my life.

My sincere appreciations also goes to my dynamic and ever ready to assist supervisor, Professor Ambassador Maria Nzomo. Thank you for your invaluable knowledge, expertise and practical guidance in the course of writing this project. I cannot wish to have any better, finest and patient supervisor than you. May God bless you **ABUNDANTLY**.

My unquantifiable gratitude goes to Geologist Farouk Al-Kasim (Founder and President, **PETROTEAM**) in Stavanger, Norway. Thank you for sharing with me your wealth of invaluable knowledge, expertise, experience and insights in the management of petroleum resources in Norway. No wonder you came up with the 'Norwegian Model' of petroleum resource management... Thank you also for dedicating your time to review this work all the way from Norway. I am **FOREVER** indebted to you Sir.

My profound gratitude also goes to all the key resourceful informants who shared with me their knowledge and expertise both in Norway and Nigeria. This study became a success because of the contribution of each one of you. Thank you for your time and resources. May Jehovah 'EMBARRASS YOU WITH GOOD THINGS.'

ABBREVIATIONS

ACF	Arewa Consultative Forum
APA	Award in Predefined Area
BP	British Petroleum
CBN	Central Bank of Nigeria
CCS	Carbon Capture and Storage
CITA	Companies Income Tax Act
CSC	Civil Service Code
DCA	Domestic Crude Allocation
DSA	Discretionary System of Allocation
E&P	Exploration and Production
ECA	Excess Crude Account
EEA	European Economic Area
EITI	Extractive Industries Transparency Initiative
EOR	Enhanced Oil Recovery
EU-ETS	European Union-Emission Trading Scheme
FCT	Federal Capital Territory (Abuja)
FDI	Foreign Direct Investment
FGN	Federal Government of Nigeria
FMPR	Federal Ministry of Petroleum Resources
FOCs	Foreign Oil Companies
GDP	Gross Domestic Product
GNP	Gross National Product
GPFG	Government Pension Fund Global
HSE	Health Safety and Environment
IMF	International Monetary Fund
IOC	International Oil Companies
JV	Joint Ventures
JVA	Joint Operating Agreement
KPRL	Kenya Petroleum Refineries Limited

LCS	Licensing and Concessionary System
MFC	Marginal Field Concession
MOC	Multinational Oil Companies
MPR	Ministry of Petroleum Resources
NAPIMS	National Petroleum Investment Management Services
NCB	Norwegian Central Bank (Norges Bank)
NCS	Norwegian Continental Shelf
NEITI	Nigeria Extractive Industries Transparency Initiative
NMGP	Nigerian Master Gas Plan
NMPE	Norwegian Ministry of Petroleum and Energy
NNOC	Nigerian National Oil Company
NNPC	Nigerian National Petroleum Corporation
NOCK	National Oil Corporation of Kenya
NOCs	National Oil Companies
NOGICD	Nigerian Oil and Gas Industry Content Development
NPD	Norwegian Petroleum Directorate
NPDC	Nigerian Petroleum Development Company
NPV	Net Present Value
NRGI	Natural Resource Governance Institute
NSIA	Nigerian Sovereign Investment Authority
OAGF	Office of the Accountant General of the Federation
OECD	Organization of Economic Cooperation and Development
OEL	Oil Exploration Licence
OML	Oil Mining Lease
OMPADEC	Oil Mineral Producing Areas Development Commission
OPEC	Organization of Petroleum Exporting Countries
OPL	Oil Prospecting Licence
PA	Participation Agreement
PAA	Petroleum Activities Act
PDO	Plan for Development and Operation
PIB	Petroleum Industry Bill

PPC	Petroleum Price Council
PPT	Petroleum Profit Tax
PPTA	Petroleum Profits Tax Act
PSA	Production Sharing Agreement
PSC	Production Sharing Contracts
PTDF	Petroleum Trust Development Fund
PTF	Petroleum Trust Fund
PTI	Petroleum Training Institute
R&D	Research and Development
RMAFC	Revenue Mobilization Allocation and Fiscal Commission
RRT	Resource Rent Tax
RSC	Risk Sharing Contracts
SAP	Structural Adjustment Program
SC	Service Contract
SDFI	State's Direct Financial Interest
SPDC	Shell Petroleum Development Company
SWF	Sovereign Wealth Fund
UNDP	United Nations Development Program
WDI	World Development Indicators

TABLE OF CONTENTS

DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
ABBREVIATIONS.....	v
TABLE OF CONTENTS	viii
LIST OF TABLES.....	xiii
LIST OF FIGURES.....	xiv
ABSTRACT.....	xv

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Introduction.....	1
1.1 Background of the Study	3
1.2 Statement of the Research Problem	6
1.3 Research Objectives.....	8
1.3.1 General Objective	8
1.3.2 Specific Objectives	8
1.4 Literature Review.....	9
1.4.1 Introduction.....	9
1.4.2 Institutional frameworks in oil sector governance	9
1.4.3 Legal and regulatory frameworks in petroleum industry	11
1.4.4 Fiscal regimes and resource rent extraction	12
1.4.5 Conclusion	14
1.5 Justification of the Study	14
1.5.1 Academic Justification.....	14
1.5.2 Policy Justification.....	15
1.6 Theoretical Framework: The Resource Curse Theory	16
1.7 Research Hypotheses	17
1.8 Research Methodology	17
1.8.1 Introduction.....	17
1.8.2 Research Design.....	18
1.8.3 Research Site.....	19
1.8.3.1 Research Locations in Norway	19

1.8.3.2 Research Locations in Nigeria	20
1.8.4 Sample Size.....	21
1.8.5 Sampling Method.....	22
1.8.6 Data Collection Methods	23
1.8.6.1 Questionnaires and Interview Schedules	24
1.8.6.2 Document Analysis	25
1.8.7 Data Analysis	25
1.8.8 Scope and Limitations of the Study	26
1.9 Definition of Key Concepts	27
1.10 Chapter Outline	29

CHAPTER TWO

PETROLEUM POLICIES IN THE DEVELOPMENT OF PETROLEUM INDUSTRY IN NORWAY AND NIGERIA

2.1 Introduction.....	31
2.2 Evolution and Development of Petroleum Industry in Norway.....	33
2.2.1 Non-Participatory Petroleum Policy	34
2.2.2 Nationalist and Protectionist (‘Norwegianisation’) Petroleum Policy.....	36
2.2.3 The “Reluctant Common-Sense Partnership” Petroleum Policy	37
2.3 Evolution and Development of Petroleum Industry in Nigeria	38
2.3.1 The Concessionary Policy.....	38
2.3.2 State-Participation (‘Nigerianisation’ or Indigenization) Policy	39
2.3.3 The Deregulation/De-Indigenisation Policy	41
2.4 Conclusion	44

CHAPTER THREE

INSTITUTIONAL DESIGN AND ORGANIZATION IN THE PETROLEUM INDUSTRY IN NORWAY AND NIGERIA

3.1. Introduction.....	46
3.2. The State’s Petroleum Administration.....	48
3.2.1 Institutional Structure in the Petroleum Administration	48
3.2.2 Technical Competence in the Petroleum Administration	50
3.3 Institutional Design and Organization in the Norwegian Petroleum Industry	51
3.3.1. Ministry of Petroleum and Energy (MPE).....	52
3.3.2. Norwegian Petroleum Directorate (NPD).....	52

3.3.3. Norwegian National Oil Company (NOC), Statoil	53
3.4. Institutional Design and Organization in the Nigerian Petroleum Industry	54
3.4.1. Federal Ministry of Petroleum Resources (FMPR)	56
3.4.2. Department of Petroleum Resources (DPR)	56
3.4.3. Nigeria National Petroleum Corporation (NNPC)	57
3.5 Conclusion	59

CHAPTER FOUR

REGULATORY PRACTICES GOVERNING PETROLEUM INDUSTRY IN NORWAY AND NIGERIA

4.0 Introduction	60
4.1 Model Agreements (Petroleum Contracts): International Perspective	62
4.1.1 Concessionary Agreement	63
4.1.1.1 Bonus	64
4.1.1.2 Surface fees	64
4.1.1.3 Royalty	64
4.1.1.4 Tax on profit	65
4.1.2 Contractual Agreement	65
4.1.2.1 Joint Venture (JV)	65
4.1.2.2 Production Sharing Contract (PSC)	66
4.1.2.3 Service Contract (SC)	67
4.2 Comparison of the Concessionary and Contractual Agreements	69
4.3 Model Agreements (Petroleum Contracts) in Norway and Nigeria	70
4.3.1 Model Agreements (Petroleum Contracts) in Norway	70
4.3.2 Model Agreements (Petroleum Contracts) in Nigeria	72
4.3.2.1 Joint Venture (JVs)	72
4.3.2.2 Production Sharing Contract (PSC)	73
4.3.2.3 Service Contract (SC)	74
4.3.2.4 Marginal Field Concession (MFC)	74
4.4 Petroleum Licences: International Perspective	76
4.4.1 Process of Award of Petroleum Licences	77
4.4.2 Methods of Awarding Petroleum Licences	77
4.5 Allocation of Petroleum Licenses in Norway and Nigeria	79
4.5.1 Award of Petroleum Licences in Norway: The Process and Method	79

4.5.2 Award of Petroleum Licences in Nigeria: The Process and Method	83
4.6 Conclusion	86

CHAPTER FIVE

FISCAL REGIMES IN THE PETROLEUM INDUSTRY IN NORWAY AND NIGERIA

5.0 Introduction.....	88
5.1 Distribution of Risk and Reward in Petroleum Industry.....	90
5.2 Fiscal Instruments (or tools) for extracting revenues from the Petroleum Industry in Norway and Nigeria.....	91
5.2.1 Norway.....	91
5.2.1.1 Tax Revenues.....	92
5.2.1.2 The State’s Direct Financial Interest (SDFI)	94
5.2.1.3 Revenue from Direct State Ownership in Statoil	95
5.2.1.4 Area Fees	95
5.2.1.5 Environmental Taxes	96
5.2.2 Nigeria.....	98
5.2.2.1 Sales of Crude oil and Gas	98
5.2.2.2 Petroleum Profit Tax (PPT)	98
5.2.2.3 Royalty	99
5.2.2.4 Signature Bonuses.....	99
5.2.2.5 Resource Rent Tax (RRT).....	100
5.3 Fiscal Rules used in Managing and Regulating Revenues from Petroleum Industry in Norway and Nigeria.....	101
5.3.1 The Norwegian Sovereign Wealth Fund.....	101
5.3.2 The Nigeria’s Sovereign Wealth Fund.....	104
5.4 Conclusion	107

CHAPTER SIX

DATA ANALYSIS, PRESENTATION AND FINDINGS

6.0 Introduction.....	109
6.1 A critical analysis of the impact of Petroleum Policies in the development of petroleum industry in Norway and Nigeria.....	111
6.1.1 Consistency and Outlook of the Petroleum Policies	112
6.1.2 Co-operation between the State Administration and Oil Companies	113
6.1.3 Development of National Expertise and Local Content	115

6.1.4 The Degree of Transparency and Integrity	117
6.2 A critical examination of the contribution of the Institutional Design and Competence in the management of petroleum resources in Norway and Nigeria	119
6.2.1 Separation of the State’s Regulatory and Commercial interests	120
6.2.2 Technical Competence in the Petroleum Sector	123
6.3 A critical assessment of how the regulatory practices governing petroleum industry have encouraged sustainable development of petroleum resources in Norway and Nigeria	124
6.3.1 Model Agreements (Petroleum Contracts)	125
6.3.2 Award of Petroleum Licenses	128
6.3.3 Tempo Regulation (Prolong Production Phase).....	132
6.3.4 Improve Oil Recovery.....	134
6.3.5 Health Safety and Environmental (HSE) Protection Issues	135
6.4 A critical analysis of the effectiveness of the Fiscal Regimes employed in extracting, managing and regulating oil revenues accrued from the Petroleum Industry in Norway and Nigeria.....	137
6.4.1 The Design of the Fiscal instruments (Tools) to capture oil revenues.....	138
6.4.2 Oil Wealth Accumulation, Management and Utilization.....	139
6.5 Conclusion	143

CHAPTER SEVEN

SUMMARY, CONCLUSION AND RECOMMENDATION

7.1 Summary	145
7.2 Conclusion	149
7.3 Recommendations.....	152
7.3.1 Policy Recommendations for the Kenyan Government.....	152
7.3.2 Academic Recommendations for Further Research.....	157
REFERENCES	158

APPENDICES

Appendix 1: Research Questionnaire.....	166
Appendix 2: Interview Schedule.....	170
Appendix 3: List of Key Informants interviewed in Norway (Oslo and Stavanger Cities)	172
Appendix 4: List of Key Informants interviewed in Nigeria (Niger Delta, and FCT, Abuja)	175

LIST OF TABLES

Table 1: The Net government cash flow from Petroleum Activities in Norway, 2015	92
Table 2: Royalties and Signature bonuses for different upstream areas in Nigeria	99
Table 3: Financial flows through Petroleum Production in Nigeria, 2006 – 2011	100

LIST OF FIGURES

Figure 1: Norwegian Petroleum Sector Organisation	53
Figure 2: Nigerian Petroleum Sector Organisation.....	58
Figure 3: Lifecycle of Petroleum Operations in Norway	82
Figure 4: Lifecycle of Petroleum Operations in Nigeria – under Joint Venture Agreement	85
Figure 5: The Net government cash flow from tax system in Norway, 1971-2015.....	94
Figure 6: The Net government cash flow from Petroleum Activities in Norway, 1971-2015.....	97
Figure 7: The Design of Petroleum Policies in Norway and Nigeria.....	111
Figure 8: Institutional Design and Competence in the Petroleum sector in Norway and Nigeria	119
Figure 9: Petroleum Regulatory Practices in Norway and Nigeria.....	124
Figure 10: Effectiveness of Fiscal Regimes in Petroleum Industries in Norway and Nigeria.....	137
Figure 11: A map showing Norwegian Continental Shelf (NCS).....	177
Figure 12: A map showing Oil blocks in Nigeria’s Niger Delta region	178
Figure 13: A map showing Oil blocks and Licence holders in Kenya.....	179
Figure 14: A map showing Oil exploration and development in Turkana County, Kenya.....	180

ABSTRACT

The differences between a natural resource becoming a potential blessing or curse to a resource-rich country all boils down to the management of such specific resource. This study critically analysed why Norway has a better performance in the management of oil resource than Nigeria, with aim of drawing some practical lessons for Kenya as a petroleum emerging host country. The basic assumption that guided this study was that Norway has a better performance in the management of oil resource than Nigeria. The logic structure of the study, therefore, took on a mixed method approach, with a case research design intended to permit in-depth study of fundamental aspects of oil management in Norway and Nigeria. The Resource Curse Theory was used as analytical tool in this study since the two countries are in the opposite spectrum in the management of oil resource: Norway is being labelled as an ‘Icon of Stability,’ while Nigeria is referred to as a ‘Resource Curse.’ The two countries, therefore, offer valuable insights into possible strategies in managing petroleum resources. To achieve the research objectives, to answer the research questions and to test the research hypotheses, the study particularly focused on the role played by four main aspects in the management of oil resource in the two countries: petroleum policy; institutional design and organisation; regulatory practices; and, fiscal regimes. The study findings showed that the four aspects have given significant results in the context of Norway as compared to Nigeria. This, therefore, explains why Norway has a better performance in the management of oil resource than Nigeria hence confirming the basic assumption in this study that Norway has a better performance in the management of oil resource than Nigeria. The study, therefore, met the research objectives, answered the research questions, confirmed the research hypotheses as well as drew some practical lessons for Kenya as a newly emerging petroleum host country. The study contributes to academic knowledge by adding to the literature in terms of how the four aspects determines and influence the manner in which a nation manages it’s petroleum resources. Moreover, the conclusion made from the findings of the study was that, well formulated and consistent petroleum policies; establishment of well organized and competent institutions; robust regulatory frameworks; and, efficient and flexible fiscal regimes; are the key fundamental aspects that greatly shape the management of oil resource in a petroleum resource host country. The study will be relevant and an important reference tool for policy makers, legislators, administrators, development practitioners, oil companies [and other participants in the industry], and professionals who are directly and indirectly involved in the issues regarding to the management of petroleum resources.

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0 Introduction

Management of natural resources should help resource-rich countries to mobilize domestic resources to spur both economic and social growth which in the end contributes to sustainable development.¹ However, petroleum resources present various challenges to management given the unique nature of these resources. Not only are these resources limited and non-renewable, but they are also of high economic value. Moreover, the entire value chain from resource extraction to distribution to the end user requires complex technical know-how and high investments in addition to mitigating social and environmental risks. Also, because the resource is limited and generates huge economic rents, capturing the economic value from the non-renewable resource and transforming it into sustainable cash flows for the future is not only important but also complex.²

Norway and Nigeria are both rich in petroleum reserves and petroleum industry plays a big role in both countries. Although it might seem strange to interface these two countries when making a comparative analysis given the politico-socio-economic diversity that they exhibit, the countries still share a common thread in terms of the discovery of oil, production capacity and the economy driven by the oil wealth. A common aspect that the countries share is the period of oil discovery and embarking as an oil producer. While in Norway oil was first struck in December

¹ See Paul Stevens, *Resource Impact: A Curse or a Blessing?* (Dundee: Center for Energy, Petroleum and Mineral Law and Policy, 2003), p. 16; see also Jeffrey D. Sachs and Andrew M. Warner, "The Curse of Natural Resources," *European Economic Review*, Vol. 45, no. 4-6, (2001): 835-854, 838

² Jeffrey D. Sachs and Andrew M. Warner, "The Big Push, Natural Resource Booms and Growth," *Journal of Development Economics*, Vol. 59, no. 1, (1999): 43-76, 47

1969 in Ekofisk field and production started in 1971³, oil discovery in Nigeria dates back to 1956, when Shell-British Petroleum discovered oil in Oloibiri in the Niger Delta with the earliest oil production starting in 1958.⁴

According to British Petroleum Statistical Review⁵, Norway has proven oil reserves of 8.01 billion barrels of oil constituting about 0.5% of the world's proven reserves while Nigeria has a total proved oil reserves of 37.2 billion barrels of oil, which constitute about 2.2% of the world's proven reserves. Interestingly, however, in terms of production, Norway has oil production capacity of about 2.1 million barrels of oil per day while Nigeria has a maximum oil production capacity of 2.5 million barrels per day, making these two countries the biggest oil producers in Western Europe and Africa respectively.⁶

The Oil revenues form a major chunk of the Norwegian and Nigerian economies as the petroleum industry is the biggest industry for both countries. Ending 2012, the oil and gas exports formed 52% of total exports, 30% share of government revenues and 23% of Gross Domestic Product (GDP) for Norway.⁷ For Nigeria ending 2012, the oil and gas exports formed

³ See Norwegianpetroleum.no, *Norway's Petroleum History*, [Accessed February 12, 2015], <http://www.norskpetroleum.no/en/framework/norways-petroleum-history/>; see also Norwegian Petroleum Directorate (NPD), *Facts 2013*, [Accessed January 4, 2015], http://www.npd.no/Global/Engelsk/3Publications/Facts/Facts2013/FACTS_2013pdf/

⁴ Nigerian National Petroleum Corporation (NNPC), *Development of Nigeria's Oil Industry* (2014), [Accessed February 23, 2015], <http://www.nnpcgroup.com/NNPCBusiness/BusinessInformation/OilGasinNigeriDevelopmentoftheIndustry.aspx/>

⁵ British Petroleum, *BP Statistical Review of World Energy June 2016*, ed. 65, (London: BP, 2016), p. 2, [Accessed August 26, 2016], <https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-full-report.pdf>.

⁶ See Norwegian Petroleum Directorate (NPD), (2016), <http://www.npd.no/en/news/Production-figures/> [Accessed on 25 August 2016]; see also BP (2016); see also Nigerian National Petroleum Corporation (NNPC), *Development of Nigeria's Oil Industry* (2014), [Accessed February 18, 2015] <http://www.nnpcgroup.com/NNPCBusiness/BusinessInformation/OilGasinNigeriDevelopmentoftheIndustry.aspx>.

⁷ See NPD, *Facts 2013*

96.8% of total exports contributing to 75.3% share of government revenues and forming 19.6% of GDP.⁸

While Norway, since 1990 has continued to invest its oil revenues in the Government Pension Fund Global (GPFGL), often cited as the most successful Sovereign Wealth Fund (SWF) in the world, Nigeria as from 2011 has followed suit by starting the Nigerian Sovereign Investment Authority (NSIA) with a seed capital of US\$1 billion.⁹ Even with the similarities discussed herein, the two countries have differently performed in the management of their oil resource since the discovery of this resource. This study delves in understanding this very difference.

1.1 Background of the Study

Although Norway and Nigeria share some similarities in terms of discovery of oil, production capacity and the economy driven by the oil wealth as discussed in the introduction section, it should be acknowledged that the two countries are also different. Some factors are obvious, such as the fact that Norway is a developed high-income country performing excellently on the World Development Indicators (WDI) while Nigeria is a lower-middle income country faring rather poorly even in comparison to other lower-middle income countries and sub-Saharan African countries.¹⁰ There are also historic implications contributing towards these differences. It is, therefore, important to keep this in mind, so as to fully appreciate why the management of oil resource in Norway and Nigeria has evolved and developed into what it is now.

⁸ Central Bank of Nigeria (CBN), *Annual Report 2012*, (Abuja: CBN, 2012), 6. <http://www.cenbank.org/Out/2013/RSD/2012%20Annual%20Report.pdf>. [Accessed June 18, 2014]

⁹ Nigeria Sovereign Investment Authority (NSIA), (2014). Available at <http://nsia.com.ng/> [Accessed June 18, 2015]

¹⁰ World Bank, *World Development Indicators 2016*, (Washington, DC: World Bank, 2016), p. 3, [Accessed September 12, 2016], <https://openknowledge.worldbank.org/handle/10986/23969>

While looking at the history of the two countries, three major distinctions should be made that help to understand the evolution and development of the petroleum industry:

- **Demography:** In the 1950s, before the discovery of oil in commercial quantities, Norway had a small population of a little over 3 million while Nigeria was around 38 million people. Today, Norway consists of about 5.5 million people while Nigeria is around 190 million.¹¹ Moreover, the ethnic makeup of Norway is also more homogenous as compared to Nigeria.
- **Enterprise capacity:** Norway already had good technical capacity in managing its natural resources like hydro through hydro power production, fisheries as well as insights into civil engineering through its shipping industry. Nigeria on the other hand, was a British colony with cash crops driving the economy and its technical capacity was also limited.
- **Location of reserves:** Norway's petroleum resources are located in the Norwegian Continental Shelf (NCS)¹² offshore while Nigeria's petroleum resources are located mostly in the marshy terrains of the Delta region as well as offshore.

These simple factors have some serious implications. Norway has had the advantage of having a small population with a homogenous ethnic group meaning that there was no animosity in competing for distribution of resource wealth. Furthermore, the location of the reserves in the NCS meant that they were far away from human interference even in the event of spills, accidents and gas flaring. It also meant that a particular domicile group could not make exclusive claims to the resource and to the rents it generates. In addition, the fact that Norway had an

¹¹ Worldometers, [accessed October 5, 2016], <http://www.worldometers.info/>, Elaboration of data by United Nations Department of Economic and Social Affairs, Populations Division (2016), *World Population Prospects: The 2015 Revision*, [Accessed October 5, 2016], <http://www.un.org/en/development/desa/population/>

¹² The NCS constitutes the entire offshore region over which Norway has resource sovereignty. It includes parts of the North Sea, Norwegian Sea, and Barents Sea (see Figure 11, p. 177)

already established enterprise capacity in natural resource management made the country more competent in managing petroleum resources.

As mentioned earlier on, apart from Nigeria having an ever growing-larger population, the country is an outcome of the British colonisation that put together different ethnic communities under one administrative colony hence used the famous mechanism of ‘divide and rule’ in controlling them. Colonisation also meant limiting technical capacity of the masses so as to retain power. Being a colony of an active participant of the World Wars also meant that geopolitical interests in oil were active in Africa with European powers having vested interests in their colonies. The interests never faded even after gaining independence and the Biafra civil war (1967-1970) is a testimony to the interference of the French and the British in securing access to Nigeria’s oil resources. Moreover, the location of oil reserves onshore (inland) exposes them to theft from the communities along the pipelines routes not mentioning environmental degradation due to oil spill and gas flaring. Furthermore, the principle of derivation and the unfortunate separation of domicile ethnic groups complicate the ownership of both the oil resource itself and resource rent generated, particularly from the nine communities in the oil-rich Delta region.¹³

From the background of the three factors, therefore, this study examines why Norway has a better performance in the management of oil resource than Nigeria through the lenses of petroleum policy; institutional design and organization; regulatory practices; and, fiscal regimes.

¹³ The nine (9) oil producing States in the Niger Delta region are: *Abia, Akwa Ibom, Bayelsa, Cross River, Delta, Edo, Ondo, Imo and Rivers* (see Figure 12, p. 178). This region cuts across over 800 oil producing communities with an extensive network of over 900 producing oil wells and several petroleum production-related facilities. See Ike Oguine, “Nigeria’s Oil Revenues and the Oil Producing Areas,” *The Journal*, Vol. 4, no. 10, (2000): 4-10, 6

1.2 Statement of the Research Problem

Extractive revenues should help resource-rich countries to mobilize domestic resources to spur both economic and social growth which in the end contributes to sustainable development. According to Sachs and Warner, petroleum in particular, creates enormous revenues and these revenues should be able to help countries overcome capital and foreign exchange constraints and accelerate both economic and social development.¹⁴ The proponents of oil-led development hold that oil-rich countries can base their development on this resource.¹⁵ They point out to the potential benefits in the form of enhanced economic growth, increased government revenues to finance poverty alleviation, the creation of job opportunities, enhanced local content, the transfer of technology, improvement of infrastructure, and development of other related industries.

In the contrary, the experience in most oil-rich countries to date illustrates few of the above mentioned benefits.¹⁶ Many countries have failed to leverage their oil wealth to build strong and stable states with sustained long-term economic and social growth. For most of these countries, petroleum resource wealth have instead become associated with weak state institutions, exceptionally poor governance and high levels of corruption, a culture of rent-seeking, often devastating and slower than expected economic growth, barriers to economic diversification,

¹⁴ Jeffrey D. Sachs and Andrew M. Warner, "Natural Resource Abundance and Economic Growth," NBER Working Paper 5398, *National Bureau of Economic Research*, (Cambridge, MA: 1998), p. 34

¹⁵ See Daniel Lederman and William F. Maloney, ed., *Natural Resources: Neither Curse nor Destiny* (Washington, DC: World Bank, 2007), p. 14; see also Macartan Humphreys, Jeffrey D. Sachs and Joseph E. Stiglitz, ed., *Escaping the Resource Curse* (New York: Columbia University Press, 2007), p. 68; see also William Ascher, *Why Do Governments Waste Natural Resources? Policy Failures in Developing Countries*, (Washington, DC: Johns Hopkins University Press, 1999), p. 17; see also Richard M. Auty, *Sustaining Development in Mineral Economies: The Resource Curse Thesis*, (London and New York: Routledge, 1993), p. 32

¹⁶ See Christa N. Brunnschweiler and Erwin H. Bulte, "Natural Resources and Violent Conflict: Resource Abundance, Dependence, and the Onset of Civil Wars," *Economic Paper Series* vol. 78, no. 8 (2008), p. 22; see also Paul Collier and Anke Hoeffler, "Greed and Grievance in Civil War," *Oxford Economic Papers*, Vol. 56, no. 4, (2004): 563-595, 575

poor social welfare performance, high levels of poverty, inequality and unemployment, and environmental degradation, not to mention high incidences of conflict and war.¹⁷

Recent history has demonstrated that extractive endowments, if not well managed can disappoint. The differences between a natural resource becoming a potential blessing or a curse to a resource-rich country all boils down to the management of such resource. Norway and Nigeria are both rich in petroleum reserves. Although the two countries differ in terms of their political, social and economic diversity, they still share a common thread in terms of the discovery of oil, production capacity and the economy driven by the oil wealth as discussed in detail in the introduction section. Whereas Norway has utilized and hugely benefitted from its Continental Shelf's (NCS) oil-wealth to earn the highest place in the United Nations Development Program's (UNDP) list of the best development performance, Nigeria has ironically not fully benefitted from the Niger Delta's oil-wealth, hence clustered near the bottom line of development index.¹⁸

The two countries, therefore, present an excellent specimen for this study because although they both share some similarities as well as utilize the main aspects that influence the manner in which a nation manages its natural resources, they have performed differently in the management of their oil resources. This study, therefore, investigates why Norway has a better performance in the management of oil resource than Nigeria, with aim of drawing some practical lessons for Kenya.¹⁹ The main question that this study seeks to answer is: Why is it that Norway

¹⁷ See Jana Stoeber, "On Comprehensive Wealth, Institutional Quality and Sustainable Development – Quantifying the Effect of Institutional Quality on Sustainability," *Journal of Economic Behavior & Organization*, Vol. 14, no. 3, (2011), p. 13-16:15; see also Thad Dunning, *Crude Democracy: Natural Resource Wealth and Political Regimes* (Cambridge, UK: Cambridge University Press, 2008a), p. 91

¹⁸ United Nations Development Program (UNDP). 'Human Development Reports.' Available at: <http://hdr.undp.org/en/countries/> [Accessed October 5, 2016]

¹⁹ See Figures 13 & 14 (p. 179 & 180) showing oil reserves in different parts of Kenya

has a better performance in the management of oil resource than Nigeria, and what lessons can Kenya draw from the experiences of the two countries? Other specific research questions that the study sought to answer are: What is the impact of the petroleum policies designed by Norwegian and Nigerian governments in the development of petroleum industry in these two countries? Does institutional design and organization in the petroleum industry in Norway and Nigeria have the competence to contribute in the management of petroleum resources in the two countries? Does regulatory practices governing petroleum industry in Norway and Nigeria encourages sustainable development of petroleum resources? Are the fiscal regimes employed by the Norwegian and Nigerian governments effectively helping in extracting, managing and regulating revenues that accrue from the petroleum industry?

1.3 Research Objectives

1.3.1 General Objective

The overall objective of this study is to critically analyse why Norway has a better performance in the management of oil resource than Nigeria with aim of drawing some practical lessons for Kenya.

1.3.2 Specific Objectives

- i. To examine the impact of petroleum policies in the development of petroleum industry in Norway and Nigeria;
- ii. To examine whether the institutional design and organization in the petroleum industry in Norway and Nigeria have the competence to contribute in the management of petroleum resources in the two countries;

- iii. To assess how the regulatory practices governing the petroleum industry in Norway and Nigeria have encouraged the sustainable development of petroleum resources;
- iv. To find out whether the fiscal regimes employed by the Norwegian and Nigerian governments are effectively helping in extracting, managing and regulating revenues that accrues from the petroleum industry.

1.4 Literature Review

1.4.1 Introduction

The literature review in this study is broadly grouped into three categories. The first category is the role of institutional frameworks in oil sector governance. The literature in this category provides a backbone to the analysis of resource management and value creation. The second category focuses on the importance of having legal regulatory framework particularly in petroleum industry. However, the framework should create a conducive commercial environment for the oil companies while at the same time help the host country to achieve it's national policy objectives. The third and final category is the role of fiscal regimes in resource rent extraction. This literature sets the foundation for analysing the management and regulation of the resource revenues captured from petroleum resources by fiscal regimes in the context of Norway and Nigeria.

1.4.2 Institutional frameworks in oil sector governance

Several authors acknowledge the role of sound institutional framework in oil and gas sector performance. Thurber et al., examines the Norwegian Model of petroleum sector management and state that separation of functions in a sound regulatory framework has been instrumental for

the petroleum sector performance in Norway.²⁰ A good way to characterise oil sector performance is taking note of the trend in production in producing countries. Toft and Duero have found that political-institutional frameworks do affect the investment environment in the upstream sector, which thereby affects production portfolio.²¹ Barma et al.²² further attest that institutional quality and governance make up the quality of economic and natural resource management policies adopted and implemented to derive economic value from the natural resources.

When studying institutional framework for oil and gas sector performance, an important aspect to consider are the National Oil Companies (NOCs) as they not only control roughly 90% of the world's petroleum reserves but also form an interface to manage the political and economic interests of the State in petroleum sector.²³ Thurber et al.²⁴ perform an extensive study on how patronage affects the performance efficacy of the Nigerian NOC, Norwegian National Petroleum Corporation (NNPC) and conclude that it has far reaching impacts on the sectors' performance. Thurber and Istad also study the Norwegian NOC, Statoil to illustrate how it has been instrumental in managing the State's interest in petroleum sector management.²⁵

²⁰ Mark C. Thurber, David R. Hulst and Patrick R. P. Heller, "Exporting the 'Norwegian Model': The Effect of Administrative Design on Oil Sector Performance," *Energy Policy*, Vol. 39, no. 9, (2011): 5366-5378, 5371

²¹ Peter Toft and Arash Duero, "Reliable in the Long Run? Petroleum Policy and Long-term Oil Supplier Reliability," *Energy Policy*, Vol. 39, no. 2, (2011): 6583-6594, 6587

²² Naazneen H. Barma et al., *Rents to Riches? The Political Economy of Natural Resource-led Development*, (New York: World Bank, 2012), p. 14

²³ Ralf Boscheck, "The Governance of Oil supply: An Institutional Perspective on NOC control and the questions it poses," *International Journal of Energy Sector Management*, Vol. 1, no. 4, (2007): 366-389, 375

²⁴ Mark C. Thurber, Ifeyinwa M. Emelife and Patrick R. P. Heller, "NNPC and Nigeria's Oil Patronage Ecosystem Oil and Governance," *Program on Energy and Sustainable Development*, Working Paper no. 95, (September, 2010b), p. 13

²⁵ Mark C. Thurber and Benedicte T. Istad, "Norway's Evolving Champion: Statoil and Politics of State Enterprise," *Program on Energy and Sustainable Development*, Working Paper no. 92, (May 2010a), p. 24

The available literature does indicate that the design of the institutional frameworks indeed affect petroleum sector performance. Existing literature in this aspect can be summarised as the ones that acknowledge and assess the impact of institutional design and governance in the petroleum sector performance and the ones that illustrate the design of institutions and the regulatory framework.

1.4.3 Legal and regulatory frameworks in petroleum industry

Armstrong²⁶ acknowledges that good legal and regulatory frameworks helps most developing countries develop market that attract domestic and foreign direct investments (FDI), build their markets competitiveness, restore investor confidence, and promote economic growth and national development. However, Li and Flier²⁷ note that there are many challenges to ensuring good legal and regulatory frameworks in developing countries especially when the business investors need to be convinced that they are not independent of the society, host community or the natural environment in which they operate.

According to Olusa²⁸, the issue of legal and regulatory framework is central to the petroleum sector sustainability and diversification of economic resources of any country. In this regard, laws and regulations are put in place in line with the peculiarities of each country, which aim to boost the needed resource development and management. Inyang²⁹ notes that, some regulations may be provided by various governments in order to make the environment attractive to the Foreign Direct Investment (FDI) in different sectors of their economy. Onyeaso opines that, while regulations are necessary in different sectors of economy, they should not be negative or

²⁶ See Armstrong (2003), p. 12

²⁷ See Li and Flier (2007), p. 23; see also Wilson (2006), p. 7

²⁸ See Olusa (2007), p. 8

²⁹ See Inyang (2009), p. 15

inhibitory.³⁰ They should be fashioned with the purpose of facilitating the realisation of national objectives rather than clouding the vision of institutions.

Alo³¹ observes that the National Constitution is the basic law and usually provides the fundamental regulatory framework for exploitation, development and production of natural resources in most resource-rich counties. Nevertheless, he also acknowledges that there are usually other laws that are made to provide the detailed guidelines for particular resources and sectors. Hunter³² also sheds light on the role of regulatory framework in optimizing the petroleum resources by comparing Australia and Norway. Hunter's study concludes that Norway's objective based policies give a better result for petroleum sector performance than Australia's rule based policies.

1.4.4 Fiscal regimes and resource rent extraction

Fiscal regimes are important in capturing the value of the non-renewable resources as revenue to the State. It has been found that a tax regime should be progressive and based on profits to capture the bulk of the resource rent.³³ The authors have also found evidence that fiscal regimes tend to be more complex and difficult to administer in developing countries with weak governance and low capacity than in countries exhibiting strong governance and sound technical capacity to administer the tax regime.

It is also important to have sound policies that manage and regulate the captured resource rent as is illustrated by Ushie et al. when they address the role of institutional quality in the

³⁰ See Onyeaso (2012), p. 34

³¹ See Alo (2003), p. 18

³² Tina Hunter, "The Role of Regulatory Frameworks and State Regulation in Optimising the Extraction of Petroleum Resources: A study of Australia and Norway," *The Extractive Industries and Society*, Vol. 1, no.1, (2014): 48-58, 52

³³ Barma et al., *Rents to Riches?*, p. 12

macroeconomic activity as a result of positive oil shocks.³⁴ The authors' recommendations call for a sound institutional structure to manage the windfalls from oil shocks. The same view is shared by Budina et al.³⁵, who conclude that volatility in government expenditures is more responsible for the non-performance of the non-oils sector than the Dutch disease phenomenon. Although the core focus of the study is not on how the revenue is spent, this study brings to light the economic impact of government policies.

The fiscal regime should also function in a way that not only minimises economic risks to the State but also makes the petroleum sector more attractive for oil companies who have the know-how to extract the resource out of the ground. Toft and Duero³⁶ have found evidence that investment frameworks do impact the manner in which the upstream sector is perceived to be attractive by the IOCs. Alternatively, Osmundsen has noted that the Norwegian State bears a greater economic risk and suggests measures to obviate it.³⁷

Studies on fiscal regimes associated with petroleum exploration and production such as that provided by Al-Attar and Alomair³⁸ have come to the conclusion that the type of the contract between the host government and the contractor does not present substantial issues in evaluating the fiscal regime; it is the structure of the fiscal regime of the contract that is important. For example, the structure of the royalty rate, fixed or variable rate, and so forth.

³⁴ Vanessa Ushie, Oluwatosin Adeniyi and Sabastine Akongwale, "Oil Revenue, Institutions and Macroeconomic Indicators in Nigeria," *OPEC Energy Review*, Vol. 37, no. 1, (2013): 30-52, 43

³⁵ Sweder van Wijnbergen, Gaobo Pang and Nina Budina, "Nigeria's Growth Record: Dutch Disease or Debt Overhang?" Working Paper no. 4256, (Washington, DC: World Bank, 2007), p. 6

³⁶ Toft and Duero, "Reliable in the Long Run?," p. 6589

³⁷ Petter Osmundsen, "Risk sharing and Incentives in Norwegian Petroleum Extraction," *Energy Policy*, Vol. 27, no. 9, (1999): 549-555, 552

³⁸ Abdulaziz Al-Attar and Osamah Alomair, "Evaluation of Upstream Petroleum Agreements and Exploration and Production Costs," *OPEC Review*, Vol. 29, no. 4, (2005): 243-266, 248

1.4.5 Conclusion

In summary, most authors do acknowledge the role of policy, institutional organization, regulatory framework, and fiscal regimes in petroleum resource management. Some also suggest that resource curse has an institutional dimension and the choice of fiscal regimes affect macroeconomic activity rather than oil price volatility. Some authors study the various institutions in greater detail.

This study took a broader overview in combining these insights and studying them in the context of the oil resource management in Norway and Nigeria. Moreover, the study adds to the literature in terms of sustainable development of petroleum resources for the State and the oil companies as a result of petroleum policy, institutional design, regulatory practices and fiscal regimes.

1.5 Justification of the Study

The study theme was chosen due to the desire to enhance the responsible management of petroleum resources given the rampant cases of abuse in the management of natural resource endowments in most resource rich countries. This study is justified both on academic and policy fronts.

1.5.1 Academic Justification

This study concentrated in examining the contribution of petroleum policy, institutional framework, regulatory practices and fiscal regimes in the sustainable development and management of petroleum resources in host countries. The study combined these insights and analysed them in the light of the petroleum industry in Norway and Nigeria. This study

contributes to academic knowledge by adding to the literature in terms of how these aspects influence the manner in which a nation sustainably develops and manages its natural resources, particularly petroleum resources.

1.5.2 Policy Justification

Although Norway and Nigeria differ in terms of their political, social and economic diversity, the two countries still share a common thread in terms of the discovery of oil, production capacity and the economy driven by the oil wealth. Therefore, the two countries present an excellent specimen for the study because although they have both utilised the main principle aspects that influence the manner in which a nation manages its natural resources, they have performed differently in their petroleum industry.

Any country in the world intends to make the best use of its natural resource base revenues to the benefits of its people and whole society. After recently discovering oil in Turkana County, Kenya equally has given a mixed bag of feelings amongst its citizens in light of expected huge oil revenues in the recent future. Therefore, this intellectual inquiry is not only timely, but also substantive to Kenya as a newly oil province. This study contributes useful and practical information for better planning, sustainable development and management of oil resource for the benefit of the State and its present and future generations. It will be relevant and an important tool for policy makers, legislators, administrators, development practitioners, oil companies [and other participants in the industry] and professionals who are directly and indirectly involved in the management of petroleum resources in Kenya.

1.6 Theoretical Framework: The Resource Curse Theory

This theory is based on the argument that countries rich in mineral resources often have poor governance structure, weak institutions, and inequitable distribution of the resource wealth among the citizens of the State. Frankel³⁹ performed an econometric analysis to conclude that mere possession of natural resources does not lead to the resource curse syndrome. Rather, factors such as the Dutch Disease, political and civil unrest, and poor institutional quality sets stage for a resource curse. Karl⁴⁰ emphasises that the resource curse problem is more political than economic. Robinson et al.,⁴¹ illustrate the role of political incentives generated by resource endowment as key to identifying if resource abundance leads to a blessing or curse. Barma et al.⁴² have indicated that governance indicators for most-resource rich developing countries are poor thereby attesting that the resource curse has an institutional dimension.

Norway and Nigeria lie at the opposite ends of the spectrum of the resource curse syndrome: Norway is labelled an ‘icon of stability’ while Nigeria is referred to as a ‘resource curse’ when it comes to the management of oil resource. While Nigeria suffers from a resource curse, Norway seems to have found a way to avoid it. The conclusion that can be made from this theory is that, political factors determined and influence the manner in which a State manages its natural resources. This theory is, therefore, relevant to this study since it helps in examining why Norway has a better performance in the management of oil resource than Nigeria through

³⁹ Jeffrey A. Frankel, *The Natural Resource Curse: A Survey*, (Cambridge, MA: National Bureau of Economic research, 2010), p. 6

⁴⁰ See Terry Lynn Karl, “Ensuring Fairness: The Case for a Transparent Fiscal Social Contract,” in *Escaping the Resource Curse*, ed. Macartan Humphreys, Jeffrey D. Sachs and Joseph E. Stiglitz, (New York, Columbia University Press, 2007), p. 12; see also Terry Lynn Karl, “Understanding the Resource Curse,” in *Covering Oil: A Reporters Guide to Energy and Development*, ed. Svetlana Tsalik and Anya Schiffrin, (New York: Open Society Institute, 2005), p. 28; see also Terry Lynn Karl, *The Paradox of Plenty: Oil Booms and Petro-States*, (Berkeley: University of California Press, 1997), p. 23

⁴¹ James A. Robinson, Torvik Ragnar and Thierry Verdier, “Political foundations of the resource curse,” *Journal of Development Economics*, Vol. 79, no. 6, (2006): 447-468, 452

⁴² Barma et al., *Rents to Riches?*, p. 18

gauging the contribution of four main political factors: petroleum policy, institutional design and organization, regulatory practices, and fiscal regimes.

1.7 Research Hypotheses

- i. The petroleum policies have positively impacted in the development of petroleum industry in Norway than in Nigeria;
- ii. The institutional design and organisation in the petroleum industry in Norway has the competence to contribute in the management of petroleum resources unlike in Nigeria;
- iii. The regulatory practices governing petroleum industry in Norway encourages sustainable development of petroleum resources better than in Nigeria;
- iv. The fiscal regimes employed by the Norwegian government are effectively helping in extracting, managing and regulating revenues that accrues from the petroleum industry than those employed by the Nigerian government.

1.8 Research Methodology

1.8.1 Introduction

This section gives an overview of basic methodological demarcations initiated and the reasons why these demarcations were conducted. It gives the criterion used to interpret the research findings and highlights the standard on which data collection was built and analysed. The section, therefore, highlights and discusses the research design; research site; sample size; sampling method; data collection methods; data analysis; and, the scope and limitations of the study.

1.8.2 Research Design

The logic structure of this study took a case study analysis intended to permit in-depth study of fundamental themes in oil management in Norway and Nigeria. The two countries were selected as the case studies since they offer valuable insights into possible strategies in managing petroleum resources for sustainable development. Although the two countries are different given their politico-socio-economic diversity, they still share the common thread of utilising the main aspects that influence the manner in which a nation manages its natural resources.⁴³

According to Flyvbjerg⁴⁴, the case study designs validate emerging constructs and proposition in the data set as well as guiding the study of various units within the identified case by underlining the mechanism by which an incident is brought to being. This was entirely in line with the justification for opting for this strategy in this study. Case studies can contribute significantly to a researcher's own learning process by shaping the skills needed to do a good research. The case studies contain multiple wealth of details, totality and variation which allows the author to understand fully how and where intervention may have worked collectively with correlated general effects.⁴⁵ This implied that, the author was to achieve more sound and applicable knowledge on the sustainable development and management of petroleum resource.

The case studies are more than a method that principally helps researchers to open their eyes and carefully look at individual cases not in hope of proving anything but rather in hope of learning something. Through the Norwegian and Nigerian cases, the researcher was able to give an in-depth description and analysis of the theme of oil resource management. This fitted well with

⁴³ The major principle aspects that influence the manner in which any nation manages its natural resources are: policy framework, institutional design and organisation, regulatory frameworks, and fiscal regimes.

⁴⁴ Bent Flyvbjerg, "Case Study" in *The Sage Handbook of Qualitative Research* (4th edition), ed. Norman K. Denzin and Yvonna S. Lincoln, (Thousand Oaks, CA: Sage Publishing, 2011), p. 301

⁴⁵ Flyvbjerg, "Case Study," p. 303

Merriam's case study definition that classified a case study as; "An intensive in-depth description and analysis of a bounded system of which, the bounded system comprise a single unit (institutions, community or groups) that are delimited by boundaries."⁴⁶ Moreover, the justification of the design in this study was the fact that the case studies raise questions of how and why in order to interpret existing set of events where the researcher has little or no behavioural control over the actors or events.⁴⁷

1.8.3 Research Site

Fieldwork research was conducted in Norway and Nigeria. The fieldwork took a period of four months; two months in each country. That was long enough to develop an in-depth understanding of interviewees' responses and generated adequate information and relevant answers to the research questions. It also allowed enough time to return to pose further questions arising from the empirical investigation to certain respondents.

1.8.3.1 Research Locations in Norway

In Norway, two cities were selected as fieldwork locations; Stavanger and Oslo. Stavanger is considered the centre of the Oil Industry in Norway because it is a key industry not only in Stavanger region and Norway as a country, but also as one of the Europe's energy capitals. This is why it has been given the name "the Oil Capital." The largest Company in the Nordic region, Norwegian Energy (Oil) Company, Statoil is headquartered in Stavanger. In addition, several international and gas companies have their Norwegian offices in the city. Moreover, several state actors such as Norwegian Petroleum Directorate (NPD), Norwegian Petroleum Safety Authority (PSA-Norway) and Petoro, all have their head offices in Stavanger. PETRAD, a non-profit

⁴⁶ Sharan B. Merriam, *A Guide to Design and Implementation (3rd ed.)*, (San Francisco: Jossey-Bass, 2009), p. 16

⁴⁷ Robert K. Yin, *Case Study Research: Design and Methods (4th ed.)*, (New York and London: Praeger, 2009), p. 15

Norwegian government foundation that facilitate the transfer of knowledge and experience from petroleum management, administration and technology between managers and experts in governments and national oil companies, is also found in Stavanger city. The city is also home to several institutions of higher education, including the University of Stavanger (University of Petroleum) which is the largest of them all.

Oslo on the other hand is the economic and governmental centre of Norway and it is where all the government ministries including Ministry of Petroleum and Energy (MPE) are found. The Extractive Industries Transparency Initiative's (EITI) International Secretariat is also based in Oslo.

1.8.3.2 Research Locations in Nigeria

Fieldwork research was conducted in two States: Delta (Niger Delta) and Abuja, the Federal Capital Territory (FCT) of Nigeria. The selection of the two States as the location for this research was informed by their relevance to the study. Delta State has the highest number of oil wells and fields among the nine (9) oil producing States and is at the vanguard of the agitation for resource control, the campaign by the oil producing states to have full control over oil resource and its revenue from their States. It also has the highest number of advocacy groups, some with militant sub-units which remain a great challenge to both the federal government and the multinational oil companies operating in the Niger Delta.

Abuja (FCT) is the seat of political power of the Federal Government (FG) where all officials of the federal government are found: States liaison offices, Federal Ministry of Petroleum Resources (FMPR), Federal Ministry of Finance, Budget Office of the Federation (BOF), and the Revenue Mobilisation Allocation and Fiscal Commission (RMAFC), the national body with a

commissioner from each states that determines what, how and when revenues are allocated to the three tiers of government.

1.8.4 Sample Size

This research study targeted 100 respondents in Norway and Nigeria (50 from each country). Sixty (60) respondents were administered with questionnaires while forty (40) key informants were interviewed on a face-to-face basis.⁴⁸ These respondents were in the best position to give insights, reliable feedback and information on oil resource management in their respective countries. This sample size was way above Bernard's perspective that shows that ten to twenty knowledgeable respondents are conceivably enough number to uncover and understand core categories in any define study.⁴⁹ In deciding about the sample size, the researcher took into account the following issues: the objectives of the research, geographical spacing, the question of an even statistical study, the response variable, the types of measurement, possibility of obstacles in data collection, the important sources of variation, the time frame and possible methods of data analysis.

In Norway, the key informants comprised the officials from the Ministry of Petroleum and Energy; Ministry of Finance; Norwegian Petroleum Directorate (NPD); Petroleum Safety Authority (PSA-Norway); Statoil AS; Petoro AS; PETRAD; Extractive Industries Transparency Initiative (EITI); international oil companies (IOCs) operating in Norway; and, Experts and Scholars in petroleum resource management.

⁴⁸ See appendices 3 and 4 for the key knowledgeable informants interviewed by the author in Norway and Nigeria (pages 172 & 175)

⁴⁹ Bernard H. Russell, *Research Methods in Anthropology: Qualitative and Quantitative Approaches (5th ed.)*, (New York and London: Praeger, 2011), p. 23

In Nigeria, the key informants comprised the officials from the Federal Ministry of Petroleum Resources (FMPR); Ministry of Niger Delta; Department of Petroleum Resources (DPR); Nigerian National Petroleum Corporation (NNPC); National Petroleum Investment Management Services (NAPIMS); Revenue Mobilization Allocation and Fiscal Commission (RMAFC); Petroleum Training Institute (PTI); Nigeria Extractive Industries Transparency Initiative (NEITI); international oil companies (IOCs) operating in Nigeria; and, experts and scholars in petroleum resource management.

1.8.5 Sampling Method

The study sample was obtained using both probability (cluster sampling) and non-probability sampling method (purposive sampling). Cluster sampling was preferred for the study as it was economical and at the same time characteristics of a probability sample were retained.⁵⁰ In this sampling technique, it is the groups or clusters that are being randomly selected and not the individuals or cases. In this research, the clusters were Cities (Oslo and Stavanger in Norway) and States (Delta and Abuja in Nigeria). Fifteen individuals then were randomly selected from each of the four clusters totalling to 60 respondents who were administered with questionnaires.

Apart from cluster sampling technique, purposive sampling technique was also used in this study to select 40 key informants who were interviewed on a face-to-face basis. According to Bernard⁵¹, purposive sampling method is outstanding in the phenomenological studies where the objective is to identify and clarify enriching phenomenon. Preference of this process included use of snowball sampling method as effective ways to build the sample frame where two-to-four respondents were drawn. Some of the selected respondents exercised a chain referral method by

⁵⁰ Olive M. Mugenda and Anthony G. Mugenda, *Research Methods: Quantitative and Qualitative Approaches*, (Nairobi: ACTS Press, 1999), p. 49-50

⁵¹ Russell, *Research Methods in Anthropology*, p. 26

identifying other suitable respondents (depending on availability, area of responsibility and technicality) who were referred to the researcher for help and collection of the desired empirical data to inform the research.

Purposive sampling method was relevant and suitable to this research study since it was used to select respondents to participate in the study on the basis of their relevance to the research questions, theoretical position, analytical framework, and most importantly the argument or explanation that is very developed.⁵² The key informants were purposively identified and selected from those who are directly and indirectly involved in the petroleum resource management in Norway and Nigeria. Since these respondents are involved, in one way or another, in the Norwegian and Nigerian petroleum industry, they were, therefore, in the best position to give insights, reliable feedback and information on how the two countries are managing their petroleum resources.

1.8.6 Data Collection Methods

This research study utilised both primary and secondary data. Secondary data on its own was insufficient in this study and this necessitated the collection of primary data from the field. The first hand information (primary data) from the field was collected through questionnaires and interview schedules and used to corroborate and authenticate the secondary data that was collected through document analysis method.

⁵² Jennifer Mason, *Qualitative Researching* (2nd ed.), (London: Sage publications, 2002), p. 32

1.8.6.1 Questionnaires and Interview Schedules

Primary data for was collected through the use of structured questionnaires and interview schedules. The questionnaires had close-ended questions (to generate quantitative data) and open-ended questions (to generate qualitative data).⁵³ The questionnaires were self-administered to the respondents. The researcher also used structured interview schedules tailor-made to extract the relevant information concerning oil resource management in the two countries.⁵⁴ The author conducted face-to-face interviews with key informants from different selected categories. There were also follow-ups through telephone and email interviews with the same respondents to get clarification of some information already collected.

According to Kvale and Svend⁵⁵, interviews describe the life events and experiences of the respondents with respect to analysis of the significance of the portrayed phenomena. As Gill et al. argue, the interviews are basically the correct technique to use when exploring sensitive topics (like oil resource management), to create conducive environment for respondent to take part.⁵⁶ A total of forty (40) key knowledgeable informants were interviewed in this study and this number surpassed Bernard's proposition of having ten to twenty knowledgeable respondents that are conceivably enough to uncover and understand core categories in any research study.⁵⁷ In view of this, the sampled number was adequate enough to contribute to empirical facts assembled.

⁵³ See appendix 1 showing the research questionnaire used (page 164)

⁵⁴ See appendix 2 showing the interview schedule used (page 168)

⁵⁵ Steinar Kvale and Brinkmann Svend, *Interviews: Learning the Craft of Qualitative Research Interviewing* (2nd ed.), (London: Sage publications, 2009), p. 1

⁵⁶ Paul Gill et al., "Methods of data collection in qualitative research: interviews and focus groups," *British Dental Journal*, Vol. 4, no. 6, (2008): 291-295, 292

⁵⁷ Russell, *Research Methods in Anthropology*, p. 28

1.8.6.2 Document Analysis

Secondary data was obtained through document analysis of existing literature related to natural resource management; resource curse thesis; oil price shock and its impacts on macroeconomic activities; institutional frameworks in oil sector governance; legal regulatory frameworks in petroleum industry; and, fiscal regimes used in extracting, managing and regulating revenues collected from the petroleum sector.

The review and analysis of both published and unpublished materials from books, journals, articles, newspapers, conference papers, archive reports, internet and other relevant sources generated factual data about the theme and shaped the research questions as well as led to the selection of the theoretical framework used in this study. Document analysis as a research strategy complemented questionnaires and interview schedules used as primary data collection methods in assembling empirical data in this research project.

1.8.7 Data Analysis

The data collected was analysed using a combination of qualitative and quantitative methods of statistical analysis. The analysis of the frequencies, percentages, and other quantitative values paid special focus on determining the constant variables as well as the level of correlation between key variables. The analysed quantitative data is presented in graphs, charts and tables. Part of the qualitative data was categorised into similar groups after which the groups were coded then keyed in as quantitative data. However, the qualitative data, which was collected in a narrative form, was used to explain the quantitative values, which had been generated from the quantitative analysis.

1.8.8 Scope and Limitations of the Study

This study was confined in analysing the management of oil resource in Norway and Nigeria through the lenses of four main aspects (policy, institutional organisation, regulatory practices and fiscal regimes) to restrict the scope while giving a broad overview. The study did not quantify the value that each of the aspects or framework actually contributes to the management of petroleum resources. Moreover, the quality of the political leadership that drives petroleum resource management in a host country was outside the scope of this study.

The author of this study encountered some challenges during the collection of empirical data from the field. Some officials from oil companies in Nigeria were professionally elusive because they were trying to protect their own vested interest and image of their companies which deterred them from giving some detailed facts about their operations in petroleum industry in Nigeria. To curb this problem, the researcher was able to produce a formal academic recommendation letter from the University to prove to and assure these respondents that the data collected was only strictly intended for academic purposes.

In general, the study did not encounter any situations that compromised any ethical boundaries in gaining access to important data. During data collection, analysis, interpretation and presentation, the research took into consideration ethical issues of confidentiality, anonymity of the respondents and gaining informed consent from the respondents to participate in the study.

1.9 Definition of Key Concepts

Oil resource management: In this study refers to the efforts to organize and coordinate activities in petroleum sector in order to transform oil-resource into sustainable development riches; benefit a country's present and future generations. It generally denotes authority, decision-making and accountability in petroleum sector and it ties together political, economic and social aspects. This term is interchangeably used with governance in this research study.

Sustainable development: Development of petroleum resources in order to meet the needs of the present without compromising the ability of the future generations to meet their own needs. It encompasses three interconnected pillars – economic development, social development and environmental protection.

Policy: In this study, policy is defined in the context of natural resource development as the current position or focus of a government in developing petroleum resources and will usually encompass political and fiscal policies.

Oil-led development: This is development based on overwhelming dependence on revenues from the export (and not the internal consumption) of petroleum, as measured by the ratio of oil and gas to GDP, total exports, and the contribution to central government revenues.

Resource curse: Refers to the negative growth and development outcomes associated with minerals and petroleum-led development. In its narrowest sense, it is the inverse relationship between high levels of natural resource dependence and growth rates.

Dutch disease: Is named after the negative effects of the North Sea oil boom on industrial production in the Netherlands. This phenomenon occurs when resource booms cause real exchange rates to rise and labour and capital to migrate to the booming sector. This results in higher costs and reduced competitiveness for other domestically produced goods and services, effectively “crowding out” previously productive sectors.

Rentier State: This is “a State that receives substantial rents from foreign individuals, concerns or governments.”⁵⁸ In general, this is a state that lives from externally generated rents rather than the surplus production of the population. In oil-exporting states, this is measured by the percentage of natural resource rents in total government revenues.

Rent seeking: The efforts, both legal and illegal, to acquire access to or control over opportunities for earning rents. In oil-dependent countries, rent seeking refers to widespread behavior, in both the public and the private sectors, aimed at capturing oil money through unproductive means.

Natural resources: These are non-artificial products situated on or beneath the soil which can be extracted, harvested or used as they can generate income or serves other functional purposes in benefiting mankind. This study mainly emphasizes on petroleum resources, majorly oil and gas.

Hotelling’s theory: Entails that it is important to regulate the rate of exploitation of petroleum resources to benefit from the rents it generates. The producer/resource owner is faced with two choices: either to dig the resource to get the economic value of it and invest it into other ventures that provide future cash flows or leave the resource in the ground until the time that the future value appreciates which makes it financially more valuable.

⁵⁸ Michael L. Ross, “Does Oil Hinder Democracy?,” *World Politics*, Vol. 53, no. 3, (2001): 325-361, 329

1.10 Chapter Outline

Chapter One provides the layout of the study. The chapter contains the introduction, background of the study, statement of the research problem, research objectives, literature review, research justification, theoretical framework, research hypotheses, research methodology, definition of key concepts in the study and outline of the chapters in the study.

Chapter Two considers and analyses the fundamental role played by petroleum policies in the development of petroleum industry in Norway and Nigeria. It explores the evolution and historical paths of development of petroleum industry in the two countries and highlights the key events and milestones that set stage for their petroleum activities. The chapter focuses mainly on the salient points of petroleum policies and the phases that the industry has undergone in the context of the two countries.

Chapter Three critically examines whether the institutional design and organisation in the petroleum industry in Norway and Nigeria have the competence to contribute in the management of petroleum resources in the context of the two countries. The Chapter delves particularly on the separation of functions between the government institutions vested with policy, regulatory and commercial roles in the petroleum industry in these two countries.

Chapter Four analysis the regulatory practices governing petroleum industry in Norway and Nigeria in order to assess how they have encouraged the sustainable development of petroleum resources. The Chapter focuses on two main regulatory tools: petroleum contracts and the award of petroleum licences in the two countries.

Chapter Five assesses and discusses the main fiscal regimes used by Norway and Nigeria in petroleum industry. The main objective of the Chapter is to examine the effectiveness of these regimes in extracting, managing and regulating revenues accrued from the petroleum industry in the two countries.

Chapter Six provides a critical data analysis, presentation and findings.

Chapter Seven provides a summary, conclusion and recommendations to the study.

CHAPTER TWO

PETROLEUM POLICIES IN THE DEVELOPMENT OF PETROLEUM INDUSTRY IN NORWAY AND NIGERIA

2.1 Introduction

As the owner of the petroleum resources, the State has a responsibility to ensure that these resources are developed and managed for the benefit of the country and its populace.¹ Therefore, it is the role of the State to assert control over the development and the management of the resources to maximise the economic and social benefits for the State and its citizens, while ensuring the least possible environmental harm.² This control is asserted by establishing, maintaining and enforcing a policy framework for the exploitation of petroleum resources. Hunter³ argues that policy framework should assert adequate control over petroleum production, the producers (the participants), and the environment, whilst at the same time seeking to implement national petroleum objectives.

In the context of natural resource development, policy is the current position or focus of a government in developing and managing a natural resource with aim to pump back the resource benefits into the resource rich country hence promote sustainable development. According to Paolo de Sa⁴, resource policy is determined by the complex interaction of many factors, including a country's resource potential, location in the world, political stability and current infrastructure. Sustainable development of petroleum resources in particular, is directly linked to

¹ This responsibility is articulated at an international level in Article 1 of United Nations General Assembly Resolution 1803 (XVII) of 14 December 1962, *Permanent Sovereignty over Natural Resources*. Adopted by General Assembly Resolution 1803 (XVII) of 14 December 1962.

² Hunter, "The Role of Regulatory Frameworks," p. 53

³ Hunter, "The Role of Regulatory Frameworks," p. 54

⁴ Paolo de Sa, "Mineral Policy: A World Bank Perspective," *International and Comparative Mineral Law and Policy*, Vol. 2, no. 1, (2005): 494-499, 497

resource exploitation policy, since it is fiscal, regulatory, depletion and economic diversification policies that interact to create conditions conducive to generating and sustaining resource wealth.⁵ State ownership of petroleum resources and the strong State interests in petroleum activity makes a strong link between the petroleum policy, the institutional framework, and the legal regulations. The state has to develop regulations and institutions that will create a development in line with the policy of the state. Since each state has to deal with the international petroleum industry and the highly commercial market of petroleum, it is a complicated task to achieve the policy objectives of each state.

Under this background, this Chapter examines the impact of petroleum policies in the development of petroleum industry in Norway and Nigeria. It explores the historical paths of development of petroleum industry in the two countries and highlights the key events and milestones that set stage for their petroleum activities. For better understanding of petroleum resource management in these two countries, it is important to look back at the events that shaped the nations' petroleum sectors as they stand today. The chapter focuses mainly on the salient points of petroleum policies and the phases that the industry has undergone in the context of the two countries.

This Chapter is divided into two main sections. The first section concentrates on discussing the role of petroleum policies in the evolution and development of petroleum industry in Norway. The second section discusses the role of petroleum policies in the evolution and development of petroleum industry in Nigeria. At the end of the Chapter, a conclusion is drawn based on the discussions above.

⁵ Richard M. Auty, *Resource Abundance and Economic Development*, (Oxford: Oxford University Press, 2001), p. 18

2.2 Evolution and Development of Petroleum Industry in Norway

Norway was a small country with 3 million people with shipping, fishing and hydroelectric industry dominating its economy before the discovery of oil in the Norwegian Continental Shelf (NCS) in 1969.⁶ Scepticism had always prevailed with the discovery of oil within Norwegian territory as late as 1958, and the Norwegian Geological Survey (NGS) even wrote in a letter to the Ministry of Foreign Affairs, which represented Norway at the Geneva Conference, that “one can exclude the possibility of finding coal, sulphur or oil on the continental shelf bordering the Norwegian coastline.”⁷ However, major gas discovery in Groningen, Holland in 1959, accelerated International Oil Companies’ (IOCs) activities on the United Kingdom (UK) side.

Norway was reluctant on its stand with respect to the finer interpretations of the Geneva Convention. Nevertheless, *the Royal Decree of 1963* proclaimed sovereignty of Norway over its continental shelf.⁸ Median-line negotiations were still pending with the UK to determine fully the extent of NCS under Norway. The negotiations went smoothly and were closed before any petroleum activity began and major discoveries made.⁹ In the meantime, Norway was also making preparations to form a policy framework to govern the petroleum activities and thus appointed the Norwegian Petroleum Council in 1965.

⁶ Farouk Al-Kasim, *Managing Petroleum Resources: The 'Norwegian Model' in a Broad Perspective*, (Oxford: Oxford Institute for Energy Studies, 2006a), p. 8

⁷ Author’s interview with Farouk Al-Kasim (Senior Geologist, Founder and the President, PETROTEAM), Stavanger, September 8, 2015. Al-Kasim mentioned that even one geologist, in disbelief, said that “I will drink that oil if discovered.” Al-Kasim also stated that Trygve Lie – the former secretary general of the United Nations and then the representative of the Norwegian Department of Industry – when approached by a delegation from the Phillips Petroleum Company, said that the company was mistaken and that there was no oil or gas in Norway.

⁸ Al-Kasim, *Managing Petroleum Resources*, p. 10

⁹ Al-Kasim, *Managing Petroleum Resources*, p. 12

2.2.1 Non-Participatory Petroleum Policy

When the UK and Norwegian governments began formulating petroleum exploration and development policies in the 1960s, they decided early on that they could not accept the prevailing international relationship between governments and oil companies in the exploitation of sovereign petroleum resources.¹⁰ Whilst they knew that they did not want to accept the North American model of petroleum regulation, the governments did not have an alternative regulatory framework.

According to Brent¹¹, the UK government relied on precedent in commerce and industry, initially adopting a non-participatory approach in the early regulation of oil and gas. Given the inexperience of the Norwegian State in the regulation of petroleum resources, they emulated the UK's approach, initially adopting a similar non-participatory approach to regulation in the 1960s.¹² However, the Norwegian State was dissatisfied with this minimalist role of the State. Historically, Norway favoured strong State regulation and intervention in the management of natural resources, illustrated by the State's strong regulation of hydropower since the early 20th Century.¹³

The principles of Norwegian petroleum policy were, therefore, laid out in 1971 in the 'ten oil commandments.'¹⁴ These commandments underpinned Norwegian oil policy, dictating two essential policy elements that remain central to the Norwegian petroleum policy today: sound

¹⁰ Austvik Ole Gunnar, "The Norwegian Petroleum Experience as an Example?," *The International Shale Gas and Oil Journal*, Vol. 2, no. 2, (2014): 18-28, 19

¹¹ Nelsen Brent, *The State Offshore: Petroleum, Politics and State Intervention on the British and Norwegian Continental Shelves*, (Jos: Centre for Democratic Studies, 1991), p. 184

¹² Alexander G. Kemp, "An Assessment of UK North Sea Oil and Gas Policies: Twenty Five Years on," *Energy Policy*, Vol. 8, no. 7, (1990): 599-623, 605

¹³ Ole Gunnar, "The Norwegian petroleum experience as an Example?," p. 19

¹⁴ These were a set of 10 goals and strategies to guide national involvement in the development of petroleum resources throughout the value chain, whilst focusing on the protection of the environment. See Al-Kasim, *Managing Petroleum Resources*, p. 143

macroeconomic policy, and the creation of a State-owned oil company to participate in the exploitation of oil resources and develop domestic industry.¹⁵ Although Statoil has been partly privatised, it remains an important vehicle for the Norwegian national petroleum policy.

The ‘ten commandments’ outlined ten areas of importance for the Norwegian government in the exploitation of their petroleum resources.¹⁶ Firstly, the national management and control must be secured for all operations on the NCS. This included the coordination of Norwegian interests, and the creation of an integrated Norwegian oil community. Secondly, petroleum discoveries exploited in a way that makes Norway independent with regard to the supply of crude oil hence ensure energy security for Norway. Thirdly, new industrial activities (new livelihood) should be developed on the basis of petroleum. Fourthly, development of oil industry must take the necessary account of existing industrial operations and protect nature and environment.

Fifthly, flaring of usable gas on the NCS must not be accepted except for shorter testing periods. Sixthly, petroleum from the NCS must as a main rule be landed in Norway with the exception of individual cases where national policy provides for other solutions. Seventhly, State becomes involved at all feasible levels, contributes to a coordination of national interests within the petroleum industry, and to the development of an integrated oil environment with both national and international objectives. Eighthly, a State oil company be established to take care of the State’s commercial interests and to have a constructive collaboration with domestic and foreign petroleum interests. Ninthly, a pattern of activity be selected north of the 62nd parallel (i.e. outside the North Sea) which satisfies the special policy concerns that apply in this part of the

¹⁵ See Dag H. Claes, *Statoil: Between Nationalisation, Globalisation and Europeanization*, (Oslo: University of Oslo Press, 2010), p. 34-46: 39; see also Richard Gordon and Thomas Stenvoll, *Statoil: A Study in Political Entrepreneurship*, (James A Baker III Institute for Public Policy: Rice University Press, 2007), p. 3

¹⁶ See Ole Gunnar, “The Norwegian Petroleum Experience as an Example?,” p. 20; also see Al-Kasim, *Managing Petroleum Resources*, p. 179

country. Tenthly, Norwegian petroleum discoveries to a greater extent will present the Norwegian foreign policy with new tasks.

2.2.2 Nationalist and Protectionist ('Norwegianisation') Petroleum Policy

Norwegian petroleum policies throughout the 1980s and early 1990s followed the key Norwegian oil and gas policies that were developed in the early 1970s, thus there was a continued focus on national management and control of petroleum resources.¹⁷ Until the early 1980s, petroleum policy in the infant Norwegian petroleum industry was characterised by nationalist and protectionist policies. The objective of this nationalist strategy was to nurture and encourage Norwegian petroleum companies through information exchange, technology transfer and skilling to build the capacity for Norwegian companies to develop the petroleum resources.¹⁸ While these multinational firms were also intended to play an important long-term role, the focus of petroleum policy during the 1980s was the goal of building up a Norwegian oil community. Al-Kasim argues that protectionist policies in the form of a favourable procurement regime existed in Norway to assist in the development of domestic industries and this initial period of reliance on protectionist policies was reduced as knowledge and technology strengthened during the late 1980s and the early 1990s.¹⁹

¹⁷ Austvik Ole Gunnar, "Landlord and Entrepreneur: The Shifting Roles of the State in Norwegian Oil and Gas Policy," *Governance*, Vol. 25, no. 2, (2012): 315-334, 328

¹⁸ Ole Gunnar, "Landlord and Entrepreneur," p. 330

¹⁹ See Al-Kasim, *Managing Petroleum Resources*, p. 56; see also Ministry of Petroleum and Energy, *Facts 2003: The Norwegian Petroleum Sector*, (Oslo: 2003), p. 3.

2.2.3 The “Reluctant Common-Sense Partnership” Petroleum Policy

Upon entry into the European Economic Area (EEA) in 1994, Norway was required to implement *EC Directive 94/22/EC of 30 May 1994 “on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons (1994).”*²⁰ This, according to Al-Kasim²¹ meant that no longer could Norway favour Norwegian companies in the allocation of petroleum licences to encourage economic diversification. By this time, Norway had developed domestic industries that captured production cost spending, as well as diversifying many industries.²² This meant that whilst Norwegian companies could no longer be favoured, they were able to compete effectively with international companies.

Although the Norwegian petroleum policies have gone through a number of distinct phases, they have always been underpinned by the ‘ten oil commandments.’²³ To date, the petroleum licencing system is based on the policy of State direction and control. This had its genesis in the early 1970s as Norway debated what form the State control and participation would take. Norway has, therefore, continued to observe the ten oil commandments, although the emphasis of the Norwegian petroleum policy has shifted a bit. Today, there is a policy of internationalization,²⁴ spearheaded by Statoil as operator and participant in international oil fields. The reasoning for this was primarily to capitalise on Norwegian competence and

²⁰ See Austvik Ole Gunnar, “EU Regulation and National Innovation,” in *Innovative Regulatory Approaches Coping with Scandinavian and Europe Union Policies*, ed. Noralv Veggeland (New York: Nova Science Publisher, 2010), p. 103-130; see also European Union (EU), “Common rules for the internal market in natural gas and repealing Directive.” Council Directive 2003/55/EC. Directive 2009/73/EC 13.7.2009. (Brussels: EU, March 2011), p. 8

²¹ Al-Kasim, *Managing Petroleum Resources*, p. 61

²² Author’s interview with Lars Erik Aamot (Director General, Department of Oil and Gas, MPE), Oslo, October 7, 2015

²³ Author’s interview with Mr. Farouk Al-Kasim (Senior Geologist, Founder and the President, PETROTEAM), Stavanger, September 8, 2015

²⁴ Internationalisation in this context refers to the Norwegian Oil industry, (including Statoil Hydro, suppliers and associated industries) seeking to participate in petroleum activities in areas aside from the Norwegian Continental Shelf.

technology, exploit the potential of emerging markets to even out fluctuations in the level of petroleum activity on the NCS, and to acquire new technology and know-how.²⁵ This policy was pursued to ensure long-term value creation, continued industrial development and economic development for Norway and Norwegians.

2.3 Evolution and Development of Petroleum Industry in Nigeria

The petroleum industry history and the evolution of the NOC, the Nigerian National Petroleum Corporation (NNPC), are inextricably interlinked. Both are characterised by dynamics of the political economy of Nigeria emerging as an independent State and reaping the benefits of its petroleum resources while witnessing changes in governances from military regimes to civilian governments. Ethnic tensions also colour the political economy of Nigeria, with the North dominated by the Hausa-Fulani tribes, the West by the Yorubas and the East by the Igbos.²⁶

2.3.1 The Concessionary Policy

The concessionary era had its roots in the first oil exploration work by the German Bitumen Company based on a 1914 colonial Minerals Oil Ordinance granting to British personnel and companies the monopoly of oil concessions in Nigeria.²⁷ This was quite natural since Nigeria was a commonwealth British colony at that time. It was under this same law that Shell d'Arcy was granted an oil concession covering the entire Nigerian mainland in 1938 and it eventually

²⁵ Tina Hunter, "The Offshore Petroleum Regulatory Frameworks of Australia and Norway," *Oil, Gas & Energy Law Intelligence* vol. 18, no. 4 (2010), p. 18-56: 23

²⁶ Augustine Ikelegbe, "Economy of Conflict in the Oil rich Niger Delta Region of Nigeria," *African and Asian Studies*, Vol. 5, no. 1, (2006): 23-56, 26

²⁷ Cyril Obi, "Globalisation and Local Resistance: The Case of the Ogoni versus Shell," *New Political Economy*, Vol. 2, no. 1, (1997): 137-148, 141

struck oil in a commercial quantity in 1956 in Oloibiri (present-day Bayelsa State) in the Niger Delta and this formally marked the inception of oil era in the country.²⁸

The discovery of oil, then, set up the stage for the entry of other international oil companies (IOCs) such as Mobil, Texaco, Esso, Agip and Safrap, that took up the oil acreages given up by Shell in 1958.²⁹ During this period, Thurber et al argue that Nigeria relied heavily on the expertise of the IOCs to develop its petroleum industry and this meant that the State earnings were limited to the royalty payments by these IOCs.³⁰ The presence and the involvement of these companies depict the fact that this early era of the oil industry was characterised by foreign control and non-participation by the Nigerian State, which instead, simply collected rents and taxes.³¹

2.3.2 State-Participation ('Nigerianisation' or Indigenization) Policy

The trend involving concessions changed as a result of various events that happened in this period.³² The key among these events included the increased contribution of oil to national revenues, the 'OPEC revolution' that led to the quadrupling on international oil prices, and the economic nationalism of the Nigerian post-civil war military government that embarked on the indigenization of the oil industry.³³ By enacting *Decree No. 51 of 1969*, the Federal military

²⁸ Nigerian National Petroleum Corporation (NNPC), *Development of Nigeria's Oil Industry (2014)*, [Accessed February 18, 2015],

<http://www.nnpcgroup.com/NNPCBusiness/BusinessInformation/OilGasinNigeriDevelopmentoftheIndustry.aspx>

²⁹ Ugo G. Nwokeji, *The Nigerian National Petroleum Corporation and the Development of the Nigerian Oil and Gas Industry: History, Strategies and Current Directions*, (Houston: Rice University Publisher, 2007), p. 23

³⁰ Thurber, Emelife and Heller, "NNPC and Nigeria's Oil Patronage," p. 14

³¹ Author's interview with Mr. Augustine Ogusi (Director, Nigerian Local Content Development Unit), Abuja, June 10, 2015

³² See Laura Hosman, "Dividing the Oils: Dynamic Bargaining as Policy Formation in the Nigerian Petroleum Industry," *Review of Policy Research*, Vol. 26, no. 5, (2009): 609-632, 613; also see Perekunah Bright Eregha and I. R., Irughe, "Oil Induced Environmental Degradation in the Nigeria's Niger Delta: The Multiplier Effects," *Journal of Sustainable Development in Africa*, Vol. 11, no. 4, (2009): 28-39, 32

³³ Kaniye S. Ebeku, "Oil and the Niger Delta People: The Injustice of the Land Use Act," *Law and Politics in Africa, Asia and Latin America*, Vol. 35, no. 2, (2002): 201-231, 212

government transferred “the entire ownership and control of all petroleum in, under or upon any lands” to Nigeria.³⁴ The government, therefore, took up equity participation in all oil marketing IOCs, and merged the Ministry of Petroleum Resources with the Nigerian National Oil Corporation (NNOC) to form the Nigerian National Petroleum Corporation (NNPC) in 1977.³⁵ The NNPC represented the State’s majority interest in the oil industry including its equity interest based both in the upstream and downstream sectors of the oil industry.³⁶

In the downstream stream sector, the Federal government nationalized some oil marketing companies, taken over Port Harcourt I which was built by Shell-BP in 1963, built three new oil refineries – Warri (1978), Kaduna (1980) and Port Harcourt II (1989).³⁷ In addition, the State commissioned petrochemical plants at Ekpan (near Warri), Eleme (Port Harcourt II) and the Kaduna refinery with the expectation to use the feedstock from the refineries to produce raw materials for the manufacturing sector. All these were State’s reactions to ensure secure supplies of refined products for the rapidly growing domestic market and provide revenue for the government.³⁸

While Nigeria gained national ownership of the oil, it lacked the technological expertise of the sophisticated working of the oil industry. In an attempt to bridge this gap, the government embarked on the indigenisation of the top management positions in all foreign oil companies

³⁴ Author’s interview with Mr. George Osahon (Director, Department of Petroleum Resources, DPR), Abuja, June 12, 2015

³⁵ Lawrence Atsegbua, “The Development and Acquisition of Oil Licences and Leases in Nigeria,” *OPEC Energy Review*, Vol. 23, no. 1, (1999): 55-77, 59

³⁶ The upstream sector of the oil industry refers to the processes related to the exploration and production of petroleum (oil) and natural gas. The downstream sector of the oil industry refers to the processes related to the refining, storage, distribution and sale of refined products such as fuel, petrochemicals and gas.

³⁷ Michael Watts, “Resource Curse? Governmentability, Oil and Power in the Niger Delta, Nigeria,” *Geopolitics* vol. 9, no. 1 (2004): 50–80, 72

³⁸ Author’s interview with Mr. Emmanuel Bekee (Head, Upstream Monitoring and Regulation, Department of Petroleum Resources, DPR), Stavanger, June 15, 2015

operating in the country at that time.³⁹ Moreover, it established the Petroleum Trust Development Fund and Petroleum Technology Development Fund (PTDF) meant to support the training of Nigerian oil professionals, and, the development of local oil infrastructure and research.⁴⁰ Furthermore, there was an establishment of a Petroleum Training Institute (PTI) in Warri with an aim to train technicians for the oil industry.

In 1977 and 1981, there was a sudden downturn in global oil prices which had disastrous consequences for Nigeria.⁴¹ Nigeria's oil-dependent economy went into recession as oil exports and revenues shrank. The country had already entered discussions with the International Monetary fund (IMF) in order to curb the situation at hand. It was thus in 1986 during General Babangida's reign that the adoption of a 'home grown' Structural Adjustment Program (SAP) was approved by the IMF, the World Bank (WB) and the country's creditors.⁴²

2.3.3 The Deregulation/De-Indigenisation Policy

It was within the rubric of the SAPs that a deregulation programme where the emphasis was on rolling back State participation in the economy and it began with the 'de-indigenisation' of the oil industry; opening up the oil sector to foreign and local private investments.⁴³ This started with the removal of domestic petroleum product price subsidies, which in reality was the aligning of domestic prices to international prices of petroleum products. The government used "appropriate

³⁹ Author's interview with Professor Adebayo Adedeji (External Affairs Manager, Shell Petroleum Development Company of Nigeria Limited, SPDC), Warri (Niger Delta), July 10, 2015

⁴⁰ Author's interview with Dr. Maikanti Baru (Group Managing Director, NNPC), Abuja, June 18, 2015

⁴¹ K.evin K. Tsui, "More Oil, Less Democracy: Evidence from Worldwide Crude Oil Discoveries," *The Economic Journal* vol. 121, no. 551 (2011): 89-115: 96

⁴² Odochi, "The Politics of Conflict over Oil," p. 389

⁴³ Augustine A. Ikein, *The Impact of Oil on a Developing Economy: The Case of Nigeria*, (New York and London: Praeger Publisher, 1990), p. 12

pricing” to deregulate the price of petroleum products by allowing it to rise upwards in order to raise revenue, hence curtailed domestic demand and freed more oil for export purposes.⁴⁴

The government sold off its equity participation in some of the downstream oil marketing companies as well as commercialized the NNPC.⁴⁵ In terms of the critical upstream oil production sector, the government sought to promote more investments by the IOCs through a package of incentives and placing new oil blocks in the deep offshore and onshore on offer.⁴⁶ These were directed at increasing oil production and exports with a view to producing revenues for external debt management and economic recovery programmes.⁴⁷ In addition, some Nigerian Companies also got licenses to explore for, and produce oil. However, due to the huge capital requirements involved, most of these companies remained marginal players even to date.⁴⁸ This therefore, enabled IOCs to consolidate their hold over the industry, concentrating and dominating both the upstream sector and downstream marketing sector till this day.

When a new democratic government under Olesgun Obasanjo came to power in 1999, there was a boost for the deregulation process of oil industry in Nigeria. Obasanjo’s regime hinged on a commitment to market-based reforms which it felt was the basis of economic efficiency and growth in the country at that time.⁴⁹ However, the hard reality was that State-owned refineries were beset by technical problems and operated well below their installed capacities in spite of

⁴⁴ Christopher N. Ekong and Ekpeno L. Effiong, “Oil Price Shocks and Nigeria’s Macroeconomy: Disentangling the Dynamics of Crude Oil Market Shock,” *Global Business Review*, Vol. 16, no. 6, (2015): 920-935, 926

⁴⁵ Declan A. Amaraegbu “Violence, Terrorism and Security Threat in Nigeria’s Niger Delta: An Old Problem Taking a New Dimension,” *African Journal of Political Science and International Relations*, Vol. 5, no. 4, (2011): 4-29, 12

⁴⁶ Author’s interview with Mrs. Onyebuchi Sibeudu (Head, Safety, Health and Environment, Department of Petroleum Resources, Department of Petroleum Resources, DPR), Abuja, June 17, 2015

⁴⁷ Author’s interview with Mr. George Osahon (Director, Department of Petroleum Resources, DPR), Abuja, June 12, 2015

⁴⁸ Amaraegbu “Violence, Terrorism and Security,” p. 15

⁴⁹ Alexandra Gillies, “Obasanjo, the Donor Community and Reform Implementation in Nigeria,” *The Round Table*, vol. 96, no. 392 (2007): 569-586, 574

the fact that between 1999 and 2003, about \$250 million was spent on the repair and maintenance of oil depots, pipelines and other oil infrastructure.⁵⁰

From 2000 onwards, the Federal government divested its shares from the oil marketing companies, and this move resulted in the privatization of these companies. The government invited investors to bid for the establishment of private refineries in the country. The expectation was that, the new investments would expand private-domestic participation in the downstream sector, while at the same time making up for the shortfall in domestic product's supplies as a result of the near-collapse of Nigeria's four refineries.⁵¹ In 2002, about eighteen companies were given approval to build refineries in Nigeria, and this move was actualized in 2006 when the government and some IOCs had concluded plans to build refineries with a combined installed capacity of approximately 1 million barrels per day.⁵²

⁵⁰ See Amaraegbu "Violence, Terrorism and Security," p. 19; also see Gillies, "Obasanjo, the Donor Community," p. 560

⁵¹ See Amaraegbu "Violence, Terrorism and Security," p. 23

⁵² Patrick Heller, *The Nigerian Petroleum Industry: Key Upstream Questions for the National Assembly*, (New York: Revenue Watch Institute, 2009), p. 14

2.4 Conclusion

Evolution and development of Petroleum industries in Norway and Nigeria portrays the interwoven relationship between politics and economy which saw the relations between the two States and the foreign oil companies in the oil sector take different directions at different stages of petroleum resource development. It can be argued that even with the similarities in terms of the discovery of oil, the petroleum policy evolved and developed very differently in the two oil-rich countries. While Norway benefited from having some industry experience and a mature industry supporting the economy way back before the oil was found,⁵³ this was certainly not the case for Nigeria, which was not only overwhelmed with its new found riches but the characteristic of its political economy saw competition among its own people to gain a bigger share of the ‘oil pie.’

Norway has been cautious and prudent with its petroleum industry, with well formulated and consistent petroleum policies spanning a longer time horizon. Nigeria on the other hand, routinely experienced changing governance, each of which tried to shape the industry in a manner most profitable to those in power and thus characterizing *‘The Roving Bandit Effect.’* From the onset, Norway was also very careful in separating State’s interest and the commercial interest of its NOC, which has become an epitome of its petroleum sector governance. Nigeria on the other hand, focused more on restructuring its NOC to serve as a means of ‘siphoning’ the oil rents it generated, than on looking at the bigger picture and propelling the NNPC in competition with the IOCs.

⁵³ Thurber, Emelife and Heller, “NNPC and Nigeria’s Oil Patronage,” p. 39

By looking at the manner in which the petroleum industry has evolved and developed in Norway and Nigeria, it is not hard to see that petroleum policies have played a fundamental role in the industry; though with positive results in Norway as compared to Nigeria. That very well puts into perspective the design and major forces shaping the management of petroleum resources in these two countries.

CHAPTER THREE

INSTITUTIONAL DESIGN AND ORGANIZATION IN THE PETROLEUM INDUSTRY IN NORWAY AND NIGERIA

3.1. Introduction

Once a country has established that it has petroleum potential, it must decide as early as possible on the kind of institutions that are needed to administer petroleum operations. A common model used by most countries is to delegate petroleum policy issues to a ministry which is responsible for energy, mining, industrial activities or a combination of these.¹ The minister thus becomes the link to the Cabinet or the Council of Ministers where decisions on major policy issues related to petroleum are taken. The responsible ministry will usually establish an entity (a bureau, a directorate, an authority or a company) within its organization or directly under its line of command that will provide the technical and professional support to the minister in administering and regulating petroleum activities.²

It should be noted that upstream operations in petroleum industry are not only risky, capital intensive but also require technical know-how. In many cases, host countries (HCs) lack this technical know-how and must rope in the services of the International Oil Companies (IOCs) to extract the petroleum resources.³ Consequently, the exploitation of petroleum resources establishes a symbiotic relationship between a State and IOCs. The oil companies need the State since it is the owner of the resource the companies wish to exploit. The State requires the oil

¹ Al-Kasim, *Managing Petroleum Resources*, p. 173

² Al-Kasim, *Managing Petroleum Resources*, p. 174

³ Bayulgen Oksan, *Foreign Investment and Political Regimes: The Oil Sector in Azerbaijan, Russia and Norway*, (Cambridge: Cambridge University Press, 2010), p. 35

companies to contribute the financial strength and technology needed to explore the resources, and assume the exploration and production risk.

While the State and the company commissioned to extract the petroleum resource need each other for the petroleum exploitation to occur, they both have different objectives.⁴ On one hand, the oil company is interested in diversifying its risk portfolio across petroleum fields in different countries with different geological structures. The other value addition for the company to engage in petroleum activities is to accelerate its own learning curve and carve a technological niche. On the other hand, the State's primary focus is to satisfy national objectives as defined in its petroleum policies. The State not only ensures that the resource generates value for the economy but it also captures maximum portion of the rent, builds local capacity, and enhances other industry involvement in processing of petroleum products.⁵

The State creates an institutional structure to manage petroleum operations and interface with the IOCs to eventually help extract the resource and derive economic value from it. This Chapter, thus, compares how the institutional design and organisation in the petroleum industry in Norway and Nigeria has contributed to the management of petroleum resources in these countries. It delves particularly on the separation of functions between the government institutions vested with policy, regulatory and commercial roles in the petroleum industry in these two countries.

The Chapter is separated into three main parts where the first part discusses in a broader perspective how the different States have administered petroleum industry in the 20th Century.

The second and the third parts discuss the institutional design and organization in the petroleum

⁴ See Hassan Bougrine, "Oil: Profits of the Chain Keepers," *International Journal of Political Economy*, Vol. 35, no. 2, (2006): 35-53, 38; see also Al-Kasim, *Managing Petroleum Resources*, p. 180

⁵ Barma et al., *Rents to Riches?*, p. 34

industry in the Norwegian and Nigerian contexts respectively. Finally, the Chapter concludes with a summary of key ideas discussed above.

3.2. The State's Petroleum Administration

3.2.1 Institutional Structure in the Petroleum Administration

In many countries that began petroleum activities in the middle of the last century, it was customary to entrust both the commercial and regulatory functions of the government to a national oil company (NOC).⁶ Typically, the company was 100 percent owned by the government, often with at least a senior minister or the president as its chairman. Victor and Boscheck argue that under this model, “the national company was allocated all rights to petroleum resources in the country and was expected to seek IOCs as partners to help it explore and develop these resources.”⁷ This meant that the function of licensing including the conduct of negotiations with IOCs was undertaken by the NOC with some consultation with the minister responsible for oil and gas. The resulting contract or agreement was usually ratified by the Cabinet or the president as the case may be.

Typically, the licence or concession was awarded to the State oil company which in turn entered into a contract with a foreign oil company.⁸ The form of the contract signed between the companies was a Production Sharing Agreement (PSA) type contract. In this model agreement, the government received its share in the form of profit oil which was assigned to the NOC to

⁶ See Baker Institute Energy Forum, *The changing role of NOCs in International Energy Markets: Report Series*, (Houston: Rice University, 2007), p. 17; see also Al-Kasim, *Managing Petroleum Resources*, p. 174

⁷ See David G. Victor, David R. Hults and Mark C. Thurber, *Oil and Governance: State-Owned Enterprises and the World Energy Supply*, (Cambridge: Cambridge University Press, 2011), p. 23; See also Boscheck, “The Governance of Oil supply,” p. 379

⁸ See Peter A., Nolan and Mark C. Thurber, ‘On the State’s Choice of Oil Company: Risk Management and the Frontier of the Petroleum Industry,’ *Program on Energy and Sustainable Development*, Working Paper 99, (December, 2010), p. 6; see also Al-Kasim, *Managing Petroleum Resources*, p. 174

dispose off in the best possible manner on behalf of the government. The government received a royalty and collected tax on the profit made by the IOCs and the NOC. According to Victor et al⁹, because the NOC is fully owned by the government, the practice in most countries using this model has been to leave the funds in the NOC with the objective of securing its growth and development.

Unfortunately, however, the reality has been at variance with the States' national objectives. The NOCs have in most cases developed into power centres in the economic and political structure of their respective countries.¹⁰ Moreover, they have been associated with questionable practices that seem to have prevailed without government intervention. Al-Kasim¹¹ suggests that tying the minister or Cabinet to national interests, for example by having to seek the approval of parliament, would reduce the risk of power being abused to serve more limited party or other interests. For this to work effectively, however, the normal mechanisms of democratic governance must function well within the State.

Another serious problem with the model was the unfortunate mixing of business and regulatory functions in one and the same entity.¹² In most countries using this system, the NOC was made responsible for both of these two distinct functions. The administration of the government's commercial interest is of course a commercial function, and the fact that governments usually allowed the NOC to retain profit for its own commercial development further emphasised the company's commercial objective.¹³ On the other hand, the assignment of regulatory functions to the same company was, to say the least, confusing to the IOCs. According to Al-Kasim, from a

⁹ Victor, Hults and Thurber, *Oil and Governance*, p. 28; Oksan, *Foreign Investment and Political Regimes*, p. 38

¹⁰ Lislle Lopez, *Reconciling Tensions Between Company and State: State-owned Enterprises and the World Energy Supply*, (Cambridge: Cambridge University Press, 2012), p. 12

¹¹ Al-Kasim, *Managing Petroleum Resources*, p. 163

¹² Victor, Hults and Thurber, *Oil and Governance*, p. 31

¹³ Boscheck, "The Governance of Oil supply," p. 383

commercial point of view, these companies are both partners and competitors to the national oil company.¹⁴ Assigning a regulatory role to the national company under these circumstances has, therefore, undermined the impartiality of the regulatory authority. It may also be said that it has disrupted the business trust between the oil companies and the national oil company.

Competition will only serve the interest of the host country if there is a fair and impartial ‘judge’ who will criticise and reward justly. The NOC does not fit the bill of impartiality, simply because it has its own business interests to protect and promote. This is likely to colour its judgement as a regulatory body. Parra argue that the negative experiences with assigning the two distinct functions to the NOCs have thus led to many oil-rich nations in the last couple of decades to abandon this model.¹⁵

3.2.2 Technical Competence in the Petroleum Administration

The government’s petroleum administration is it’s window to the industry. When trying to evaluate the merits of starting exploration activities in a new country, the IOCs prefer to visit the country and talk to officials in the responsible ministry as well as the body (s) responsible for petroleum administration. Through his many years of experience working in the Norwegian petroleum industry, Al-Kasim pointed out that the IOCs basically look for two requirements in a host country.¹⁶ Firstly, a fundamental understanding of the industry’s requirements, and secondly, a clear statement of the country’s own aspirations and expectations expressed in the national policy, laws and regulations. Therefore, the better these two sets of interests are

¹⁴ Al-Kasim, *Managing Petroleum Resources*, p. 175

¹⁵ Francisco Parra, *Oil Politics: A Modern History of Petroleum*, (London and New York: I.B. Tauris, 2009), p. 67; see also Al-Kasim, *Managing Petroleum Resources*, p. 176

¹⁶ Author’s interview with Mr. Farouk Al-Kasim (Senior Geologist, Founder and the President, PETROTEAM), Stavanger, September 8, 2015

understood and reconciled in the country's licensing policies, legislation and regulatory practices, the more attractive the country will be to the IOCs.

The problem is that in the early stages of petroleum activities, most host countries lack previous knowledge of petroleum operations. They often have no experience in dealing with oil companies or licensing issues. For these reasons, Mommer¹⁷ argues that, many countries have tried to bridge the gap by employing international consultants, at least in the initial stages of trying to build up their own competence. This practice will of course help, but only if there is good communication between the consultants and the real decision makers in the country.

3.3 Institutional Design and Organization in the Norwegian Petroleum Industry

To ensure that the petroleum industry takes important public interests into account and that resources are utilised as effectively as possible to the benefit of both the State and the IOCs, the Norwegian government has designed and organized the petroleum industry with clearly defined and well coordinated areas of responsibilities.¹⁸

Norway is well known for an administrative system in which it assigns petroleum industry functions to three distinct state-controlled institutions, each with its own distinct role.¹⁹ First, there is the policy making body, the Ministry of Petroleum and Energy (MPE), which works with the country's political leadership in setting goals for the sector. Second, there is the regulatory and technical advisory agency, the Norwegian Petroleum Directorate (NPD), whose main responsibility is to set petroleum regulations related to petroleum resource management. Third,

¹⁷ Bernard Mommer, *Global Oil and the Nation State*, (Oxford: Oxford University Press, 2002), p. 62

¹⁸ Author's interview with Professor Austvik Ole Gunnar (Professor, Norwegian Institute of International Affairs; BI Norwegian Business School), Stavanger, September 23, 2015

¹⁹ See Thurber, Emelife and Heller, "NNPC and Nigeria's Oil Patronage," p. 45; see also Al-Kasim, *Managing Petroleum Resources*, p. 240

there is the commercial entity, National Oil Company (NOC), Statoil, which today carries out extensive oil operations both in Norway and abroad.

The Norwegian approach has inspired admiration and imitation as the canonical model of good bureaucratic design for petroleum industry. Development institutions have explored whether oil-rich countries should adopt the so called the ‘Norwegian Model’ as a route to both better performance and enhanced transparency in their petroleum activities.²⁰ Although there are other institutions that are involved in the Norwegian petroleum operations, the three main institutions that form the ‘Norwegian Model’ are the only ones discussed in detailed in this Chapter.

3.3.1. Ministry of Petroleum and Energy (MPE)

The MPE is responsible for managing petroleum resources in the Norwegian Continental Shelf (NCS). It sets goals for the sector and makes plans to achieve these goals. It also ensures that petroleum activities carried out are in line with the guidelines set by the Parliament and the Government. In addition, it oversees the crucial licensing process. Furthermore, the Ministry also fully owns the State-owned companies such as Petoro AS, Gassco AS, and partially owns Statoil.

3.3.2. Norwegian Petroleum Directorate (NPD)

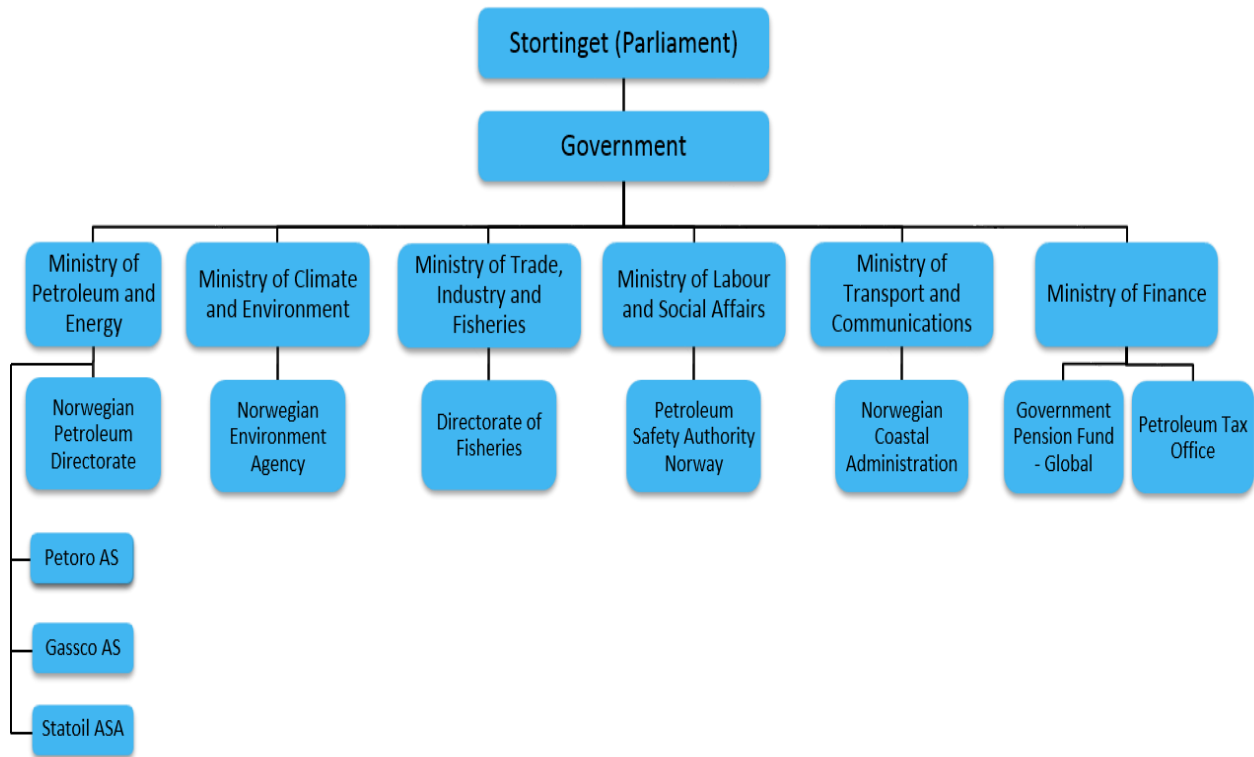
The NPD is the regulator of the petroleum sector and reports to the MPE. It is the technical advisory body for the MPE and the administrative authority for exploration and production of petroleum deposits. It also stipulates petroleum regulations and makes decisions under the petroleum activities, collects fees from oil operators, and is the primary authority responsible for collection, compilation and analysis of all data related to the Norwegian Continental Shelf (NCS).

²⁰ Al-Kasim, *Managing Petroleum Resources*, p. 242

3.3.3. Norwegian National Oil Company (NOC), Statoil

Statoil is the commercial arm of the Norwegian Model representing the State through active participation in the petroleum industry. The company is partially owned by the State with the State having a 67% ownership interest. It is an international public limited liability company, with operations in 33 countries and territories, and more than 23,000 employees worldwide.²¹ Statoil engages in exploration and production, natural gas supply, research and development (R&D), pipelines, and decommissioning. Seventy percent (70%) of the company's oil and gas production is from Norway.

Figure 1: Norwegian Petroleum Sector Organisation



Source: *The Ministry of Petroleum and Energy (MPE)*

²¹ Statoil, *Annual Report 2013*, [Accessed March 21, 2015], http://www.statoil.com/no/InvestorCentre/AnnualReport/AnnualReport2013/Documents/DownloadCentreFiles/01_KeyDownloads/AnnualReport20-F.pdf

3.4. Institutional Design and Organization in the Nigerian Petroleum Industry

Nigeria has also tried to design its petroleum sector with formal organisational relationships surprisingly similar to, and in fact pre-dating those of the Norwegian Model.²² Prior to Nigerian government direct participation in oil, the Ministry of Mines and Power had the task of managing the concessions given to foreign operators to extract the country's oil. In 1970, those working on hydrocarbons within the Ministry were split off as the Department of Petroleum Resources (DPR) to handle the growing regulatory demands.²³ With the creation in 1971 of Nigeria's original NOC, the Nigerian National Oil Company (NNOC), the Ministry, DPR, and NNOC formed a triumvirate quite similar in formal relationship to what Norway would create a year later with the Ministry of Industry, NPD, and Statoil.

Whereas in the Norwegian case all the three government bodies were able to hold their own and balance the others (although the NPD took some time to establish its niche), Nigeria's triad rapidly deteriorated in the face of a domineering permanent secretary at the Ministry who was able to subdue and eviscerate both NNOC and the civil servants at DPR.²⁴ Responding to the disastrous management of Nigeria's oil sector under this tripartite arrangement in the 1970s, and with the logic that it would be better to consolidate Nigeria's limited human talent in petroleum industry, the NNOC and the DPR were combined to form the Nigerian National Petroleum Corporation (NNPC) in 1977.²⁵

²² Mark C. Thurber, David R. Hults and Patrick R. P. Heller, *The Limits of Institutional Design in Oil Sector Governance: Exporting the 'Norwegian Model,'* (Stanford, CA, USA: PESD, Stanford University Press, 2010c), p. 12

²³ Thurber, Hults and Heller, *The Limits of Institutional Design in Oil Sector Governance*, p. 13

²⁴ Thurber, Hults and Heller, *The Limits of Institutional Design in Oil Sector Governance*, p. 16

²⁵ Thurber, Emelife and Heller, *NNPC and Nigeria's Oil Patronage*, p. 18

Formal regulatory independence was re-established in the 1980s, eliminated in 1998, and re-established again in 1999. However, even in periods of formal regulatory oversight (including the present one), the regulator has been unable to procure sufficient resources to effectively oversee and control the petroleum industry. The principal reason is that Nigeria's political system is built on a patronage network fueled by oil revenue, and those in power have been disinclined to support the development of a truly autonomous regulator that could constrain their ability to distribute spoils to kin and associates.²⁶

Currently, the Federal Government's absolute powers over the petroleum industry have been exercised primarily through four main government institutions, namely, the Presidency (the President and his top advisors), the Federal Ministry of Petroleum Resources (FMPR), the Department of Petroleum Resources (DPR), and the Nigerian National Petroleum Corporation (NNPC).²⁷ The President, who has often served as his own Minister of Petroleum (usually supported by a junior-level Minister of State for Petroleum), and his senior advisors on petroleum matters, along with the top leadership of the NNPC, 'form the inner circle for oil sector decision-making.'²⁸ The last three institutions are discussed in detail in this section. The information for the Nigerian petroleum sector organization is primarily sourced from the audit report of the Nigerian Extractive Industries Transparency Initiative (NEITI).²⁹

²⁶ Thurber, Emelife and Heller, *NNPC and Nigeria's Oil Patronage*, p. 26

²⁷ Author's interview with Mr. George Osahon (Director, Department of Petroleum Resources, Department of Petroleum Resources, DPR), Abuja, June 12, 2015

²⁸ Thurber, Emelife and Heller, *NNPC and Nigeria's Oil Patronage*, p. 28

²⁹ Nigerian Extractives Industries Transparency Initiative, *Report 2013*, [Accessed May 19, 2015]
<http://eiti.org/files/NEITIEITI-CoreAuditReport-Oil-Gas-2009-2011-310113New-4.pdf>

3.4.1. Federal Ministry of Petroleum Resources (FMPR)

This is the government administrative arm that deals with policy formulation and provides the general direction to other agencies in the sector for the exploration and production of petroleum resources. It also oversees all other sectors including downstream, midstream and oil services. The Minister of Petroleum Resources supervises the Ministry.

3.4.2. Department of Petroleum Resources (DPR)

The DPR is aligned under the Federal Ministry of Petroleum Resources. It functions as the official industry regulator, with the responsibility to oversee or supervise the activities of all companies licensed to operate in the industry, including the NNPC.³⁰ It is charged with processing all applications for licenses and leases in the industry; ensuring compliance of all industry operators with applicable national regulations and good oil producing practices; enforcing safety and environmental standards; keeping and updating records on petroleum industry operations; ensuring timely and adequate payments of all rents and royalties to the government; promoting and monitoring progress towards the enhancement of local content (or indigenization) of the petroleum industry; and, providing appropriate technical advice on oil industry matters to the government.

³⁰Author's interview with Mrs. Onyebuchi Sibeudu (Head, Safety, Health and Environment, Department of Petroleum Resources, DPR), June 17, 2015

3.4.3. Nigeria National Petroleum Corporation (NNPC)

The NNPC is Nigeria's NOC through which the Federal Government of Nigeria (FGN) participates in the petroleum industry. It is wholly (100%) owned by the state and is a fully vertically integrated oil company. The NNPC is a holding company with 11 fully owned subsidiaries and 2 partially owned subsidiaries or Corporate Business Units.³¹

The NNPC is a sector manager and quasi regulator of the petroleum industry through National Petroleum Investment Management Services (NAPIMS), with secondary responsibilities for upstream and downstream development.³² Furthermore, the NNPC's other functions can be categorized as follows: Buyer and seller of oil and refined petroleum products; plays operational role in upstream, downstream and gas transport activities; and, service provider to the Nigerian petroleum sector.³³

The NAPIMS is one of the 11 fully owned subsidiaries of NNPC, and it interfaces with the IOCs by acting as a government agent by entering in PSCs while being the approver for yearly budgets for IOC led JVs, as well as engaging in frontier exploration services in basins where IOCs are reluctant to venture into.³⁴

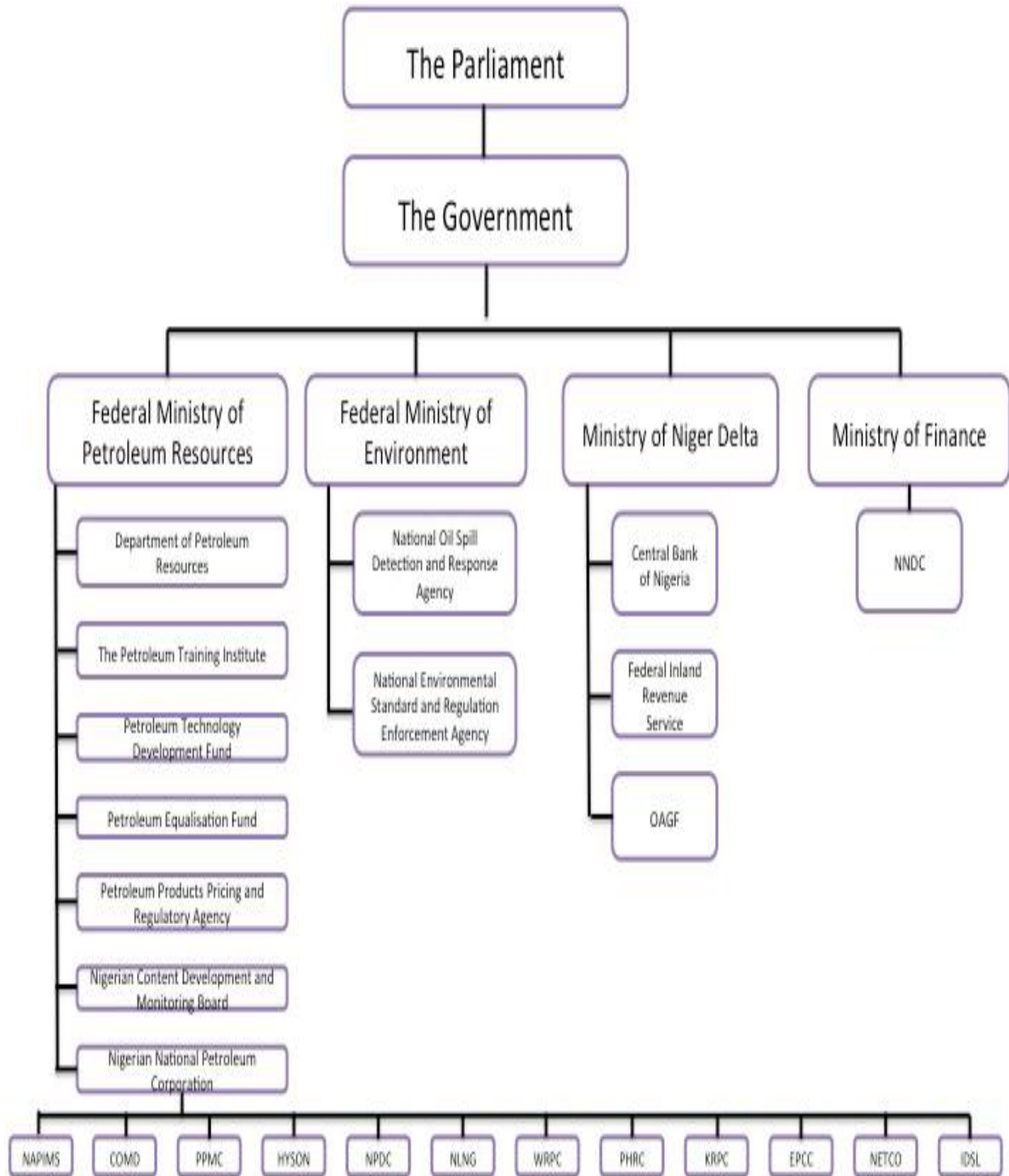
³¹ Nwokeji, "The Nigerian National Petroleum Corporation," p. 34

³² Author's interview with Mr. Chidi Momah (Legal Adviser, NNPC), Abuja, June 25, 2015

³³ Author's interview with Dr. Maikanti Baru (Group Managing Director, NNPC), Abuja, June 18, 2015

³⁴ Thurber, Emelife and Heller, *NNPC and Nigeria's Oil Patronage*, p. 17

Figure 2: Nigerian Petroleum Sector Organisation



Source: Author's own based on data from Federal Republic of Nigeria & NNPC

3.5 Conclusion

The Norwegian and Nigerian cases present a complex and nuanced picture of the optimal role for separation of functions in petroleum administration. Norway's petroleum sector design and organisation is characterised by clear separation of roles with an extremely successful national oil company (NOC). In Nigeria's case, even though the petroleum sector organisation shows a clear separation of roles on the surface, the functional dynamics are littered with duplication of functions, weak governance and a powerful NOC that has become a '*State within a State.*' While Norway has indeed implemented separation of functions in managing its petroleum resources, Nigeria has tried to separate regulatory and commercial functions in oil sector but has been unable to robustly establish such a separation in anything other than in a strictly formal sense.

In addition, Norway has been diligently building technical capacity in the petroleum sector, both in administrative sense and on the technological front, while Nigeria has mostly failed to do so. Therefore, while Norwegian institutional design and organisation have financial resources and technical capacity to competently contribute in the management of petroleum resources in the country, Nigeria's institutional design and organisation lack both the financial resources and technical capacity to competently contribute in the management of petroleum resources in the country.

In conclusion, Norway, a country that many consider to have the most mature, robust, and effective nationalized petroleum sector, has indeed implemented separation of functions in managing its petroleum resources. In the contrary, Nigeria has tried to separate regulatory and commercial functions in oil sector but has been unable to robustly establish such a separation in anything other than in a strictly formal sense.

CHAPTER FOUR

REGULATORY PRACTICES GOVERNING PETROLEUM INDUSTRY IN NORWAY AND NIGERIA

4.0 Introduction

Petroleum exploration and production are subject to high risk, changing economic and technological environment. It is necessary for both the State as regulator, and the companies who perform the petroleum activities, to be able to adapt to new conditions over the period of a petroleum licence, which may span twenty years or more.¹ Therefore, it is important to establish a regulatory legislative framework that balances the need for flexibility and stability with the State's petroleum policy objectives.

At first glance, it appears that the interests of the State and oil companies in the exploitation of petroleum are the same: to produce as much petroleum, as cheaply as possible.² However, there are also divergent interests, since the State is also concerned with its national petroleum objectives. A State's interests are necessarily focused on the development of the national petroleum resource as a whole, including the development of petroleum-producing provinces, and the concomitant infrastructure required to develop those resources. This differs to the focus of individual petroleum companies, which concentrate on their portfolio of petroleum fields in many jurisdictions and in various stages of development. A company views its commitment and field development strategy in the broader perspective of global petroleum activities and the

¹ See William T. Onorato and Jay J. Park, "World Petroleum Legislation: Frameworks that Foster Oil and Gas Development," *Alberta Law Review*, Vol. 39, no. 1, (2001): 23-48, 31; see also Tina Hunter, 'The Role of Regulatory Frameworks,' p. 54

² See Tina Hunter, "Comparative Law as an Instrument in Transnational Law: The Example of Petroleum Regulation," *Bond Law Review*, Vol. 21, no. 3, (2009): 42-45, 43; Mommer, *Global Oil*, p. 66

necessary deployment of physical and human resources to accomplish commercial goals, whilst the State focuses on the petroleum resources they own in their jurisdiction.³

The legislative regulatory framework should reflect a State's petroleum policy objective, establishing, maintaining and enforcing a system of competence to regulate petroleum activities in a manner consistent with a State's national petroleum objectives.⁴ On one hand, legislative competence establishes and maintains a legal regulatory framework for the conferring of rights and interests relating to petroleum exploitation, and the competence to make legal decisions regarding these rights and interest. Administrative competence on one hand confers upon a regulatory body the necessary knowledge, jurisdiction and decision making capacity to regulate petroleum activities consistent with national petroleum objectives.

This Chapter engages in analysing the regulatory practices governing petroleum industry from a broader perspective while narrowing it down to the context of Norway and Nigeria. The Chapter primarily focuses on petroleum contracts and licences as the key regulatory tools in petroleum sector in the two countries. The Chapter is divided into two major sections. The first section offers a discussion on petroleum contracts while the second section deals with petroleum licenses in the context of Norway and Nigeria. The final section is a conclusion of the key aspects discussed in the previous sections.

³ See Michael Likosky, "Contracting and Regulatory Issues in the Oil and Gas and Metallic Minerals Industries," *Transnational Corporations*, Vol. 18, no. 1, (2010): 1-42, 12; see also Bernard Tavernier, *An Introduction to the Regulation of the Petroleum Industry: An Introduction to Regulation, Economics and Government Policies*, (London: Kluwer International, 2000), p. 23

⁴ The State's national objectives include the effective development of, and maximum ultimate recovery from petroleum fields, and maximisation of benefit to the national economy from such development. This competence includes both legislative and administrative competence. Likosky, "Contracting and Regulatory Issues," p. 15

4.1 Model Agreements (Petroleum Contracts): International Perspective

The exploitation of petroleum resources is a commercial venture, undertaken as a joint activity between the host government and the oil companies with the express purpose to produce petroleum as profitably as possible.⁵ The two parties enter into a negotiation process that leads to the host government signing a contract with the contractor, and this contract organizes the relationship between the host government and the contractor. According to Al-Kasim, in order to facilitate negotiations with applicants to a license, it is customary for the host country to prepare a model agreement which embraces all the principles and conditions the host country wishes to maintain.⁶ That is not to say, however, that the model agreement should be a one-sided document expressing the sole interest of the host country because these model agreements are very often sent to potential applicants as part of the promotion campaign.⁷ As such, they must be viewed as a promotional document attracting the applicants to apply.

Al-Kasim advises that the message in the model agreement should at the outset be a balanced review of the position of the host country regarding its expectations and its willingness to accommodate, where possible the wishes of the licensees in a fair and equitable manner.⁸ It is, therefore, important that the document distinguishes between negotiable and non-negotiable items. Normally a copy of the existing legislation including the fiscal regime is enclosed with the promotion documents. The implied message here is that whereas all that is covered by legislation is not open to negotiation, the items in the model agreement are more or less open to some negotiation, provided there are strong arguments to warrant deviation from the model text.

⁵ Knut Kaasen, "Scope of Joint Operating Agreements in Norway," *Marius*, Vol. 127, no. 2, (2000): 45-76, 51

⁶ Al-Kasim, *Managing Petroleum Resources*, p. 161

⁷ Al-Kasim, *Managing Petroleum Resources*, p. 162

⁸ Author's interview with Mr. Farouk Al-Kasim (Senior Geologist, Founder and President, PETROTEAM), Stavanger, September 8, 2015

Due to the negotiation of contract terms between the contractor and the host government in a number of petroleum host countries in the world, certain flexibility in petroleum contract types exists. Thus, a contract may have different terms compared to another contract in the same country. Depending on the fiscal regime in the country, there are basically two approaches to model agreements; *a Concessionary Agreement* or *a Contractual Agreement*.⁹

4.1.1 Concessionary Agreement

The concessionary agreement or so-called royalty (or tax) system was the first system used in world petroleum contracting and it is used currently by around half of the petroleum producing countries worldwide, including the USA, UK, France, Norway, Canada, Australia, New Zealand, Libya, and South Africa.

A concessionary agreement is based on the conventional basis of a license whereby the licensee is entitled to carry out petroleum operations against the payment of royalty and tax to the resource owner.¹⁰ The contractor pays all exploration, development and operating costs, so that the government does not bear any risk during the project. Therefore, a contractor gets the total petroleum production but makes different types of payments which are identified in the laws and regulations of the host government.

Al-Kasim argue that, save for royalty oil or gas, if paid in kind, the licensee under this type of agreement assumes full ownership of the produced petroleum once it is brought up to the wellhead.¹¹ The licensee is entitled to sell the oil and gas as it sees fit but must pay tax to the host

⁹ Al-Kasim, *Managing Petroleum Resources*, p. 164

¹⁰ See Mark Kaiser and Allan G. Pulsipher, *Fiscal System Analysis: Concessionary and Contractual Systems Used in Offshore Petroleum Arrangements*, (Louisiana: Centre for Energy Studies, 2004), p. 8; see also Timothy A. Martin, "Model Contracts: A Survey of the Global Petroleum Industry," *Journal of Energy & Natural Resources Law*, Vol. 22, no. 3, (2004):281-340, 296,

¹¹ Al-Kasim, *Managing Petroleum Resources*, p. 167

country on the basis of an agreed mechanism for determining the price at any time. The price of oil is usually related to the international price of oil, while the price of gas is related to that agreed with the buyer in a gas sales agreement, unless access to a market is assured. Normally, a concessionary agreement is based on a legislated fiscal regime that is specified in detail in a fiscal law, a decree or regulations.¹² According to Kaiser and Pulsipher, the host government makes profit from the petroleum project under a concessionary agreement by using one or more of the following fiscal tools discussed in this section.¹³

4.1.1.1 Bonus

A bonus is paid when predetermined events happen. For example, a *signature bonus* is paid by a contractor when a contract is signed or an exploration license is granted. A *production bonus* is paid when production is starting or a certain production level is reached in a field. In some countries these bonuses are deductible for tax purposes, whereas in others they are not.

4.1.1.2 Surface fees

The contractor may be required to pay annual surface fees to the host government, either in the exploration phase or/and in the production phase, based on the area over which the project extends.

4.1.1.3 Royalty

A royalty is one of the most commonly used fiscal tools worldwide. It represents an amount paid by the contractor to the host government in cash or in kind. Royalties paid to a private party other than to a host government are called *overriding royalties*. Calculation principles are the

¹² Bernard Taverne, *An Introduction to the Regulation of the Petroleum Industry: Laws, Contracts and Conventions*, (London: Kluwer Law International, 1994), p. 16

¹³ Kaiser and Pulsipher, *Fiscal System Analysis*, p. 14

same for both, the difference is only in who receives the payment. The implementation of a royalty rate differs from one host government to another. Some use a flat royalty rate while others use variable royalty rates. These variable rates can be calculated depending upon yearly production, cumulative production, petroleum price, or price and production together.

4.1.1.4 Tax on profit

The contractor is subject to the profit tax laws in the investment country, in addition to other taxes such as those applied to export and import of the commodity.

4.1.2 Contractual Agreement

In the contractual agreement, the host government retains the ownership rights on the petroleum, and shares the petroleum production with the contractor in kind or in cash. There are several forms of the contractual agreement and these include *Joint Ventures* (equity joint ventures and contractual joint ventures), *Production Sharing Agreements* and *Service Contracts*.¹⁴

4.1.2.1 Joint Venture (JV)

According to Al-Kasim, there are two kinds of joint ventures; incorporated (equity) joint venture and unincorporated (contractual) joint venture.¹⁵

In *the incorporated joint venture*, the host government (or its national oil company) and the foreign oil company form a joint operating company in which each of them often owns about 50 percent of the shares. Despite equality in ownership, the foreign company may bear the entire risk of exploration expenditure and have no possibility to recover that cost unless a commercial discovery is made – in which case it would recover its cost out of the revenue made by the joint

¹⁴ See Martin, "Model Contracts," p. 300; see also Kaiser and Pulsipher, *Fiscal System Analysis*, p. 17

¹⁵ See Al-Kasim, *Managing Petroleum Resources*, p. 169

company. Although the host country has formally equal say in the management of the joint venture, in practice the foreign company has the upper hand on technical management.¹⁶ On the other hand, there are no provisions for sole-risk operations and this, therefore, means that the two owners have to agree on what constitutes a commercially exploitable discovery.

In *the contractual joint venture*, the partnership between the government and the foreign oil company is not incorporated into a joint stock company.¹⁷ Consequently, it does not assume a separate corporate entity and the relations between the parties are governed by the terms of the partnership contract. The petroleum produced is thus not jointly owned; each party owns its respective share of the oil produced at the wellhead and is free to dispose of that share as it sees fit. Management of operations under a contractual joint venture is entrusted to a non-profit making joint stock company that has no balance sheet and is not subject to taxation. Since the exploration risk is borne solely by the foreign partner, the operating company acts as its agent during exploration while it acts on behalf of both partners during development and production operations.

4.1.2.2 Production Sharing Contract (PSC)

Perhaps the most common type of agreement worldwide is the so-called Production Sharing Agreement (PSA), also referred to as Production Sharing Contract (PSC). The basic principle in this agreement is that the recovery of cost as well as the profit sharing between the contractor and the government takes place in the form of gaining access to agreed portions of the crude oil that is produced and saved by the contractor. The PSC design entails that the host country appoints a competent International Oil Companies (IOCs) as a contractor to develop petroleum

¹⁶ See Al-Kasim, *Managing Petroleum Resources*, p. 166

¹⁷ See Al-Kasim, *Managing Petroleum Resources*, p. 171

activities in a certain region. The IOC assumes all the risks in the project and is solely responsible for developing the project. The production, if any, belongs to the host country.

The government take under the PSA consists of three parts:¹⁸ *Royalty Oil* (representing payment of royalty to the host country); *Cost Oil* (the share of oil after the ‘Royalty Oil’ given to the IOC to recover its operating costs); and *Profit Oil* (the profit oil is shared between the IOC and the HC on the split agreed upon in the PSA). Over and above, the IOC is also liable to pay income tax on its net profits from the PSC. The government is free to take the oil in kind and arrange for its sale as it sees fit. On the other hand, it can negotiate an agreement with the contractor whereby the latter sells the government’s share free of charge or for an agreed fee as the case may be.

Bindermann argue that the PSA is usually preferred by oil companies, largely because it gives them full disposition rights to their own share of oil to sell as they see fit.¹⁹ Being able to sell the oil on the international market, oil companies will be able to avoid exposure to risks arising from local conditions in the country or the stability of its currency. Al-Kasim²⁰ argues that the PSA is particularly attractive to the IOCs particularly in countries where the political risk is a source of concern to their investments.

4.1.2.3 Service Contract (SC)

A service contract is usually entered into by a national oil company (NOC) and an IOC (contractor), and the contractor provides certain services to government or the NOC against an

¹⁸ Kirsten Bindemann, *Production Sharing Agreements: An Economic Analysis*, (Oxford: Institute for Energy Studies, 1999), p. 9

¹⁹ See Bindemann, *Production Sharing Agreements*, p. 15; see also Al-Kasim, *Managing Petroleum Resources*, p. 175

²⁰ See Al-Kasim, *Managing Petroleum Resources*, p. 177

agreed form of payment. The contractor takes the full exploration risk and receives no compensation unless a commercial discovery is made in which case it recovers its exploration investment typically without interest. It recovers its development cost from total revenue together with agreed rates of interest from production and pays taxes according to the tax laws in the host government.

The main attraction of the SC to the host country, according to Al-Kasim, is that “it allows the country to retain its ownership of assets”.²¹ Ownership of the oil and of plant, equipment and other assets is retained either by the government or by the NOC. As the owner, the country significantly retains the powers of management. The contractor may share powers with the NOC during exploration and development phases through a joint committee. All powers are taken over by the NOC within a period of about five years from the date of commercial production.

In recent years, several variations to the SCs have evolved. The *risk-service contract* is a variety where the contractor undertakes recognized risks in the development of discoveries or prospects usually related to existing production.²² The contract deals with this element of risk by offering the contractor an acceptable reward. In the *buy-back version of the service contract*, the contractor is expected to undertake the development of a field bearing the associated risks and being rewarded by an agreed rate of return on investment. The contractor is secured payment through a share in the oil produced but is expected to turn the operation of the field over to the NOC once the field development is completed or at a certain date agreed thereafter.

²¹ Al-Kasim, *Managing Petroleum Resources*, p. 165

²² Lopez, *Reconciling Tensions Between Company and State*, p. 14

4.2 Comparison of the Concessionary and Contractual Agreements

The concessionary and contractual systems are similar in many respects. In both systems, the host government may use the same fiscal tools (royalty, rental, tax) in order to capture economic reward from the petroleum projects.²³ The main difference between these systems is the ownership of the petroleum resource. According to the concessionary system the contractor owns the whole production, while under the contractual system the contractor receives a share of production in kind or in cash in return for services. The host government may be responsible for the abandonment according to the contractual system, while the contractor is always responsible for abandonment according to the concessionary system. The NOC may pay the income tax on behalf of the contractor under the contractual system, while the contractor pays tax under the concessionary system.

It should be noted that sometimes the government participates in cost payments when either a concessionary or a contractual system is installed. In this case the contractor does not have 100% working interest in the project area and the government achieves more rewards from the petroleum projects; such an agreement is called a joint venture. According to Al-Attar and Alomair the cornerstone of the fiscal system is the structure (for example, applied tax rates or royalty rates) and not the type of the contract.²⁴ This means that it cannot be easily claimed that one type is better than the other, and each contract must be evaluated separately.

²³ Kaiser and Pulsipher, *Fiscal System Analysis*, p. 45

²⁴ Al-Attar and Alomair, "Evaluation of Upstream Petroleum Agreements," p. 23

4.3 Model Agreements (Petroleum Contracts) in Norway and Nigeria

The type of model agreement dictates the terms of host country and IOC engagements as well as providing a lens for understanding how the two parties interact with each other to derive more value from the petroleum activities. Presented in this section are some of the most common model agreements that are used in Norway and Nigeria.

4.3.1 Model Agreements (Petroleum Contracts) in Norway

Norway, according to Al-Kasim, decided from the beginning to apply its industrial taxation system to the petroleum industry with only minor modifications (related mostly to methodology) where required.²⁵ It thus had no need to consider the mechanisms of the PSA as a possible form of agreement between the authorities and the foreign oil companies. It follows, therefore, that apart from experience gained by the Norwegian oil companies through their international ventures from the 1980s onwards, Norway has no special expertise in PSA type of agreement.²⁶

The Norwegian government has continued to apply a concessionary (royalty/tax) system to engage with IOCs operating in its petroleum sector. Moreover, the government uses JV model to participate in the petroleum industry as a direct investor through the State's Direct Financial Interest (SDFI), rather than as a commercial oil company.²⁷ This, therefore, means that the oil companies do not have 100% working interest in the project area and the government achieves more rewards from the petroleum operations.

²⁵ Author's interview with Mr. Farouk Al-Kasim (Senior Geologist, Founder and President, PETROTEAM), Stavanger, September 8, 2015

²⁶ Author's interview with Professor Austvik Ole Gunnar (Professor, Norwegian Institute of International Affairs; BI Norwegian Business School), Stavanger, September 23, 2015

²⁷ Thurber, Hults and Heller, *The Limits of Institutional Design*, p. 16; p. 5579: see also Al-Kasim, *Managing Petroleum Resources*, p. 180

In Norway, the joint petroleum activity between participants is regulated by a joint venture agreement known as the *Joint Operating Agreement (JOA)*.²⁸ Under section 3-3 of the *Petroleum Activities Act of 1996*, the State may stipulate as a condition for the granting of a production licence that the licencees are required to enter into agreements with specified contents with one another, and without a *JOA*, petroleum exploitation cannot commence. Therefore, together with the *Petroleum Activities Act (PAA)* and the *Petroleum Regulation (PR)*, the mandatory *JOA* forms part of a regulatory trinity that enables the State to regulate all aspects of petroleum development and production.²⁹

An important regulatory aspect of the Norwegian *JOA* is that the participants of a petroleum licence are selected by the Norwegian Petroleum Directorate (NPD), and the joint venture is formed by the Norwegian State.³⁰ Furthermore, the State appoints the operator for the joint venture. By establishing the requirement of a universal *JOA*, and then selecting the companies that will be party to that *JOA*, the State is able to exert control over the development of a field. This enables the government to direct petroleum operations, since the *JOA* stipulates all conditions concerning petroleum activities, including management of the JV, petroleum activities, liability, sole risk field development, and financial arrangements. The Norwegian *JOA* also enables the NPD to consider environmental and socioeconomic factors in the exploitation of petroleum resources.³¹ Thus, the *JOA*, as part of this regulatory trinity, enables the Norwegian

²⁸ Knut Kaasen, "Scope of Joint Operating Agreements in Norway," *Marius Yearbook*, Vol. 281, no. 1, (2001): 45-72, 53

²⁹ Author's interview with Mr. Kalmar Ildstad (Director, Development and Operations, Norwegian Sea, NPD), Stavanger, September 9, 2015

³⁰ The legislative capacity of the State to select the participants of a licence is found in section 3-4 and 3-5 of the *Petroleum Activities Act 1996* (Norway).

³¹ Geir S. Braut and Preben H. Lindoe, "Risk regulation in the North Sea: A Common Law perspective on Norwegian Legislation," *Safety Science Monitor*, Vol.14, no. 1, (2010):67-98, 12

State to regulate petroleum activities in a manner that encourages the sustainable exploitation of petroleum resources in abundance of Norway's petroleum policy.

4.3.2 Model Agreements (Petroleum Contracts) in Nigeria

Unlike Norway, Nigeria has adopted contractual arrangements (or an agreement system) under which oil and gas exploration and production may be undertaken. These contractual arrangements, for which model clauses exist, serve to ensure state participation in the exploitation of oil and gas resources in Nigeria. In other words, through contractual arrangements, the Nigerian government, through its NOC, the Nigerian National Petroleum Corporation (NNPC), participates in the exploration and production of oil and gas together with some IOCs. The contractual arrangements used by the government include the Joint Ventures (JVs), the Production Sharing Contracts (PSCs), Service Contracts (SCs), and Marginal Field Concessions (MFCs). One of the main reasons for this is the diversity of the availability of the resource base located offshore as well as onshore.³²

4.3.2.1 Joint Venture (JVs)

In Nigeria, Joint venture is the basic standard agreement between the NNPC and IOCs. The JV operates under the terms, guidelines and modalities agreed in the *Joint Operating Agreement (JOA)* with the NNPC, and the *Memorandum of Understanding (MoU)* with the Federal Government. Under this arrangement, both NNPC and the IOCs contribute to funding oil operations in the proportion of their JV equity holdings, and generally receive crude oil produced in the same ratio.³³

³² Author's interview with Mr. Bello Rabi (Chief Operating Officer, Upstream, NNPC), Abuja, June 19, 2015

³³ Lawrence Atsegbua, "Acquisition of Oil Rights under Contractual Joint Ventures in Nigeria," *Journal of African Law*, Vol. 10, no. 37, (1993): 10-29, 13

4.3.2.2 Production Sharing Contract (PSC)

The PSC has recently become the preferred choice for Nigeria in participation in the exploration of petroleum resources, particularly for offshore areas. It is an agreement born in response to the increasing funding problem faced by the old JV arrangement as well as the desire of the Nigerian government to open up the sector for more foreign participation.³⁴ The PSC is signed by the NNPC and any foreign petroleum company or group of companies (consortium). In most cases the operator for the consortium is the contractor.

The PSC arrangement governs the understanding between the NNPC and all new participants in the new inland deep and ultra deep-water acreages.³⁵ The NNPC engages the IOCs or the indigenous company as a contractor to conduct petroleum operations on behalf of itself and the NNPC. The Contractor takes on the financing risk and if the exploration is successful, the contractor is entitled to recover its costs on commencement of commercial production. If the operation is not successful, the contractor bears the loss.

The Contractor is taxed under the *Petroleum Profits Tax Act (PPTA) 2004*.³⁶ Since the PSC was devised to developed frontier areas in deep offshore as these regions bear more risk, the royalty payment is adjusted on a sliding scale. The taxable income of the petroleum companies is subject to *Petroleum Profits Tax (PPT)* at 85%, but this percentage is lowered to 65.75% during the first five years of operation, and sometimes to as low as 50% acknowledging the high risk of the

³⁴ Francis E. Nlerum, "Reflections on participation regimes in Nigeria's Oil Sector," *Nigerian Current Law Review*, Vol. 145, no. 1, (2012): 34-56, 14

³⁵ Sola Adepetun, "Production Sharing Contracts: the Nigerian Experience," *JENRL*, Vol. 13, no. 1, (1995): 12-21, 17

³⁶ See the Petroleum Act (Chapter 10; Chapter 350 LFN 1990) Laws of the Federal Republic of Nigeria, first promulgated in 1969, as amended by the Petroleum Act Cap. p. 10 Laws of the Federation of Nigeria (LFN) 2004

operations.³⁷ In addition, the Contractor is also liable to pay signature and/or production bonuses and royalties. The bonus values and type represent an item for negotiation between the Contractor and the Nigerian government. After royalty payments, the contractor recovers costs; operating cost is recoverable in the year of occurrence, while the capital cost is recoverable in equal installments over a five year period. The revenue remaining after royalty payments and cost recovery is shared between the contractor and the Nigerian government.³⁸

4.3.2.3 Service Contract (SC)

Under the SC model in Nigeria, the contractor undertakes exploration, development and production activities for, and on behalf of the NNPC (or the concession holder), at its own risk. The concession ownership remains entirely with the NNPC and the Contractor has no title to the oil produced. The Contractor is reimbursed cost incurred only from proceeds of oil sold and is paid periodical remuneration in accordance with the formulae stipulated in the contract. The Contractor has the first option to buy back the crude oil produced from the concession and is assessed to tax on its service fees under the Companies Income Tax Act as amended (CITA) at 30%; while the concession holder (or the NNPC) is assessed to tax under the PPTA.³⁹

4.3.2.4 Marginal Field Concession (MFC)

As petroleum fields mature and production drops, it is no longer profitable for the big IOCs to exploit these fields rather than focusing on producing from other “juicy” fields in their portfolio. Such fields are then sold to smaller operators. This model agreement is used in Nigeria and the

³⁷ The Petroleum Profits Act of 1969 (PPTA, Cap 354) specifies the applicable tax rates on the chargeable or net profits companies engaged in petroleum operations

³⁸ Author’s interview with Engineer Catherine Ngozi Ihome (General Manager, Joint Venture Operations Division, NAPIMS), Abuja, June 26, 2015

³⁹ Author’s interview with Mr. Emmanuel Bekee (Head, Upstream Monitoring and Regulation, Department of Petroleum Resources, Department of Petroleum Resources, DPR), Abuja, June 15, 2015

independent operators are indigenous companies. In the context of Nigeria, a Marginal Field is defined as any field that has reserves booked and reported annually to the Department of Petroleum Resources (DPR) and has remained unproduced for a period of over 10 years.⁴⁰

The *Nigerian Oil and Gas Industry Content Development (NOGIC) Act (The Act) in 2010*, seeks to promote the use of Nigerian companies/resources in the award of oil licences, contracts and projects.⁴¹ Mr. Augustine Ogusi argues that, the Federal Government, in furtherance of its Nigerian Content agenda, encourages IOCs to surrender their marginal fields for assignment to indigenous concession holders.⁴² The main objectives of the Nigerian government for introducing Marginal Field regime include: expanding the scope of participation by small (indigenous) players in Nigeria's oil industry; increasing the country's oil and gas reserves base; providing opportunity for portfolio rationalization; and, enhancing employment opportunity.⁴³

⁴⁰ Author's interview with Dr. Victor Babatunde Adeniran (Chief Operating Officer, Ventures, NNPC), Abuja, June 22, 2015

⁴¹ The Act is designed to enhance the level of participation of Nigerians and Nigerian companies in the country's oil and gas industry. With the promulgation of the Act, the Government has clearly established its intention to increase indigenous participation in the industry in terms of human, material and economic resources. See Lawrence A., Atsegbua, "The Nigerian Oil and Gas Industry Content Development Act 2010: An Examination of its Regulatory Framework." *OPEC Energy Review* 479, 36 (4), (2012), p. 8; also see KPMG, *The Nigerian Oil and Gas Industry Content Development Act, 2010*, p. 3, [Accessed on July 5, 2015]
<https://www.kpmg.com/NG/en/IssuesAndInsights/ArticlesPublications/Documents/Newsletter%20on%20Nigerian%20Oil%20and%20Gas%20Industry%20Content%20Development%20Act%20-%20June%202010.pdf>

⁴² Author's interview with Mr. Augustine Ogusi (Director, Nigerian Local Content Development Unit), Abuja, June 10th, 2015

⁴³ KPMG, *Nigeria's oil and gas industry in brief*, 2014, p. 4, [Accessed on July 5, 2015]
<https://www.kpmg.com/NG/en/IssuesAndInsights/ArticlesPublications/Documents/Nigerian%20oil%20and%20gas%20Industry%20brief.pdf>

4.4 Petroleum Licences: International Perspective

The process of allocating petroleum licences has two main important roles in the States management of its petroleum resources.⁴⁴ Firstly, the allocation of a petroleum licence seeks to identify the best partner for the State to conduct petroleum activities in a particular licence area. This is to ensure that the licence is given to oil companies with the technical and financial capacity to carry out the exploration in an effective and safe manner, so that the States' interests are considered, and that the extraction of petroleum in the field is maximised.

Secondly, the allocation of petroleum licences establishes a relationship between the State and the oil companies that will extract the resources. Throughout this relationship, the State, to a greater or lesser degree, exerts control over the way the 'partner' oil companies carry out their petroleum activity in the basis of the licence. Once a petroleum licence is allocated and the plan for development of a field is approved, the participants may be left to develop the field, subject to meeting requisite regulatory conditions. In other instances, the State exerts control over all facets of licence allocation and petroleum activities, and will participate in the extraction of petroleum resources.

According to Hunter⁴⁵, the allocation of a petroleum licence encapsulates not only the process of the award of a petroleum licence, but also marries the method of allocation with the national petroleum interests. State petroleum interests are generally articulated in a State's petroleum policy, and regulated by the legislative framework. Where sustainable development of petroleum resources is a national policy objective, such as in Norway and Nigeria, the method of allocation is crucial in ensuring that sustainable development of petroleum resources occurs.

⁴⁴ See Michael A. Bunter, "A New Approach to Petroleum Licencing," *Oil, Gas and Energy Law Intelligence*, Vol. 1, no. 1, 2003): 12-32, 23; see also Hunter, "The Role of Regulatory Frameworks," p. 48

⁴⁵ Hunter, "The Role of Regulatory Frameworks," p. 52

4.4.1 Process of Award of Petroleum Licences

The host governments use licensing systems to distribute the exploration and production investment rights to the contactors. According to Bunter, the licensing systems can be classified in two groups; *open-door systems* where interested contractors are allowed to submit a proposal with respect to specific areas at any time; and, *licensing rounds* held as an auction or administrative process based on a set of criteria provided by the host governments.⁴⁶

In most instances the award of petroleum licences occur within formal licencing rounds.⁴⁷ Formal licencing rounds are discrete acts of licencing that take place on a regular basis, often annually or biannually, at which pre-defined acreage is publicly offered for licencing by the State. Formal licencing rounds can assist the State to identify the most suitable party to develop a petroleum field since the formal process encourages companies to apply for a licence, and be assessed according to the stipulated criteria.⁴⁸

4.4.2 Methods of Awarding Petroleum Licences

Sinding and Kretzer agree that there are two principle methods of awarding petroleum licences.⁴⁹ The first is *the bid or auction system*, where licences are ‘sold’ to the highest bidder. This bid or auction may include either *cash bidding (CB)*, where the licence is sold to the highest bidder, or *work program bidding (WPB)*, where the licence is awarded to the applicant that bids to spend the highest amount of work in dollar terms, on exploration for petroleum in the licence area.

⁴⁶ Michael A. Bunter, *The Promotion and Licensing of Petroleum Prospective Acreage*, (London: Kluwer Law International, 2002). p. 13

⁴⁷ Ursula M., Kretzer, “Exploration Prior to Oil Lease Allocation: a Comparison of Auction Licensing and Allocations based on Size of the Work Programme,” *Resources Policy*, Vol. 20, no. 4, (1994):12-29, 18

⁴⁸ Kretzer, “Exploration prior to Oil Lease Allocation,” p. 20

⁴⁹ See Knud Sinding, *Auctions and Discretion in Oil and Natural Gas Licencing*, (University of Dundee, Centre for Energy, Petroleum & Mineral & Policy Publication, 1999), p. 12; also see Kretzer, “Exploration prior to Oil Lease Allocation p. 15

Under the *bid system*, whether the auction is made by cash auction or a work program bid system, the bidder with the highest value (either cash or work program) is awarded the licence. This system occurs in few countries with Licencing and Concessionary System (LCS).⁵⁰

While the United States uses the cash bid system, Australian current government policy allocates petroleum licences solely on the WPB. The bid system of allocation enables an oil company to assert control over the licencing process by stating what they are prepared to pay for the property rights over the acreage being offered for licence by the government.⁵¹ The value of those property rights is expressed in terms of how much a company will pay as a cash bonus or special royalty rate.

The second is the *discretionary system of allocation (DSA)*. Under this method, the State allocates licences according to administratively or politically created criteria defined by the State enabling the government to define and assert a set of legal conditions to which the participating oil company is expected to conform.⁵² Often, it is the criteria used and the transparency of the process that is a source of concern, although this has been somewhat mitigated by the requirement for objective, transparent criteria in the award of licences, particularly in the EU and EEA countries.⁵³ The discretionary system is a feature of the North Sea system of licencing, developed by Norway since it began awarding licences in 1963.⁵⁴

⁵⁰ Kjell J. Sunnevåg, "Designing Auctions for Offshore Petroleum Lease Allocation," *Resources Policy*, Vol. 3, no. 26, (2000): 23-45,15

⁵¹ Ursula M. Kretzer, "Allocating Oil Leases: Over-capitalisation in Licencing Systems based on the size of work programme," *Resource Policy*, Vol. 2, no. 1, (1993): 299-311, 302

⁵² Robert Fraser, "Licencing Resource Tracts: a Comparison of Auction and Discretionary Systems," *Resource Policy*, Vol. 17, no. 4, (1991): 271-283, 278

⁵³ This criteria is found in the EC Hydrocarbon Directive: *Directive 94/22/EC of the European Parliament and of The Council of 30 May 1994 On The Conditions For Granting And Using Authorizations For The Prospection, Exploration And Production Of Hydrocarbons* (1994).

⁵⁴ Frian Aarsnes and Petter F., Lindgren, *Fossil Fuels – at What Cost? Government Support for Upstream Oil and Gas Activities in Norway*, (New York: International Institute for Sustainable Development, 2012), p. 5

4.5 Allocation of Petroleum Licenses in Norway and Nigeria

The allocation of a petroleum licence is crucial in encouraging sustainable petroleum development. In order to translate natural capital into societal capital, the State needs the right policies and good implementation capacity from the allocation of exploration rights to how governments spend their revenue.⁵⁵ Hence, the sustainable development of petroleum resources starts with the allocation of the petroleum licence. The difficulty lies in determining which method of allocation is most likely to encourage sustainable development. This section, therefore, presents how the allocation of licences is done in Norway and Nigeria.

4.5.1 Award of Petroleum Licences in Norway: The Process and Method

The *Petroleum Activities Act (PAA) of 1996* gives the lifecycle of petroleum operations in Norway.⁵⁶ Before an area is opened for petroleum activities, an impact assessment is carried to gauge the economic, social and environmental impacts of the said petroleum activities as well as its impacts on other industries in the particular and neighbouring regions.⁵⁷ After the assessment, the government makes public announcements for blocks that would be accepting production licenses.

Production licences are normally awarded only through licencing rounds (except for Awards in Predefined Area), where the Norwegian State invites applications for a certain number of blocks.⁵⁸ When acreage is announced and released in licencing rounds, companies can apply

⁵⁵ Glada Lahn, Valerie Marcel and John Mitchell, *Good governance of the national petroleum sector*, (The Chatham House Document, 2007), p.2, [Accessed on July 5, 2016], <http://www.chathamhouse.org.uk/files/9761ggdoc0407.pdf>

⁵⁶ See NPD, *Petroleum Activities Act 1996*, section 5

⁵⁷ Author's interview with Mr. Ole Jorgen Melleby (Head of Health, Safety and Environment (HSE) Management Section, PSA-Norway), Stavanger, September 15, 2015

⁵⁸ Author's interview with Mr. Lars Erik Aamot (Director General, Department of Oil and Gas, MPE), Oslo, October 7, 2015

individually or in groups. As mentioned early on, Norway applies discretionary system of awarding licenses. The announcement, therefore, specifies the terms and criteria that will determine the award of a licence that include the technical competence and financial capacity of the applicant and the applicant's plan for exploration and production in the area for which a production licence is sought.⁵⁹ The grant of a licence is, therefore, based on the licensee fulfilling the conditions of the award of a licence.

After the close of the licencing round, the State assesses the applications received and the Ministry of Petroleum and Energy (MPE) shortlists a group of companies based on the criteria for selection. If the applicant is or has been a licensee according to an exploration licence, the MPE may also take into consideration any form of inadequate efficiency or inadequate responsibility that may have been demonstrated by the applicant as a licensee.⁶⁰ Where there are cooperation agreements entered into for application for a production licence, these agreements are submitted to the MPE for veto and approval. The Minister reserves the right to alter the agreement if required and the licences are then awarded, based on the non-discriminatory, objective, published criteria, and announced publicly.⁶¹

As part of the award of the discretionary award of licence in Norway, companies are not required to apply for acreage in a pre-arranged consortium rather each company applies individually for the blocks on offer, indicating their preference for blocks. The MPE, in consultation with the NPD and individual companies, selects a number of companies and assembles a JV for each

⁵⁹ Norwegian Petroleum Directorate (NPD), 'Act 29 November 1996, No. 72 relating to petroleum activities, (Chapter 3, section 3-5),' [Accessed May 12, 2015], <http://www.npd.no/en/Regulations/Acts/Petroleum-activitiesact/#2-1>

⁶⁰ Author's interview with Mr. Kalmar Ildstad (Director, Development and Operations, Norwegian Sea, NPD), Stavanger, September 9, 2015

⁶¹ It is important to note that the King is not obliged to grant any production licence on the basis of the applications received. He may grant production licences without announcement. [Accessed May 12, See NPD, 2015] <http://www.npd.no/en/Regulations/Acts/Petroleum-activities-act/#2-1>

licence area, as well as designating the operator for that acreage.⁶² The MPE then stipulates as a condition of the grant of a licence that the licencees are to enter into agreements with specified contents with one another and this JV then enters into a contractual arrangement with each other through the JOA.⁶³ The MPE selects the operator, thus conferring upon the operator the responsibility for the daily conduct of petroleum operations in accordance with the terms of the licence.

The award of a production licence confers upon the licensee the right to survey, explore for, drill and produce petroleum for a period of 10 years, with the possibility to extend up to 30 years, but may in specific cases be up to 50 years,⁶⁴ during which the licensee carries out exploration work by submitting a work commitment program. After the commitment has been fulfilled the licensee can either relinquish the license or continue to the next phase of developing the resource. This encourages companies to have a long-term perspective in managing their interests on the Norwegian Continental Shelf (NCS).⁶⁵

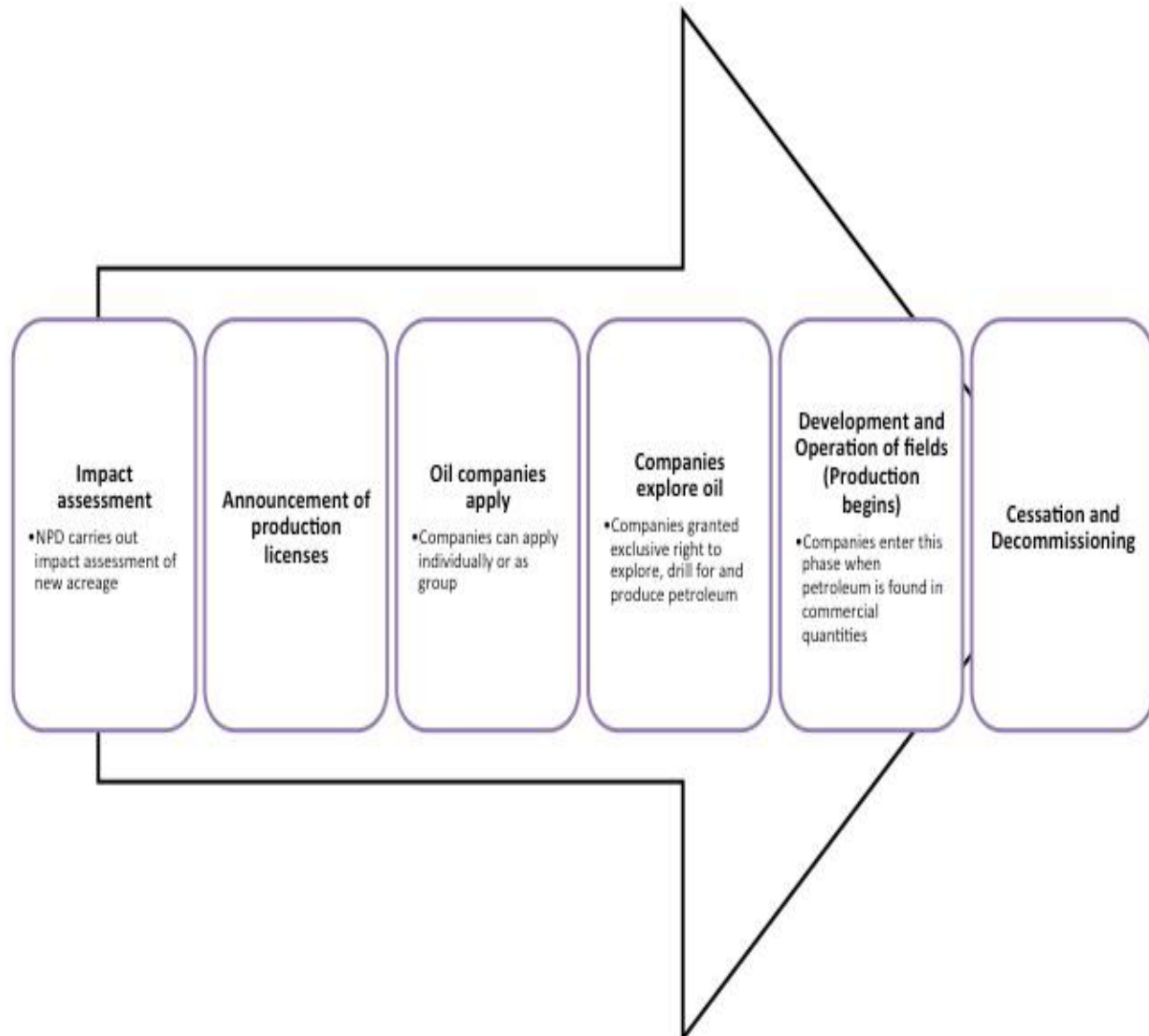
⁶² Author's interview with Mr. Kjeil Morisbak Lun (Vice President, Licences, Petoro AS), Stavanger, September 10, 2015

⁶³ The *JOA* is a mandatory part of the licencing framework, as defined under Chapter 3, s 3-3 of the *Petroleum Activities Act 1996* (Norway). A company is not able to participate in the exploitation of petroleum resources on Norwegian Continental Shelf unless it enters into the *JOA*.

⁶⁴ NPD, *Petroleum Activities Act 1996, Chapter 3*, section 3-9

⁶⁵ Author's interview with Mr. Ole Jorgen Melleby (Head of Health, Safety and Environment (HSE) Management Section, PSA-Norway), Stavanger, September 15, 2015

Figure 3: Lifecycle of Petroleum Operations in Norway



Source: Compiled by the author based on data from the MPE & NPD, 2015

The development of the field continues if the discovery is found to be commercially viable. The licensee submits a Plan for Development and Operation (PDO) to the MPE for approval.⁶⁶ An important part of the *PDO* is an environmental impact assessment which interested parties are given the opportunity to comment upon in a hearing round. Post approval, the licensee is solely

⁶⁶ NPD, *Petroleum Activities Act 1996, Chapter 4, section 4-2*

responsible for the development of the field. Two to five years before the expiry of the production license or cessation of operation, the licensee is required to submit a decommissioning plan to the Ministry and the plan must consist of assessment of impact from disposal activities and the proposed plan to carry out the dismantling of facility and cessation of activities.⁶⁷

4.5.2 Award of Petroleum Licences in Nigeria: The Process and Method

Nigerian law allows petroleum licences to be granted by the Federal Government of Nigeria (FGN) to oil companies by direct negotiation in what is commonly known as discretionary allocations, a model essentially similar to Norwegian licensing system.⁶⁸ However, as a result of the abuse of the discretionary allocation system and its commitment to facilitate more transparency and increased revenue from award of oil licences, the FGN has adopted competitive tenders as the preferred mode for the award of licenses.⁶⁹ With tenders, the process becomes more competitive and brings industry players with the most persuasive technical and financial capabilities to the fore. The Department of Petroleum Resources (DPR) is responsible for organizing oil bid rounds.

The lifecycle for petroleum operation under the traditional leases system is based on the *Petroleum Act of 1969* and under this Act, a company wishing to undertake petroleum operations in Nigeria must be incorporated in Nigeria.⁷⁰ The first step is to acquire an Oil Exploration Licence (OEL). The OEL is granted by the Minister of the Federal Ministry of Petroleum

⁶⁷ Author's interview with Mr. Ole Jorgen Melleby (Head of Health, Safety and Environment (HSE) Management Section, PSA-Norway), Stavanger, September 15, 2015

⁶⁸ Gbenga Biobaku, *Investing in Nigeria's Oil and Gas Industry*, p. 4, [Accessed November 12, 2015], http://www.gbclaw.com/investing_in_Nigeria_OndG%20Industr.pdf

⁶⁹ Author's interview with Mr. George Osahon (Director, Department of Petroleum Resources, NPD), Abuja, June 12, 2015

⁷⁰ See Section 2 (2) of the *Petroleum Act, 1969*

Resources (FMPR) in Nigeria and entitles the owner to explore (that is, to make geological and geophysical studies but not the right to drill) for petroleum, on specified non-exclusive area, valid for one year, subject to one year renewal on condition that the licensee has fulfilled all obligations in terms of the Act or otherwise, the Minister is satisfied with the work done and the reports submitted, and the application for renewal is made at least three months prior to the expiry of the license.⁷¹

Following the OEL, the applicant can apply for an Oil Prospecting License (OPL) through the same application process. The Minister again has the discretion to grant the license and set the duration of which cannot exceed 5 years including renewals.⁷² The OPL gives the owner the sole right to explore and prospect for oil in the area designated. If oil is found in commercial quantities, the applicant must relinquish the OPL and apply for an Oil Mining Lease (OML), which gives the owner the right to carry away and dispose off the petroleum found in the area granted.⁷³ The OML is valid for renewable maximum period of twenty years, and subject to a relinquishable area of one half of the lease area after a period of ten years after the grant of the lease.⁷⁴

Finally, when the OML is granted, the JV agreement is entered between the NNPC and the oil company and the terms of the agreement are specified in the JOA and in the OML.⁷⁵ The participants contribute equity and share risk as per the participation agreement and share the production on the same basis.

⁷¹ See *Petroleum Act, 1969*, Item 1, 3 and section 2 (1.a.)

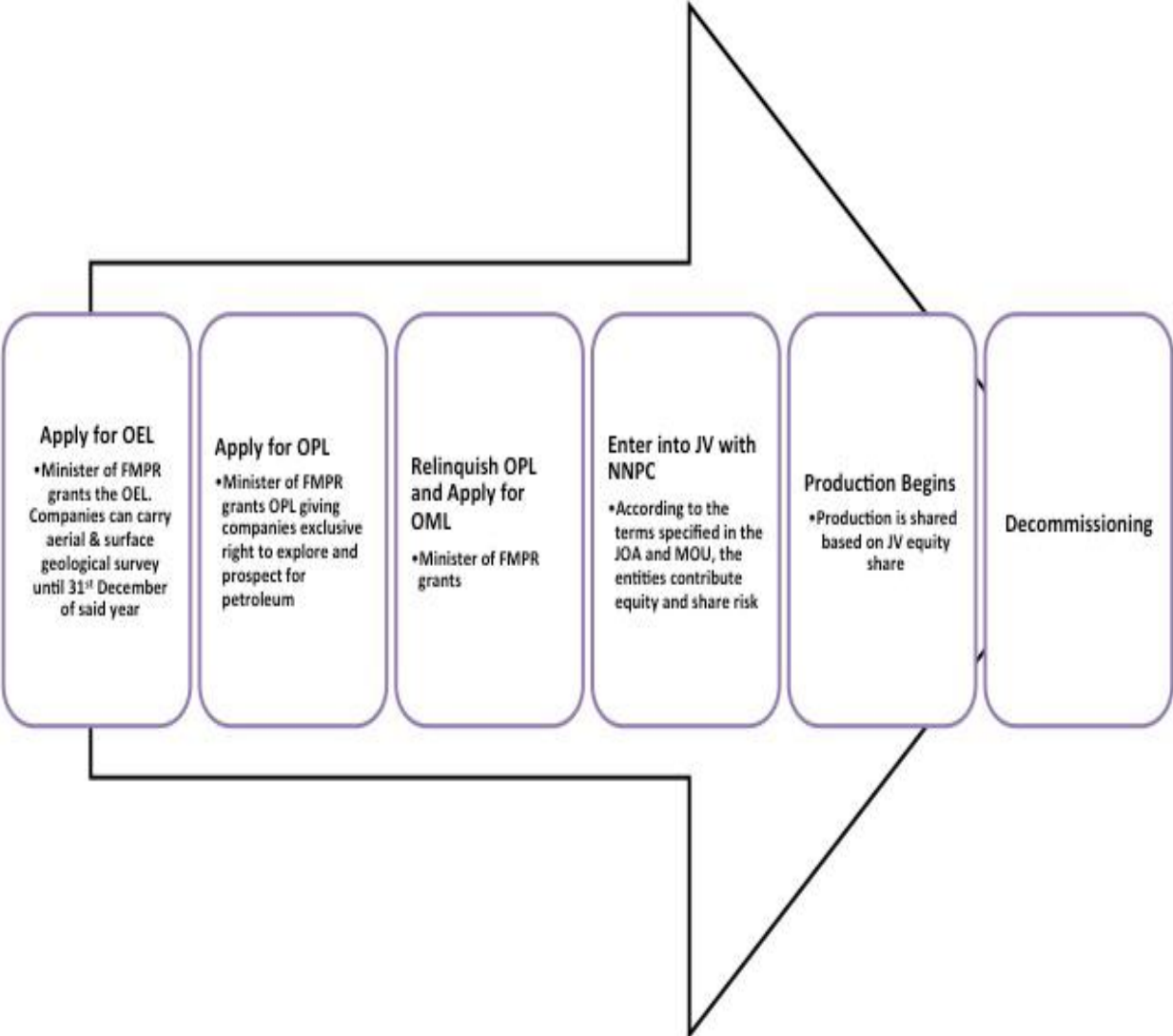
⁷² See Section 2 (1.b) of the *Petroleum Act, 1969*

⁷³ See *Item 11* of the First Schedule to the *Petroleum Act, 1969*; also see section 2 (1.c) of the *Petroleum Act, 1969*.

⁷⁴ See *Item 8* of the First Schedule to the *Petroleum Act, 1969*. Oil shall be deemed to have been discovered in commercial quantities if the Minister, upon evidence adduced by the licensee, is satisfied that the licensee is capable of producing at least 10 000 barrels per day of crude oil from the licensed area.

⁷⁵ Francis E. Nlerum, "Reflections on participation regimes in Nigeria's oil sector." *The Journal Of The Nigerian Institute Of Advanced Legal Studies*, (2010), p. 12

Figure 4: Lifecycle of Petroleum Operations in Nigeria – under Joint Venture Agreement



Source: Compiled by the author based on data from FMPR & DPR, 2015

4.6 Conclusion

The Norwegian illustration considers the entire lifecycle of the petroleum operations while the Nigerian seems a bit truncated and staccato. Whereas there is only one single streamlined licensing process for Norway since the country applies the JVs as model agreements, the process is complicated for Nigeria based on a variety of model agreements used in the country. Unlike in Nigeria, every petroleum development phase in Norway is carefully thought of, streamlined and transparent, which helps in assessing the risk and reward in each stage. For instance, the preliminary impact assessment ensures that petroleum operations do not disrupt or harm the economic, social and environmental ecosystems of the acreage under consideration. For Nigeria on the other hand, the different model agreements and complex arrangement adds more burden to the already starved technical capacity and presents more challenges to value creation. Presently, it does not seem that Nigeria has strict regulations or plans for decommissioning and dismantling of petroleum fields. Moreover, the exact details of how the lifecycle of petroleum operations takes place for the various model agreements could not be found in the public domain.

In Norway, the optimal recovery of petroleum resources has been encouraged through the various mechanisms including legislative requirements for prudent petroleum production, the *PAA* and the *PR* which require a PDO for all petroleum activities, partnership with industry and research organisations to develop technologies to maximise the recovery of petroleum from offshore fields. In Nigeria, the country has not really secured optimal recovery of petroleum from the fields in production as well as not generally regulated the production rate in order to achieve sustainable development of petroleum resources for the society as a whole.

In conclusion, unlike the Nigerian approach, the Norwegian approach to regulate petroleum industry has enabled Norway to balance the needs of Norwegian society with the need to remain attractive to oil companies to ensure the sustainable development of petroleum resources. The Norwegian approach to petroleum exploitation is premised on the sustainable development of petroleum resources, accomplished through an integrated approach to petroleum regulation. In particular, by critically analysing model agreements and award of licenses as the regulatory tools used in the petroleum industry in Norway and Nigeria, the regulatory tools have encouraged sustainable development of petroleum resources in Norway as compared to Nigeria.

CHAPTER FIVE

FISCAL REGIMES IN THE PETROLEUM INDUSTRY IN NORWAY AND NIGERIA

5.0 Introduction

Among the most important classifications that need to be provided by a host country to potential licensees are the fiscal terms for petroleum operations. These are usually defined in a fiscal regime, which is included either in the petroleum law itself, or in a separate fiscal legislation.¹ In many countries, however, a model Production Sharing Agreement (PSA) is used either on its own or in association with general fiscal legislation.

A fiscal regime is intended to regulate the economic relationship between the government as the landowner and the investor as the licensee.² Al-Kasim advises that the host countries should attract international oil companies (IOCs) primarily because their expertise, capital and ability to manage risk help the host country to improve the efficiency of petroleum operations.³ In this context, it is worth pointing out that within any IOCs, there is internal competition among the different regional affiliates for both financial and human resources. As a rule, IOCs (or corporations) allocate these resources in the order of expected returns to investments. Areas that are expected to yield the highest profit are, therefore, likely to receive the lion's share of financial resources as well as the best available personnel.

¹ Ben Eifert, Alan Gelb and Nils B. Tallroth, "The Political Economy of Fiscal Policy and Economic Management in Oil-Exporting Countries" in *Fiscal Policy Formulation and Implementation in Oil Producing Countries*, eds. Jeffrey M. Davis, Rolando Ossowski and Annalisa Fedelino, (Washington, D.C.: International Monetary Fund, 2003), p. 69

² Chakib Khelil, "Fiscal Systems for Oil: The Government 'Take' and Competition for Exploration Investment," *The World Bank Publication Policy for the Private Sector*, Note no.46, (2014): 29-42, p. 36. The fiscal regimes regulates four fundamental interests: guarantees the investor recovery of its investment from revenue arising from operations and an adequate reward for the risks taken; it compensates the government for the depletion of its non-renewable resources (royalty); it determines the split of profit between the licensee and the government; and, it specifies what other taxes, custom duties and imposes the licensee, and the sub-contractors it employs, must pay, if any, in the course of petroleum operations. See Al-Kasim, *Managing Petroleum Resources*, p. 166

³ Al-Kasim *Managing Petroleum Resources*, p. 167

While the petroleum policy, institutional structure and sector organisation, and regulatory practices create value in attracting the IOCs to explore, prospect and produce petroleum resources, the fiscal regimes are essential and required to extract, manage and regulate the revenues that accrue from the petroleum industry.⁴ It is the State's objective to maximise this resource rent to benefit the country and its people. Therefore, the design of the fiscal framework is important to understand, as it should capture the bulk of the resource rent while ensuring that the required investment associated with the capital-intensive petroleum operations are not affected.

In this Chapter, the main fiscal regimes used by Norway and Nigeria in petroleum industry are discussed in detail. The main objective is to examine whether the fiscal regimes employed by the two countries have been effective in extracting, managing and regulating revenues accrued from the petroleum industry. The Chapter is organised into three main sections and the first section briefly discusses the distribution of risks and reward in petroleum industry. The second section delves in discussing the fiscal instruments or tools for extracting revenues from the petroleum industry in Norway and Nigeria. The third section discusses the fiscal rules used in managing and regulating revenues that are captured from petroleum industry in the two countries. The fourth and the final section conclude the discussion on the basis of the preceding sections.

⁴See Eifert, Gelb and Tallroth, "The Political Economy of Fiscal Policy," p. 71

5.1 Distribution of Risk and Reward in Petroleum Industry

The petroleum industry is characterised by the need to deal with inherent risks that are rather high compared with other industrial activities. It follows, therefore, that a successful fiscal regime for petroleum operations must recognize that the rewards offered to investors should ideally be proportional to the degree of risk involved.⁵ This means that the higher the risk, the higher the rewards should be under the fiscal regime and vice versa.

Unfortunately, however, the assessment of risk, particularly at the exploration stage, is very often a matter of perception and cannot be ascertained with any degree of reliability.⁶ Moreover, the risk will vary by province, prospect and play type. This makes it difficult to argue beforehand, whether a given fiscal regime provides fair or unfair rewards compared with the risk involved. According to Al-Kasim⁷, many host countries have had to go through the painful experience of failing to attract oil companies because they had aimed at an unrealistically high share of the net profit to the government. Very often than not, such failures are due to underestimation of the risks involved in exploration or they can just be the result of bad timing. Moreover, periods of high oil prices have motivated unreasonably high government ‘takes’ in some fiscal regimes.⁸ At times when the oil price is high, it is conceivable that some provinces suddenly become interesting to some oil companies. Such glimpses of interest under exceptional circumstances

⁵ Silvana Tordo, “Fiscal Systems for Hydrocarbons: Design Issues,” *World Bank Working Paper*, No. 123, (2007): 23-45, 34

⁶ See Tordo, “Fiscal Systems for Hydrocarbons,” p. 35

⁷ Author’s interview with Mr. Farouk Al-Kasim (Senior Geologist, Founder and President, PETROTEAM), Stavanger, September 8, 2015

⁸ Chuku A. Chuku, “Linear and Asymmetric Impacts of Oil Price Shocks in an oil importing and Exporting Economy: The Case of Nigeria,” *OPEC Energy Review*, Vol. 36, no. 1, (2012): 413-443, 421

have led some host countries to overestimate the potential and attraction of their resource potential and to design their fiscal regimes on unrealistically stiff terms.⁹

In designing a fiscal regime, Davis, Ossowski, and Fedelino¹⁰ advise that the host country should aim at achieving optimal balance between incentives to the oil companies on the one hand and net returns to the host country on the other. It should also be pointed out here that the net returns to the country are not exclusively financial. The returns embrace intangible as well as tangible benefits accruing to the society from petroleum operations.¹¹ An example of intangible benefits is the technological transfer that occurs as a result of petroleum operations and the institutional development associated with them.

5.2 Fiscal Instruments (or tools) for extracting revenues from the Petroleum Industry in Norway and Nigeria

5.2.1 Norway

One of the overall principles of Norway's management of its petroleum resources is that the exploration, development and production must result in maximum value creation for society and that revenues must accrue to the Norwegian State and thus benefit society as a whole.¹² Since these resources belong to the Society as a whole, the Norwegian State secures a large share of the value creation through taxation and the system known as the State's Direct Financial Interest (SDFI) in the petroleum industry.¹³ Other avenues include Statoil dividends; environmental taxes; area fees; and, application fees. The government's total net cash flow in 2015, including

⁹ Chuku, "Linear and Asymmetric Impacts of Oil Price Shocks," p. 439

¹⁰ Jeffrey M. Davis, Rolando Ossowski and Annalisa Fedelino, (eds.), *Fiscal Policy Formulation in Oil Producing Countries*, (Washington, D.C.: International Monetary Fund, 2012), p. 23

¹¹ Davis, Ossowski and Fedelino, (eds.), *Fiscal policy formulation*, p. 31

¹² Author's interview with Mr. Lars Erik Aamot (Director General, Department of Oil and Gas, MPE), Oslo, October 7, 2015

¹³ Davis, Ossowski and Fedelino, (eds.), *Fiscal Policy Formulation*, p. 36

the dividend from Statoil and various fees, was NOK 218.3 billion (US\$26.9 billion), or about 20 % of total government revenues as shown in Table 1 below:

Table 1: The Net government cash flow from Petroleum Activities in Norway, 2015

No.	Revenue Category	Cash in Billion NOK
1.	Tax Revenues	103.7
2.	Net Cash from SDFI	93.6
3.	Statoil Dividends	15.4
4.	Environmental Taxes and Area Fees	6.5
The Net Cash Flow		218.3

Source: *The Ministry of Finance, Statistics Norway, 2015.*¹⁴

5.2.1.1 Tax Revenues

In Norway, the petroleum taxation systems are based on the rules for ordinary company taxation and set out in the *Petroleum Taxation Act of 13 June 1975 No. 35*, relating to the taxation of subsea petroleum deposits.¹⁵ A company operating within the Norwegian borders and performing petroleum activities is taxed to a total of 78% tax and of this; 25% forms the corporate income tax liable to any company operating in Norway, while the remaining 53% is a special tax for petroleum activities carried offshore on the Norwegian Continental Shelf (NCS).¹⁶ A special allowance is made in the form of capital uplift that gives depreciation allowance for a period of six years and can be deducted from the special tax. This makes the tax regime neutral and non-

¹⁴ Norwegianpetroleum.no, *The Government Revenues*, <http://www.norskpetroleum.no/en/economy/governments-revenues/> [Accessed September 28, 2016]

¹⁵ Norwegianpetroleum.no, *The petroleum Tax System*, [Accessed September 28, 2016] <http://www.norskpetroleum.no/en/economy/petroleum-tax/>

¹⁶ see Norwegianpetroleum.no, *The petroleum Tax System*,

distortive so that investments projects that are profitable for an investor [have a positive Net Present Value (NPV)] before tax also remain profitable after taxation.¹⁷ This, therefore, ensures substantial revenues for Norwegian society and at the same time encourages companies to carry out all profitable projects.

To ensure a neutral tax system, only the company's profit is taxable, and losses may be carried forward with interests.¹⁸ Deductions are allowed for all relevant costs including costs associated with exploration, research and development, financing, operations and decommissioning. Furthermore, consolidation between fields is allowed, and this means that losses from one field or exploration costs can be written off against the company's income from operations elsewhere on the NCS.¹⁹ The norm price (operating income) is used to calculate the taxable income, and according to Mr. Gunnar Soiland, the norm price is derived in consensus through meetings with oil companies and differs for the different grades of oil and natural gas.²⁰

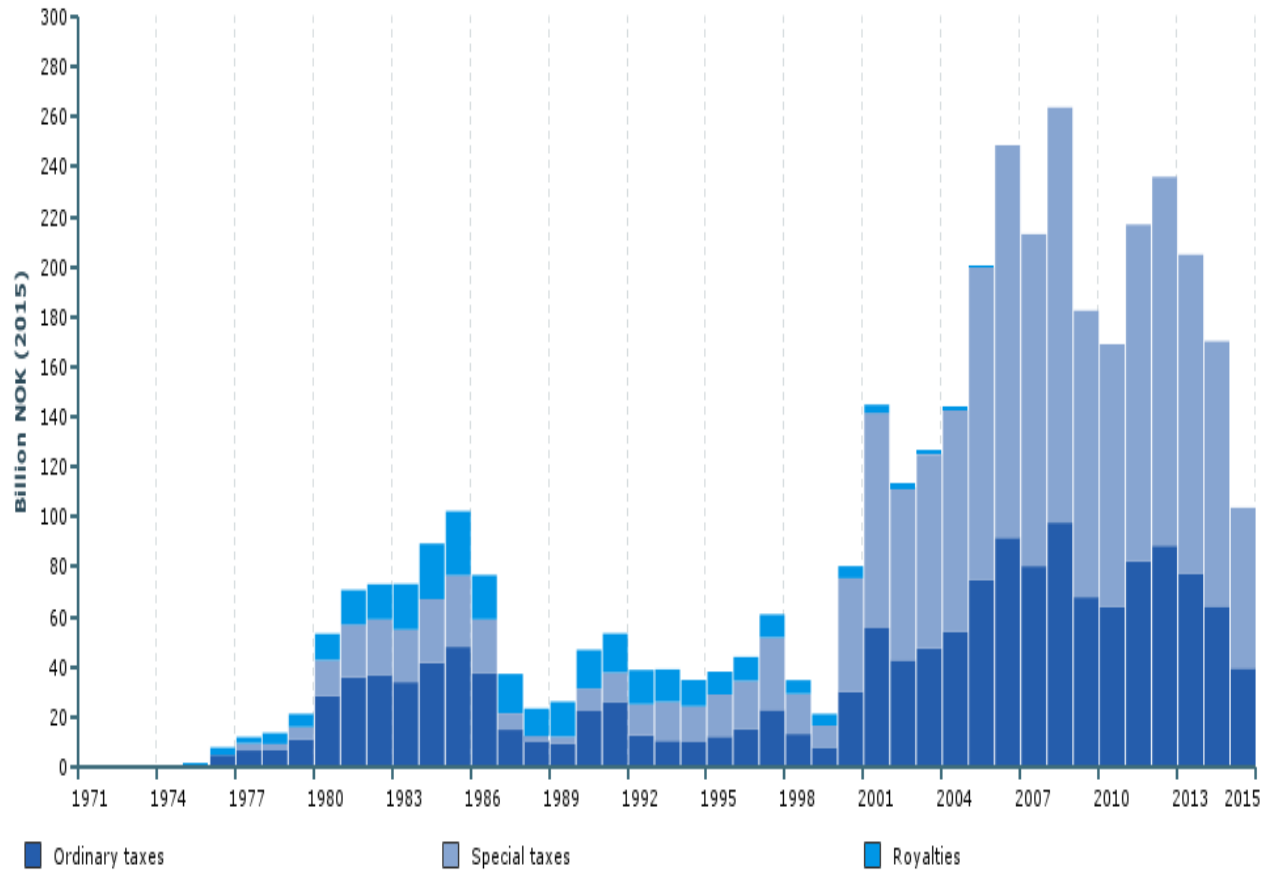
¹⁷ Author's interview with Mr. Farouk Al-Kasim (Senior Geologist, Founder and President, PETROTEAM), Stavanger, September 8, 2015

¹⁸ Author's interview with Ms. Nina Bjerkedal (Director General, The Tax Policy Department, Norwegian Ministry of Niger Delta), Oslo, October 14, 2015

¹⁹ Author's interview with Mr. Farouk Al-Kasim (Senior Geologist, Founder and President, PETROTEAM), Stavanger, September 8, 2015

²⁰ Author's interview with Mr. Gunnar Soiland (Senior Geologist, NPD), Stavanger, September 11, 2015

Figure 5: The Net government cash flow from tax system in Norway, 1971-2015



Source: Ministry of Finance, Statistics, Norway, 2015

5.2.1.2 The State’s Direct Financial Interest (SDFI)

The SDFI is a type of Joint Venture and is a system under which the Norwegian State owns holdings in a number of oil and gas fields, pipelines and onshore facilities. For oil and gas fields, the proportion is determined when production licences are awarded, and varies from field to field.²¹ As one of several owners, the government covers its share of investments and costs, and receives a corresponding share of the income from production licences.

²¹ Author’s interview with Mr. Arne Sigve Nylund (Head of Development and Production Section, Statoil AS), Stavanger, September 17, 2015

Before the establishment of the SDFI system in 1985, the Norwegian government only had ownership interests in production licenses through Statoil, which was by then wholly owned by the State.²² From 1985, the ownership interests were split into two: one part became owned by SDFI and the other part remained with Statoil. When Statoil was listed on the stock exchange in 2001, the responsibility for managing the SDFI was transferred from Statoil to a new State-owned management company, Petoro. The State has direct financial interests in around 174 production licenses, 34 producing fields and holdings in 15 joint ventures that own pipelines and onshore facilities.²³

5.2.1.3 Revenue from Direct State Ownership in Statoil

The State is the majority shareholder with 67% shares in Statoil²⁴ and, therefore, receives dividends from Statoil's operations in Norway and abroad, in the same way as other shareholders.

5.2.1.4 Area Fees

According to Mr. Kalmar Ildstad,²⁵ the rationale behind the area fee as a fiscal instrument is to encourage petroleum activities in an awarded area and to ensure that awarded acreage is explored efficiently. The fees are steep but companies can apply for exemption by submitting a Plan for Development and Operation (PDO) to the Ministry of Petroleum and Energy (MPE).

²² Author's interview with Mr. Gunnar Soiland (Senior Geologist, NPD), Stavanger, September 11, 2015

²³ Author's interview with Mr. Kjeil Morisbak Lun (Vice President, Licences, Petoro AS), Stavanger, September 10, 2015; see also Norwegianpetroleum.no, *The government Revenues*, [Accessed on September 28, 2016], <http://www.norskpetroleum.no/en/economy/governments-revenues/>

²⁴ Thurber, Hults and Heller, "Exporting the "Norwegian Model," p. 5370

²⁵ Author's interview with Mr. Kalmar Ildstad (Director, Development and Operations, Norwegian Sea, NPD), Stavanger, September 9, 2015

5.2.1.5 Environmental Taxes

Norway is a member of the European Union - Emission Trading Scheme (EU-ETS) and requires petroleum activities to comply with emission quotas.²⁶ Therefore, the petroleum industry is also included in the emissions trading system. The Oil Companies are required to purchase emissions quotas for their activities on the Norwegian Continental Shelf (NCS) for each tonne of Carbon Dioxide (CO₂) emitted if their greenhouse gas emissions exceed their allocated amount for the year.²⁷ The price per tonne of CO₂ is based on the market price.

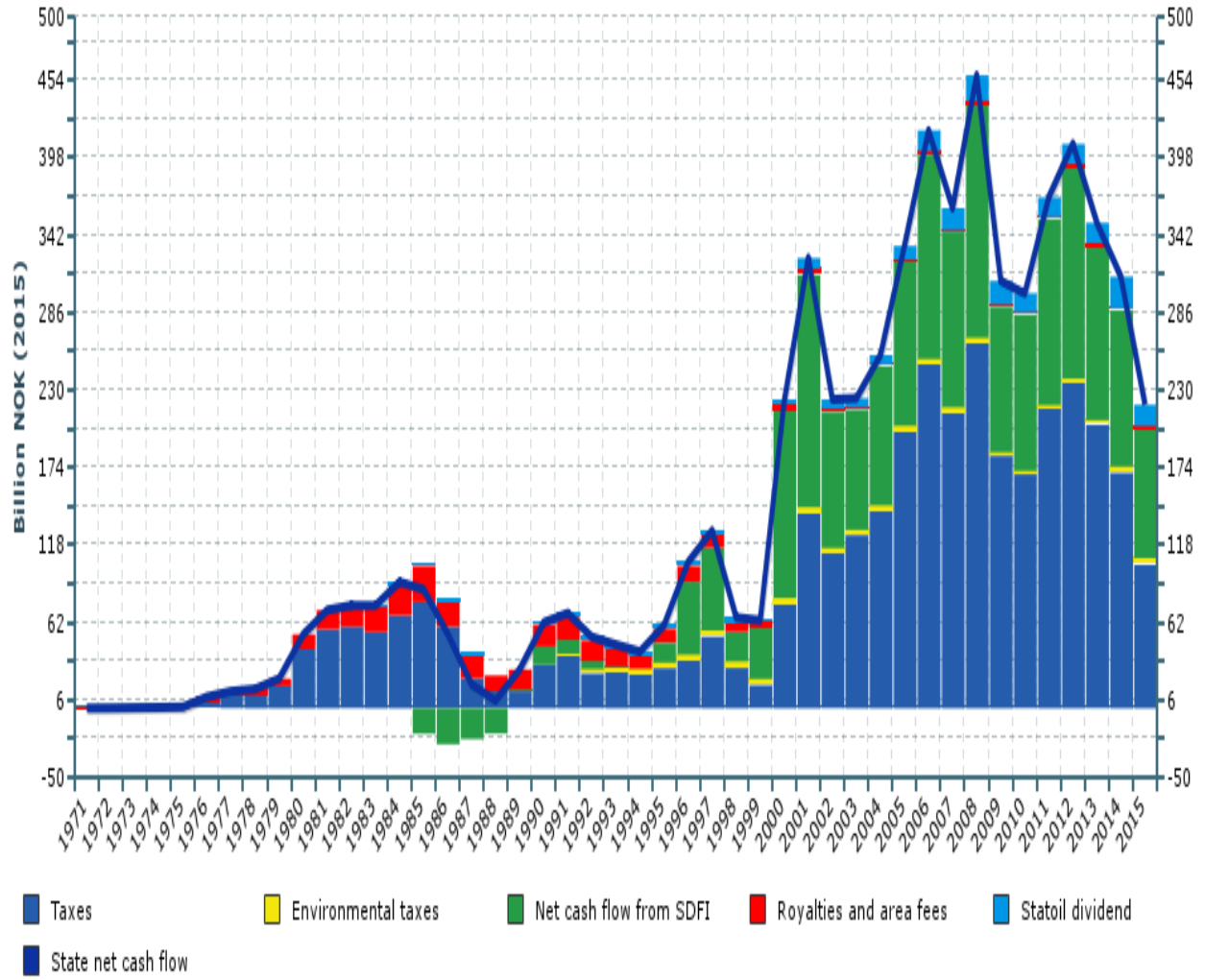
Mr. William Christensen argues that even before participating in the EU-ETS, the CO₂ tax was introduced by the Norwegian government in 1991 as a policy instrument to reduce emissions of CO₂ from the petroleum activities.²⁸ The tax applies for every standard cubic metre (Sm³) of gas that is burned or released directly, and every litre of petroleum burned. The tax is levied on combustion or direct release of natural gas and on combustion of oil and condensate.

²⁶ Norwegianpetroleum.no, *Emissions to Air*, [Accessed September 25, 2016], <http://www.norskpetroleum.no/en/environment-and-technology/emissions-to-air/>

²⁷ Author's interview with Ms. Anne Vatten (Director of Legal and Regulatory Affairs, Petroleum Safety Authority, PSA-Norway), September 15, 2015

²⁸ Author's interview with Mr. William Christensen (Director General, Department of Climate, Industry and Technology, MPE), Oslo, October 8, 2015

Figure 6: The Net government cash flow from Petroleum Activities in Norway, 1971-2015



Source: Ministry of Finance, Statistics Norway, 2016

5.2.2 Nigeria

The Nigerian government secures a large share of the value creation from the petroleum sector through sales of crude oil and gas, and petroleum profit tax.²⁹ However, there are other additional avenues such as royalty; resource rent tax; signature bonuses; and, gas flare penalty.

5.2.2.1 Sales of Crude oil and Gas

Nigeria, through Nigerian National Petroleum Corporation (NNPC) generates revenues by selling oil and gas domestically as well as exports the same commodities. In the months of January to August 2015, the country earned a total of about US\$6 billion from oil and gas sales (both from domestic and export receipts).³⁰

5.2.2.2 Petroleum Profit Tax (PPT)

Under the *Petroleum Profit Tax Act (PPTA), Cap P 13, (2004)*,³¹ the PPT rate is 85% for all operations and is levied for all companies registered in Nigeria and engaged in upstream petroleum operations. However, this rate is reduced to 65.75% for a period of five years for new companies until all the pre-production capital expenditure has been amortized.³²

²⁹ Victor O. Asekunowo, and Sam A. Olaiya, "Crude oil revenue and economic development in Nigeria (1974-2008)," *OPEC Energy Review*, Vol. 36, no. 1, (2012): 138-169, 145

³⁰ Premium Times, 'Nigeria's State-owned Oil Company, NNPC, Pens its Accounts to Public,' *Premium Times*, (Abuja), Sunday, (October 11, 2015), p. 12

³¹ Kamoru T. Lawal, "Taxation of Petroleum Profit under the Nigeria's Petroleum Profit Tax Act," *International Journal of Advanced Legal Studies and Governance*, Vol. 4, no. 2, (2013): 34-49, 39

³² Author's interview with Mr. Michael Dalhat (Director, Planning, Research and Statistics (PRS) Department, Nigerian Ministry of Petroleum Resources), Abuja, June 9, 2015

5.2.2.3 Royalty

In Nigeria, a royalty payment is due on every month on each producing concession by an operating oil company engaged in upstream operations and agreed percentage of oil produced after the adjustments for expenses related to treatment and handling. Table 2 below shows the different royalty rates that prevailed for joint venture operations as of 2015.³³

Table 2: Royalties and Signature bonuses for different upstream areas in Nigeria

Depth (in meters)	Royalty rate (%)	Signature bonus (US\$ million)
Onshore production	20	5
Production in territorial waters and continental shelf up to 100 meters water depth	18.5	10
Offshore production beyond 100 meters and up to 200 meters	16.6	10
In areas from 201 - 500 meters water depth	12	20
In areas from 501 – 800 meters water depth	8	25
In areas from 801 – 1000 meters water depth	4	20
In areas above 1000 meters water depth	0	20

Source: Compiled by the author based on data from the NNPC & DPR, 2015

5.2.2.4 Signature Bonuses

Signature bonuses are defined as payments made by the international oil companies (IOCs) to the State on agreeing to carry out the model agreements. Nigerian government generates payments from the signature bonuses for different areas as shown in Table 2 above.

³³ Op cit Al-Atar and Alomair “Evaluation of upstream petroleum agreements,” p. 38

5.2.2.5 Resource Rent Tax (RRT)

The RRT payable to the State in Nigeria is as follows: Oil Production Lease (OPL) entails NGN200.00 for each km² or part thereof; a nonproducing Oil Mining Lease (OML) entails NGN300.00 for each km² or part thereof; and a producing OML entails NGN500.00 for each km² or part thereof.³⁴

Table 3: Financial flows through Petroleum Production in Nigeria, 2006 – 2011

Type of Revenue	2006	2007	2008	2009	2010	2011	Grand Total
	\$USD Million	\$USD Million	\$USD Million	\$USD Million	\$USD Million	\$USD Million	\$USD Million
Sales of crude oil and gas	22,177	30,875	47,794	20,804	32,698	45,560	199,908
Petroleum Profit Tax (PPT)	10,627	8,084	10,957	5,400	8,590	18,764	62,422
Royalty Oil	4,405	3,872	5,433	2,578	3,854	6,041	26,183
Signature Bonus	985	510	45	5	0	216	1,761
Gas Flaring Penalties	0	0	0	19	18	22	59
PSC in Kind Payments	0	0	0	3,193	5,063	8,836	17,092
Concession Rentals	0	0	0	1	1	2	4
Companies Income Tax	137	194	215	236	368	273	1,423
Grand Total per year	38,331	43,535	64,444	32,236	50,592	79,714	

Source: Compiled by the author based on data from NEITI reports (2006-2011)

³⁴ See NEITI, *Report 2013*, p. 6

5.3 Fiscal Rules used in Managing and Regulating Revenues from Petroleum Industry in Norway and Nigeria

5.3.1 The Norwegian Sovereign Wealth Fund

The Norwegian government manages all the revenues from the petroleum industry through the Government Pension Fund Global (GPF), which was established in 1990 to ensure a long-term perspective in the management of government petroleum revenues.³⁵ Government revenues from petroleum activities are, therefore, transferred to the Fund and none of the oil revenue goes directly into the government budget revenues. Transfers to the resource Fund come from the entire net cash flow from the petroleum sector (less government spending) and the return of the Fund's investments. Only the real return (interest minus inflation) from the Fund, currently estimated at 4 percent, can be used for non-petroleum government budget deficits.³⁶

The Norwegian's GPF is the largest Sovereign Wealth Fund (SWF) in the world³⁷ and at the end of 2015 the Fund's market value was in excess of US\$890 billion; which corresponds to more than twice Norway's Gross Domestic Product (GDP), based on figures for the 2016 budget, or over US\$0.16 million per person in the current Norwegian population.³⁸ The Fund has a very long investment horizon, and is intended to be managed so that Norway's petroleum wealth not only benefits the present generations but the future generations as well. It was established as a fiscal policy tool to underpin long-term considerations in the phasing of petroleum revenues into

³⁵ Norwegianpetroleum.no, *Management of Revenues*, [Accessed September 28, 2015]
<http://www.norskpetroleum.no/en/economy/management-of-revenues/>

³⁶ See Norges Bank Investment Management (NBIM), *About the Fund*, p. 3, [Accessed on September 28, 2015], <https://www.nbim.no/en/the-fund/about-the-fund/>. The so-called spending rule, stating that no more than 4 percent of the Fund over time should be spent on the annual national budget, was first established in 2001.

³⁷ See Delia Velculescu, "Norway's Oil Fund shows the way for Wealth Funds," *IMF Survey*, (July 9, 2008), p. 12-19: 15; also see Ole Gunnar, "The Norwegian petroleum experience," p. 25

³⁸ Author's interview with Ms. Nina Bjerkedal (Director General, The Tax Policy Department, Norwegian Ministry of Finance), Oslo, October 14, 2015

the Norwegian economy.³⁹ There are strict rules – covering such elements as ethical investments, limits on equities, transparency and so on – governing how the resource funds are used or invested.⁴⁰

The law of the Petroleum Fund is clear that the wealth should be invested in foreign assets. All of the funds are invested outside of the country to lessen inflationary pressures on the local economy from resource-driven prosperity.⁴¹ Investing in foreign financial assets serves the purpose of sterilizing revenue inflows to avoid problematic macroeconomic mechanisms. While it provides foreign currency income from the return on the assets, the strategy also helps to avoid increased investments in Norway which can push up the already high Norwegian cost level.⁴² Furthermore, it is considered that Norwegian companies already have satisfactory access to capital in the form of possibilities to raise equity and obtain loans in the capital market.⁴³

The Fund is supposed to have a diversified portfolio, with both equity and fixed income, and with weights depending on the overall market shares with a slight preference for Europe, due to the shorter geographical distance. The current weights imply that the asset distribution should be *60% in equities, 30% - 40% in fixed income securities, and 0% – 5% in real estate.*⁴⁴ The regional distribution depends on the asset type. For equities, the regional distribution is based on market weights – the relative size of the regional equity markets - while for fixed income the

³⁹ Author's interview with Mr. Amund Holmsen (Director General, The Economic Policy Department, Norwegian Ministry of Finance), Oslo, October 13, 2015

⁴⁰ Paul Segal, "How to Spend It: Resource Wealth and the Distribution of Resource Rents," *Energy Policy*, (2012): 51:347, 74

⁴¹ Norges Bank Investment Management (NBIM), *Investment Strategy*, p. 12, [Accessed on September 28, 2015] <https://www.nbim.no/en/investments/investment-strategy/>

⁴² Martin Skancke, "Fiscal Policy and Petroleum Fund Management in Norway," in Jeffrey M. Davis, Rolando Ossowski and Annalisa Fedelino, (Eds.), *Fiscal Policy Formulation and Implementation in Oil Producing Countries*, (Washington, DC: International Monetary Fund, 2014), p. 24

⁴³ Author's interview with Mr. Jens Okland (Head of Marketing, Midstream and Processing Section, Statoil), Stavanger, September 18, 2015

⁴⁴ See NBIM, 'Investment Strategy.'

regional distribution is based on GDP weights to avoid that countries with high debt are given a large weight in the portfolio.⁴⁵

The ultimate owner of the Fund is the Norwegian parliament (Storting), on behalf of the Norwegian State and its people.⁴⁶ The parliament decides how the Fund should be managed, and who should be responsible for doing so. The Norwegian Ministry of Finance is the one responsible for the management of the Fund, but the operational management is carried out by the Norwegian Central Bank (Norges Bank), through the Norges Bank Investment Management (NBIM), which invests the Fund's capital in the three mentioned asset classes (equities, fixed income and real estate) outside of Norway in accordance with guidelines issued by the Ministry.

The management of the Norwegian resource Fund is often hailed as a good example for other oil rich nations to emulate. There is high level of compliance to the Santiago Principles, which is a set of 24 guidelines for high standards of good governance, transparency, accountability and prudent investment practices whilst encouraging a more open dialogue and deeper understanding of SWF activities.⁴⁷ The management of the Norwegian Fund is accounted for in annual reports to the National Assembly (Storting), and in the National Budget.⁴⁸

⁴⁵ Author's interview with Mr. Amund Holmsen (Director General, The Economic Policy Department, Ministry of Finance), Oslo, October 13, 2015

⁴⁶ Authors interview with Ms. Nina Bjerkedal (Director General, The Tax Policy Department, Norwegian Ministry of Finance), Oslo, October 14, 2015

⁴⁷ The Santiago Principles consists of 24 generally accepted principles and practices voluntary endorsed by the International Forum of Sovereign Wealth Funds (IFSWF) members. The Principles were proposed and drafted by the International Working Group of SWFs (now the International Forum of SWFs) and welcomed by the IMF's International Monetary Financial Committee in 2008. As of 2016, there were 30 Funds signed up to the Principles. See International Forum of Sovereign Wealth Funds. Available at: <http://www.ifswf.org/santiago-principles-landing/santiago-principles/> [Accessed on September 28, 2015]. There are three fundamental pillars in the management of the Norwegian GPF: transparency, responsible investments and adherence to ethical guidelines, principles and rules of the fund.

⁴⁸ Steiner Holden, 'Avoiding the Resource Curse: The Case of Norway,' *Energy Policy*, Vol. 6, no. 3, (2013): 870-876, 872

5.3.2 The Nigeria's Sovereign Wealth Fund

Excess oil reserves in Nigeria were previously allocated to Excess Crude Account (ECA) which was set up in 2004.⁴⁹ The ECA was created to act as a fiscal reserve for Nigeria to cushion the economy from the volatility of oil prices by acting as a stabilizing fund to meet the country's yearly budget deficits and to also fund the development of local infrastructure.⁵⁰ A benchmark price for oil is considered and oil revenues over and above the benchmark price are pooled into the ECA so that in the event of price volatility, the ECA is used to bridge the gap between the actual oil income and the budgeted one. However, due to the fact that the ECA lacks real legal backing and is not protected for withdrawals, the Nigeria Sovereign Investment Authority (NSIA) was then created in 2011 to replace it.⁵¹

The Nigeria's SWF was set up by the *NSIA Act* which was signed in May 2011 and commenced operations in October 2012.⁵² The Fund was founded for the purpose of managing and investing the oil funds on behalf of the government of Nigeria. It is intended to invest the savings gained on the difference between the budgeted and actual market prices of oil to earn returns that would benefit future generations of Nigerians. The Nigeria's SWF is composed of three ring-fenced distinct funds:⁵³ A *Stabilisation Fund* that acts as a buffer to safeguard against short-term macro-economic instability (hence a last resort from which the government withdraws annually to meet shortfalls - deficits - in the budget brought about by falls in oil prices or other budgetary constraints); a *Future Generations' Fund* for long-term investments and assets to pass the

⁴⁹ Uwafiokun Idemudia, "The Resource Curse and the Decentralization of Oil Revenue: The Case of Nigeria," *Journal of Cleaner Production*, Vol. 35, no. 1, (2012): 183-193, 189

⁵⁰ See SWFI, 2014

⁵¹ Author's interview with Professor Humphrey Asobie (Former Chairperson, NEITI), Abuja, July 27, 2015

⁵² NSIA, *Overview*, [Accessed September 29, 2016], <http://nsia.com.ng/overview/>

⁵³ See NSIA; see also SWFI

benefits of petroleum resources to future generations; and, the *Nigeria Infrastructure Fund* that invest in infrastructure development for promoting economic growth.

The NSIA receives monthly funding of a significant portion of oil and gas revenues above the budgeted revenue and approved by the parliament. Under the NSIA, the assets distribution currently is: *Nigeria infrastructure fund* – 40%; *Future generations' fund* – 40%; and *Stabilisation fund* – 20%.⁵⁴ According to Professor Anthony Adegbulugbe, the rationale behind this decision was the assertion that through this initial period of NSIA's existence, equal importance be placed on ensuring that the institution is targeting inter-generational equity in the form of savings for future generations of Nigerian, whilst addressing the infrastructure deficit currently holding back the country's growth.⁵⁵

It is important to note that in Nigeria, the oil revenues are divided on monthly basis between the three tiers of government: Federal, State and Local levels. The Federal government typically gets about half (1/2th) of oil revenue; the 36 State governments gets about a quarter (1/3rd); and the 774 Local governments gets about a fifth (1/5th).⁵⁶ The rest of the oil revenue flows to special funds. Governance is generally better at the Federal level than at the State and Local levels, though some State governments are fairly well regarded.

Although NSIA is still young in terms of existence and operation, it's predecessor the ECA, had partially helped cushion the country's economy. However, the problem of low technical capacity in administering the fiscal regime is affecting the value that is actually derived from the resource.

⁵⁴ See NSIA

⁵⁵ Author's interview with Professor Anthony Adegbulugbe (General Manager, Budget Office of the Federation (BOF), Ministry of Niger Delta), Abuja, July 6, 2015

⁵⁶ See NEIT *Report 2013*, p. 6; also see Mike Kwanashie, "Fiscal Federalism, Resource Sharing and Political Economy of Nigeria" in) *Resource Control and Democratic Stability in Nigeria*, ed. Uba Sani, (Abuja: Kaduna NCPD, 2001), p. 12

George Osahon points out that the country seems to be pursuing fiscal discipline at the Federal level, but such discipline is yet to hold firm at the State and Local government levels, where the worst corruption probably now occurs. The Federal Government has incorporated the oil-price fiscal rule into the *Fiscal Responsibility Act of 2007*, which seeks to institutionalize budgetary transparency and accountability, promote effective management of the public sector, and reduce leakages in the economy.⁵⁷ But reflecting pressures by the States' governors, the National Assembly agreed to make the *Act* inapplicable to the States on constitutional autonomy ground, yet the expected voluntary implementation of fiscal responsibility regimes by the Sub-units is progressing only slowly.⁵⁸

While various checks have been put in place at Federal level, such as a *Due Process Office* (now Bureau of Public Procurement), a *Public Procurement Act*, and a *Fiscal Responsibility Act*, these have no jurisdiction over many financial flows at State level, though a few of these kinds of checks have also been adopted in some states.⁵⁹ The current stabilization regime also does not seem to have a truly integrated structure in terms of Federal, State and local spending. Often than not, the States seem to have a bigger hit during the downturn than do the Federal Government.⁶⁰

⁵⁷ See Thomas Baunsgaard, "Fiscal Policy in Nigeria: Any Role for Rules?" Working Paper 03/155, (Washington, DC: International Monetary Fund, 2003), p. 15; see also Chris Ikporukpo, "Petroleum, Fiscal Federalism and Environmental Justice in Nigeria," *Space and Polity*, Vol. 8, no. 3, (2004): 321-354, 332

⁵⁸ Author's interview with Mr. Elias Mbam (Chairman, Revenue Mobilization Allocation and Fiscal Commission, RMAFC), Abuja, July 3, 2015

⁵⁹ Human Rights Watch, *Chop Fine: The Human Rights Impact of Local Government Corruption and Mismanagement in Rivers State, Nigeria*, (New York: Human Rights Watch, 2007a), p. 8

⁶⁰ Daniel J. Smith, *A Culture of Corruption: Everyday Deception and Popular Discontent in Nigeria*, (Princeton: Princeton University Press, 2007), p.12

5.4 Conclusion

For both Norway and Nigeria, the fiscal regimes are a function of domestic petroleum production and create significant economic value. While taxation, followed by SDFI creates the biggest economic value for Norway, the crude oil and gas sales, followed by PPT generate the highest economic value for Nigeria. In addition, although the two countries have both been able to establish Sovereign Wealth Funds (SWFs), only Norway has been able to accumulate significant assets. So far, Norway has been able to save a large share of the petroleum revenues as compared to Nigeria whose oil revenues have been embezzled by the political elites and their cronies in the country. Unlike in the case of Nigeria, the fiscal rule of spending oil revenues in Norway ensures that the spending of the oil revenues will last for long, to benefit both the current and the future generations.

While Norway has been efficient in collecting oil revenues from petroleum sector, inefficiencies in revenue collection in Nigeria arise as officials channel resources to associates, and short time horizons of competing elites lead to policies geared more at creating niches for middlemen than establishing a favorable long-term investment climate. The incentives for foreign investment tend to be put in place on an ad hoc basis in response to crises in revenue generation, due for example to declines in oil price.⁶¹ This general short-term outlook is also not compatible with the sustained focus on institutional and human capacity development that would support development of local technological capability.

⁶¹ Author's interview with Professor Humphrey Asobie (Former Chairperson, NEITI), Abuja, July 23, 2015

In conclusion, Norway and Nigeria have both designed fiscal regimes in order to help the State accumulate, manage and regulate revenues drawn from the petroleum sector. However, while fiscal regimes have effectively helped Norway to accumulate, manage and utilise huge wealth from the petroleum industry, inefficiencies in oil revenue collection, management and regulation have negatively impacted the Nigerian State and its population.

CHAPTER SIX

DATA ANALYSIS, PRESENTATION AND FINDINGS

6.0 Introduction

This Chapter presents analysis of quantitative and qualitative data collected from the field research in Norway and Nigeria. The overall objective of this study was to critically analyse why Norway has a better performance in the management of oil resource than Nigeria with aim of drawing some practical lessons for Kenya. The basic assumption that guided this study was that Norway has a better performance in the management of oil resource than Nigeria. Moreover, the resource curse theory was used as analytical tool in this study. The analysis, therefore, is guided by the research objectives, research questions and research hypotheses as stipulated in the study.

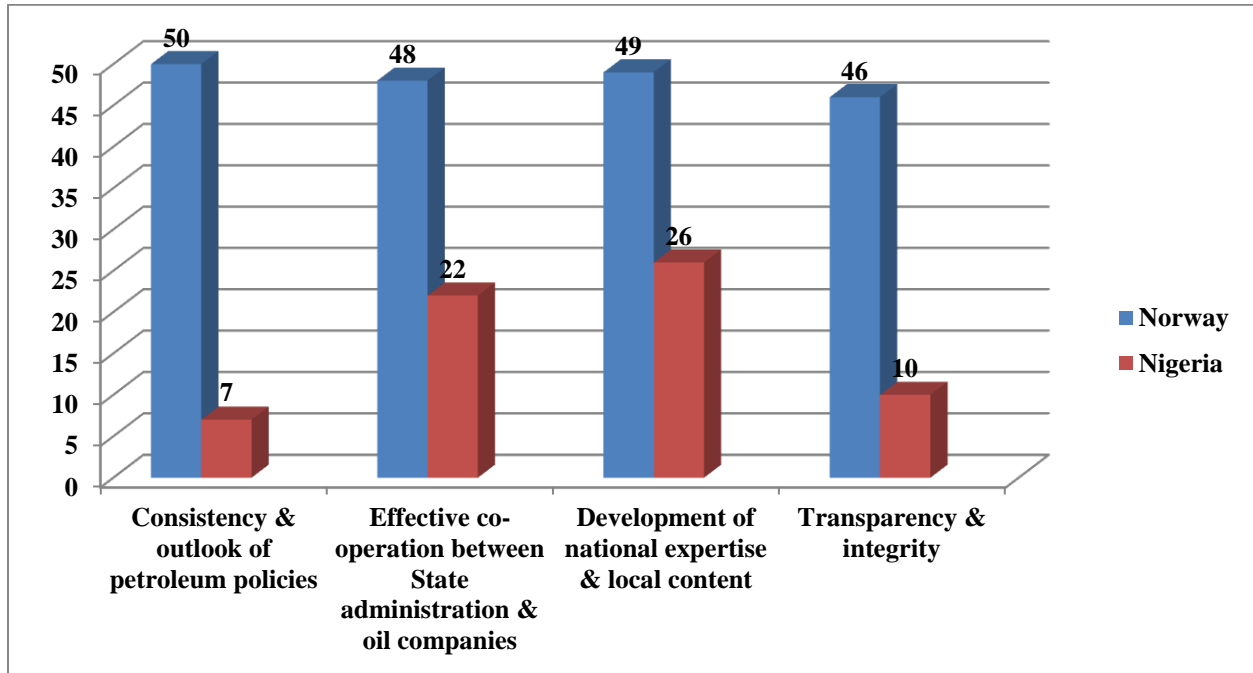
The particular research objectives that guided this analysis are: to investigate the impact of petroleum policies in the development of petroleum industry in Norway and Nigeria; to examine whether the institutional design and organization in the petroleum industry in Norway and Nigeria have the competence to contribute in the management of petroleum resources in the two countries; to assess how the regulatory practices governing the petroleum industry in Norway and Nigeria have encouraged the sustainable development of petroleum resources; and finally, to find out whether the fiscal regimes employed by the Norwegian and Nigerian governments are effectively helping in extracting, managing and regulating revenues that accrues from the petroleum industry. Moreover, the findings sought to confirm or disconfirm the following hypotheses: the petroleum policies have played a positive role in the development of petroleum industry in Norway than in Nigeria; the institutional design and organisation in the petroleum

industry in Norway has the competence to contribute in the management of petroleum resources unlike in Nigeria; the regulatory practices governing petroleum industry in Norway encourages sustainable development of petroleum resources better than in Nigeria; and finally, the fiscal regimes employed by the Norwegian government are effectively helping in extracting, managing and regulating revenues that accrues from the petroleum industry than those employed by the Nigerian government.

This Chapter, therefore, constitutes analysis of data by synthesizing the key themes focusing on issues that flow throughout the study in the first five Chapters. The nature of analysis is both quantitative and qualitative where data collected was analysed using a combination of qualitative and quantitative methods of statistical analysis. The analysis of the frequencies, percentages, and other quantitative values paid special focus on determining the constant variables as well as the level of correlation between key variables. The analysed quantitative data is presented in graphs and charts. Part of the qualitative data was categorised into similar groups after which the groups were coded then keyed in as quantitative data. However, the qualitative data, which was collected in a narrative form, was used to explain the quantitative values, which had been generated from the quantitative analysis. The Chapter has four main sections. The first and the second sections present a critical analysis of data on petroleum policies and the institutional design and organisation in petroleum industry respectively. The third and the fourth sections deal with regulatory practices and fiscal regimes in that order. In each section, practical lessons are drawn for Kenya as an emerging petroleum host country.

6.1 A critical analysis of the impact of Petroleum Policies in the development of petroleum industry in Norway and Nigeria

Figure 7: The Design of Petroleum Policies in Norway and Nigeria



To understand the design of the petroleum policies formulated and implemented by the Norwegian and Nigerian governments, the researcher through the self-administered questionnaires and face-to-face interviews, posed questions that revolved around the outlook of the petroleum policies; the co-operation between the State and International Oil companies (IOCs); the development of national expertise and the enhancement of local content; and, the issues of transparency and integrity in the two countries.

From the data collected from the field (as shown in Figure 7), all the 50 (100%) respondents that participated in this study in Norway compared to 7 of the 50 (0.14%) respondents in Nigeria argued that the petroleum policies in their respective countries are consistent and have a long-term outlook; 48 (96%) respondents in Norway and 22 (44%) in Nigeria agreed that there is

effective co-operation between the State administration and IOCs; 49 (98%) respondents in Norway and 26 (52%) in Nigeria said that their respective governments have encouraged the development of national expertise and local content in these countries; and finally, 46 (92%) respondents in Norway as compared to 10 (20%) in Nigeria argued that there is transparency and integrity in the petroleum industry in their respective countries. On average, 48 (98%) respondents in Norway as contrasted to 16 (32%) in Nigeria argued that petroleum policies formulated and implemented by their governments have played a significant role in the development of petroleum industry in their respective countries. From this data, the petroleum policies have positively impacted in the development of petroleum industry in Norway than in Nigeria.

6.1.1 Consistency and Outlook of the Petroleum Policies

Petroleum policies that are sufficiently institutionalized and with a long-term outlook on resource management hugely benefits and maximises the value of a country's petroleum resources.¹ In other words, a petroleum policy should identify these resources as part of the national wealth that should be sustainably developed and managed to optimise the economic and social benefits for the present and future generations in the resource-rich nations.

As shown in Figure 7 by the responses from all the 50 (100%) respondents that participated in this study, Norway has been cautious and prudent with its petroleum industry with consistent and institutionalised policies spanning a longer time horizon to benefit the current and future generations of the Norwegians. Moreover, Norwegian policy has been structured in a manner that serves the economy as a whole rather than the interests of a limited number of individuals in

¹ Author's interview with Mr. Farouk Al-Kasim (Senior Geologist, Founder and President of PETROTEAM), Stavanger, September 8, 2015

the economy. On the other hand, only 7 (0.14%) out of the 50 respondents agreed that Nigeria has consistent petroleum policies with long-term outlook; 43 (99.86%) of the respondents disagree on the same issue. This, therefore, shows that Nigeria has routinely formulated petroleum policies with a short-term outlook as a result of changing governance, each of which trying to shape these policies in a manner most profitable to those in power at any particular given time.

From this background, Kenya should, therefore, implement a petroleum policy that is in full harmony with long-term objectives for the development of its national economy and society as a whole. The country MUST formulate a petroleum policy that is sufficiently institutionalized and consistent with long term national objectives in order to avoid profound changes whenever new governments come into power. Moreover, the slogan of developing petroleum resources ‘for the benefit of all the people’² should seriously be adhered to by the authorities throughout. Sustainable development of petroleum resources for the benefit of both the current and future generations MUST be the principle objective of the Kenya’s petroleum policy.

6.1.2 Co-operation between the State Administration and Oil Companies

The petroleum policy should attract the best of international expertise and competence, and promotes cooperation between domestic and international players.³ This, therefore, means that a good and sound petroleum policy should attempt to balance the needs of the State as the owner and regulator of the petroleum resources, with the needs of the IOCs as extractors of these resources.

² See Farouk Al-Kasim, *Managing Petroleum Resources*, p. 241

³ Author’s interview with Farouk Al-Kasim (Senior Geologist, Founder and President, PETROTEAM), Stavanger, September 8, 2015

From Figure 7, 48 (96%) of the respondents in Norway as compared to only 22 (44%) of the respondents in Nigeria agreed that there is effective co-operation between their respective State administrations and IOCs. The analysis, therefore, showed that unlike Nigeria, the most distinctive and important feature of the Norwegian petroleum policy is perhaps its success in attracting competent IOCs and creating a working model for joint co-operation between the authorities and these licensees. An important cornerstone for positive interaction between the Norwegian authorities and the oil companies is the existence of mutual respect for each other's objectives and expertise. The other prerequisite is a free exchange of information based on a genuine desire to co-operate in order to find and implement win-win solutions.⁴

While, just like in the majority of host countries, co-operation between oil companies and national authorities in Nigeria leaves a lot to be desired, the Norwegian experience offers valuable clues to Kenya as to how a positive relationship could be developed. While trying to attract competent IOCs, the Kenyan government should not only understand the commercial challenges but also sympathize with them. As an administrator, the Kenyan government should be objective in its dealing with all commercial interests and should recognize where technological challenges require joint efforts between the authorities and the IOCs. This will lead to joint co-operation projects with oil companies in order to investigate or promote common operational objectives. There are several examples of such co-operation ranging from projects on Improved Oil Recovery (IOR); health, safety and environmental (HSE) protection; cost efficiency; drilling breakthrough technologies; joint research; and, joint owned database system where authorities and several oil companies can keep their data and access them in accordance with agreed confidentiality rules.

⁴ Author's interview with Ms. Inger Lise Stromme (Director, Data Management and Organization, NPD), Stavanger, September 9, 2015

Through working together to meet common challenges, both the Kenyan government and the licensees will increase their in-depth understanding of the challenges as well as of each other's attitude to them. By enhancing this mutual understanding, the two sides will have a much better chance of reaching mutually agreeable solutions. It is important to note that while cooperating with the IOCs, Kenya as a host country should domesticate the Norwegian *'Internal Control'*⁵ approach mainly because it places the responsibility where it belongs and it simplifies the government's role to that of auditing the companies' adherence to their own codes and standards.

In general, the Kenyan government should see international expertise as essential for sustainable resource development, since the combination of domestic and international knowledge and effort ensures the maximum value for the country's petroleum resources. Therefore, the aim of the Kenya's national petroleum policy should be to maintain a balance between the interests, rights, obligations and benefits of all of the participants in the exploitation of petroleum resources.

6.1.3 Development of National Expertise and Local Content

From Figure 7, 49 (98%) respondents in Norway and 26 (52%) in Nigeria said that their respective governments have encouraged the development of national expertise and local content in these countries as a result of petroleum industry. These data, therefore, shows that spillover-loss in Norway may have been much lower than in Nigeria because of accumulation of domestic know-how and expertise in offshore extraction. This was achieved by letting experienced IOCs lead in the beginning. After a gradual accumulation of competence, Norwegian firms have been

⁵ This is a special feature of the Norwegian resource management which simply means that the licensees are responsible for maintaining the government's standards for HSE by developing their own codes and procedures. The authorities' role is to ensure that the companies' codes and procedures are adequate to meet the HSE objectives; and, to ensure through audits that the companies adhere to their own codes and procedures. See Al-Kasim, *Managing Petroleum Resources*, p. 244

given an increasingly important role, both in extraction and supply of inputs unlike in Nigeria.⁶ This has spurred important linkages from oil to different resource industries and through downstream links to processing industries.

Unlike in Nigeria, the Norwegian approach to managing its petroleum resources also included the policy of optimizing the ‘local content’⁷ of deliveries to petroleum operations. The Norwegian authorities made it clear that the performance of oil companies in this regard would be monitored and taken into account when selecting licensees in forthcoming allocation rounds. The positive response by oil companies made it possible for Norway to achieve accelerated technological development within short period of time. The performance of Nigeria as a host country in encouraging the development of national expertise so that it may provide services to petroleum operations is invariably less impressive than that of Norway. Norway is in a relatively advanced position in technological development combined with entrepreneurial and industrial traditions and cannot be matched by Nigeria or even the majority of the petroleum host nations around the world.

The experiences of the two countries provides a good incentive to Kenya to exert its utmost in order to develop national expertise in petroleum sector and encourage participation by its local industries, research and technological institutions. The clear goal of the State here should be to make sure that Kenyan local companies participate and thereby build up expertise in the industry. To benefit from the transfer of know-how and expertise from the IOCs operating in the country, the Kenya government should utilise the policy of optimising the local content by

⁶ Author’s interview with Professor Reidar Bratvold (Professor of Petroleum Investment and Decision Analysis, University of Stavanger; and Lecturer, Norwegian Institute of Technology, Trondheim), Stavanger, September 21, 2015

⁷ The local content is defined here as national employment, the use of national goods and services, and transfer of technology and know-how

inviting IOCs to contribute in the development of expertise within the petroleum sector. In the meantime, Kenyan government should try to bridge this gap by employing international consultants, at least during the initial stages as it continues to build up its own technical competence in the industry. But all in all, capacity building should be a priority both at the national and county levels (including for civil society and local communities), as the Turkana oil projects move from the discovery towards development and eventually production phases.

6.1.4 The Degree of Transparency and Integrity

Data from Figure 7 shows that 46 (92%) of the respondents that participated in the study in Norway as compared to 10 (20%) respondents in Nigeria argued that there is transparency and integrity in the petroleum industry in their respective countries. Perhaps by far, as compared to Nigeria, Norway has long traditions in openness, integrity and transparency. The Civil Service Code⁸ of behaviour guarantees all users of government services full access to the process leading to decisions on their cases. In addition, the media enjoys free access to almost all public documents on decisions made by the government with only a few exceptions related to national security.

All documents submitted by the government to the national assembly are made public and are thus available for research by public institutions that constantly monitors government performance.⁹ All these democratic features provide confidence both to the public and oil companies that the government exercises discretion in a forthright and objective manner that is open to scrutiny if and when required. In the contrary as shown by the 40 (80%) respondents that

⁸ In Norway, the office of the Public Auditor watches over all civil servants to ensure their adherence to the Code. See Al-Kasim, *Managing Petroleum Resources*, p. 243-244

⁹ Author's interview with Mr. Farouk Al-Kasim (Senior Geologist, Founder and President, PETROTEAM), Stavanger, September 8, 2015

participated in this research study, just like several of the petroleum host countries around the world, Nigeria is still faced with corruption, impunity, issues of integrity and accountability, hence, struggling to secure these features in their petroleum policies and practices.

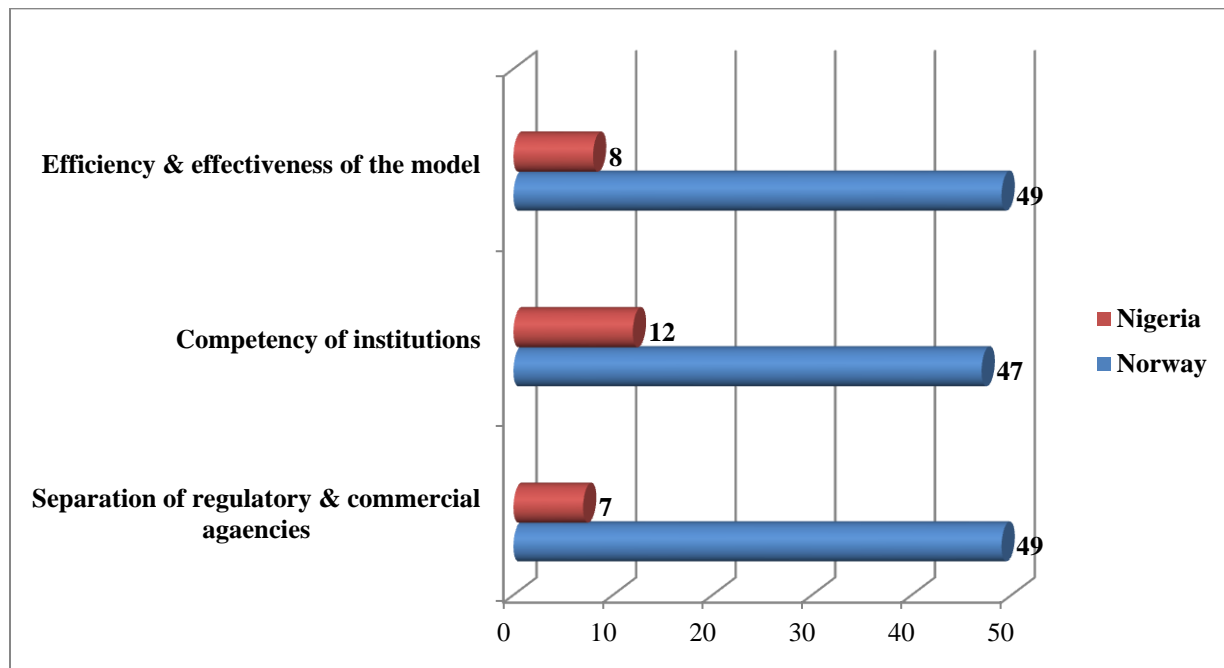
From the experiences of the two cases, Kenyan government MUST practice high degree of integrity, openness and transparency by disseminating and disclosing to the public all data and information related to the nature of petroleum contracts entered between the government and the IOCs, criteria for awarding licenses, cost of petroleum resource exploration, development and production, health safety and environmental issues, to name just a few. Presently, the government of Kenya has disseminated and disclosed very little detailed information on the prospects of Kenya's oil, particularly oil reserves discovered in Turkana County. For example, the government commitments to contract disclosure remain unmet and comprehensive details of the pipeline feasibility study have not been published. The one important exception is the Petroleum Master Plan (PMP), funded by the World Bank and prepared by Price Waterhouse Coopers.¹⁰

The Kenyan authorities must understand and appreciate the fact that the Kenyan citizens have as much right to information related to the extraction of their petroleum resources as foreign shareholders. The information related to petroleum operations should be made available to the public and relevant stakeholders for their scrutiny and comments. Here lie not only great challenges but also great benefits to Kenya in the case of success.

¹⁰ Bernard Namunane, "Tullow: Oil Exports Next June," *Daily Nation* (Nairobi), Thursday 25, August 2016, p. 8

6.2 A critical examination of the contribution of the Institutional Design and Competence in the management of petroleum resources in Norway and Nigeria

Figure 8: Institutional Design and Competence in the Petroleum sector in Norway and Nigeria



In trying to find out how the States in Norway and Nigeria are administering petroleum industry, the researcher asked the respondents questions related to the institutional organisation, clarity of roles and competence in the petroleum industry, the nature of relationship between the State and the National Oil Company (NOC), and the effectiveness of the structural model used in administering petroleum sector in the two countries.

As shown from Figure 8, 49 (98%) of the participants in Norway responded that there was clear separation of agencies that are responsible for taking care of the regulatory and commercial interests of the State as compared to 7 (14%) of their counterparts in Nigeria. Moreover, 47 (94%) of the respondents in Norway and 12 (24%) respondents in Nigeria agreed that the

institutions responsible for petroleum industry administration in their respective countries are technically competent. Furthermore, 49 (98%) of the respondents in Norway as compared to 8 (16%) in Nigeria agreed that the structural model used by their respective governments in administering petroleum operations and activities are efficient and effective. On average, 48 (96%) of the participants in Norway as compared to 9 (18%) in Nigeria responded that the institutional design and organisation administering petroleum industry is effective and the institutions have the technical competence to contribute in the management of oil resource in the two countries. This data confirms that the institutional design and organisation in the petroleum industry in Norway has the competence to contribute in the management of petroleum resources unlike in Nigeria.

6.2.1 Separation of the State's Regulatory and Commercial interests

The data collected as shown in Figure 8, a staggering 49 (98%) of the respondents in Norway agreed that there was clear separation of the institutions that are responsible for regulatory and commercial interests of the State as compared to 7 (14%) respondents in Nigeria. Norway is well known for an administrative system in which it assigns petroleum industry functions to three distinct State-controlled institutions, each with its own clear and distinct role. First, there is the policy making body, the Ministry of Petroleum and Energy (MPE). The Ministry works with the country's political leadership in setting goals for the sector, makes plans to achieve these goals, and oversees the crucial licensing process. Second, there is the regulatory and technical advisory agency, the Norwegian Petroleum Directorate (NPD), which compiles data on all hydrocarbon activities on the NCS, collects fees from oil operators, advises the Ministry on technical matters, and sets hydrocarbon regulations related to resource management. Third there is the commercial

entity, NOC, Statoil, which today carries out extensive oil operations both in Norway and abroad.

As shown by 43 (86%) of the respondents that participated in the study, Nigerian government have not succeeded in clearly separating the regulatory and commercial interests of the State. The country instead has largely entrusted both the commercial and regulatory functions of the government to a NOC, Nigerian National Petroleum Corporation (NNPC). The company is 100 percent owned by the government, often with at least a senior minister or the president as it's chairman. The NNPC is allocated all rights to petroleum resources in the country and is expected to seek IOCs as partners to help it explore and develop these resources.¹¹ This means that the function of licensing including the conduct of negotiations with IOCs is undertaken by the NNPC with some consultation with the minister responsible for oil and gas. The resulting contract or agreement is usually ratified mostly by the president.

Moreover, the licence or concession is awarded to the NNPC which in turn enters into a contract with an IOC. The form of the contract mostly signed between the company and the IOCs are a PSA type of contract. In this model agreement, the government receives it's share in the form of profit oil which is assigned to the NNPC to dispose off in the best possible manner on behalf of the government. The government also receives a royalty and collect tax on the profit made by the IOCs and the NNPC. Because it is fully owned by government, the practice in Nigeria has been to leave the funds in the NNPC with the objective of securing its growth and development. Unfortunately, however, the reality has been at variance with the objective. The NNPC has developed into a power centre in the economic and political structure of the country. The

¹¹ Author's interview with Professor Adebayo Adedeji (External Affairs Manager, Shell Petroleum Development Company of Nigeria Limited, SPDC), Abuja, July 10, 2015

company has been associated with questionable practices including corruption and accusations of diverting oil revenues to private accounts, and withholding resource revenues from the Federal Account.

As clearly seen in the case of Nigeria, the unfortunate mixing of regulatory and commercial functions in one and the same entity is very problematic. The administration of the government's petroleum resources is of course a commercial function, and the fact that governments usually allows the NOC to retain profit for its own commercial development further emphasizes the company's commercial objective. On the other hand, the assignment of regulatory functions to the same company is, to say the least, confusing to the IOCs. From a commercial point of view, these companies are both partners and competitors to the NOC. Assigning a regulatory role to the NOC under these circumstances is, therefore, undermining the impartiality of the regulatory authority as well as disrupts the business trust between the IOCs and the NOC.

From the experiences of administration of petroleum resources in the two countries, Kenya can learn that there is the need and benefit for clear separation of the government entities administering the petroleum operations (policy and regulatory bodies) from those looking after its commercial interest (commercial body). Kenya as a host country should understand that, tying the minister or Cabinet to national interests, for example by having to seek the approval of parliament, would reduce the risk of power being abused to serve more limited party or other interests.

Competition among different oil companies, both domestic and foreign will only serve the interest of the host country if there is a fair and impartial judge who will criticise and reward justly. The National Oil Corporation of Kenya (NOCK) does not fit the bill of impartiality,

simply because it has its own business interests to protect and promote. This is likely to colour its judgement as a regulatory body. Therefore, to ensure that the petroleum industry takes important public interests into account and that petroleum resources are utilised as effectively as possible, the Kenyan government should structure and organise its petroleum industry with clearly defined areas of responsibilities to avoid duplication of roles, inefficiency and corruption issues.

6.2.2 Technical Competence in the Petroleum Sector

From Figure 8, 47 (94%) of the respondents in Norway and 12 (24%) respondents in Nigeria agreed that the institutions responsible for petroleum industry administration in their respective countries are technically competent. This, therefore, means that while Norway has been diligently building technical capacity in the petroleum sector, both in administrative sense and also on the technological front, Nigeria has mostly failed in this aspect, as confirmed by 38 (76%) of the respondents that participants in this study. While the Norwegian NPD and Statoil have financial resources and technical capacity to discharge their distinct functions competently¹², the Nigerian DPR and NNPC lacks both the financial resources and technical capacity to execute their mandates effectively.

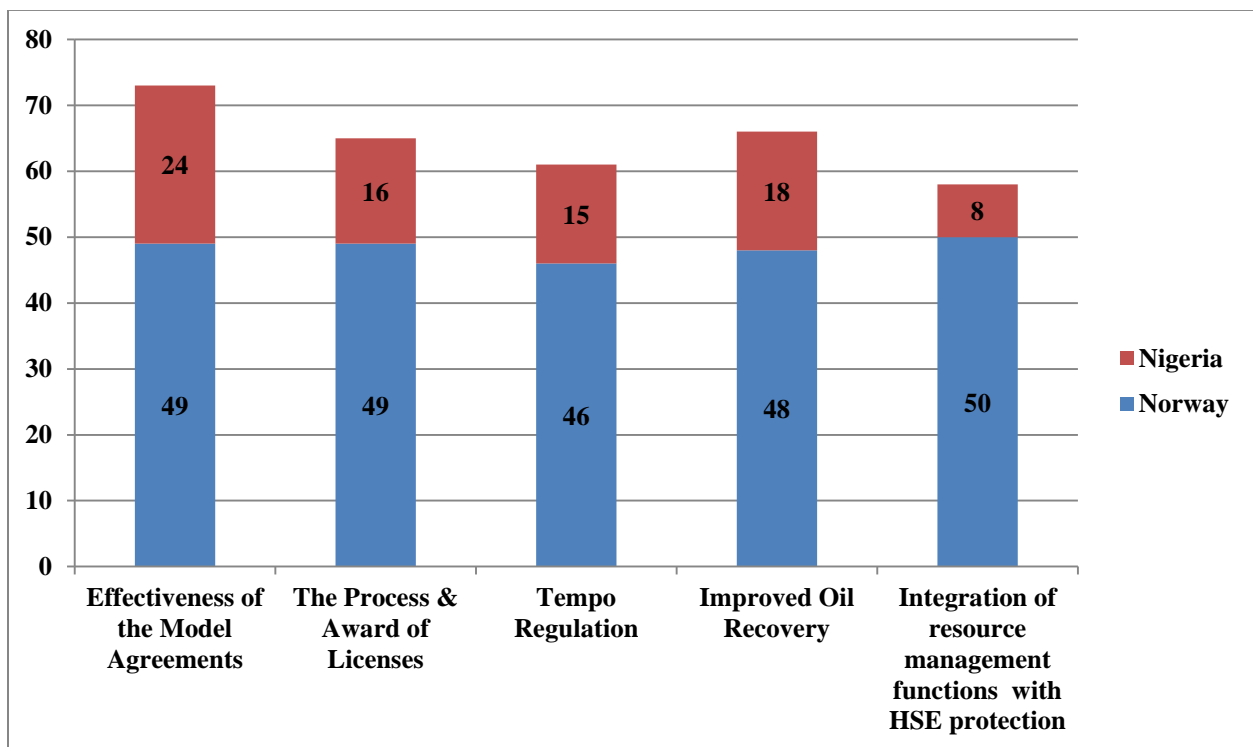
Kenya lacks previous knowledge of petroleum operations and it is still in the early stages of petroleum industry development. Moreover, it has no experience in dealing with oil companies or licensing issues. Since the government's petroleum administration is its window to the industry, the Kenyan government should diligently try to build technical competence in its petroleum administration to direct, control and manage petroleum industry. The government should, particularly invest in training personnel which will contribute in the building of technical

¹² Author's interview Professor Ove Tobias Gudmestad (Professor of Marine Technology, University of Stavanger), Stavanger, September 25, 2015

capacity in the petroleum sector, both in administrative and technological fronts. This will enable the government to gradually accumulate and build its own technical competence. Moreover, the government should also provide financial resources to petroleum administrative agencies to enable them discharge their roles competently. Therefore, the institutions involved in petroleum administration should have the necessary technical skills, financial resources and legal authority to perform their responsibilities without being manipulated or undermined by political leadership, economic elites or any other groups.

6.3 A critical assessment of how the regulatory practices governing petroleum industry have encouraged sustainable development of petroleum resources in Norway and Nigeria

Figure 9: Petroleum Regulatory Practices in Norway and Nigeria



To understand the regulatory practices employed in the petroleum sector in Norway and Nigeria, the researcher asked the respondents that participated in this study questions related to the effectiveness of the model agreements, the process and award of petroleum licenses, tempo regulation, improved oil recover, and, the relations between the resource management functions and the health safety and environmental (HSE) protection.

As presented in Figure 9, a significant 49 (98%) of respondents in Norway and 24 (48%) respondents in Nigeria argued that the model agreements are effective; 49 (98%) of respondents in Norway and 16 (32%) in Nigeria pointed out that the process and award of petroleum licenses in their respective countries are effective; 46 (92%) of respondents in Norway and 15 (30%) in Nigeria argued that the tempo regulation of petroleum production in their countries are efficient; 48 (96%) of the respondents in Norway and 18 (36%) in Nigeria argued that improved recovery of oil is sufficient; and finally, all the 50 (100%) respondents in Norway and 8 (16%) in Nigeria agreed that their respective governments have sufficiently integrated resource management functions with HSE protection. On average, 48 (96%) of the respondents in Norway and 16 (32%) in Nigeria agreed that petroleum regulatory practices in their respective countries have encouraged the sustainable development of petroleum resources in these countries. This data, therefore, shows that the regulatory practices governing petroleum industry in Norway encourages sustainable development of petroleum resources better than in Nigeria.

6.3.1 Model Agreements (Petroleum Contracts)

In Figure 9, 49 (98%) of respondents in Norway and 24 (48%) respondents in Nigeria argued that the model agreements employed in their respective countries are effective in engaging with IOCs. The Norwegian form of contract, the Joint Venture Agreement (JVA) is not particularly

widespread. As Norway became reconciled to its role as a major petroleum producer, petroleum activities were allowed to develop more freely but with at least 50% Norwegian participation (state participation and participation by Norwegian companies).¹³ Given its vast wealth in petroleum resources and traditions in State participation in industrial activities, it was perhaps natural for Norway to choose direct state participation in petroleum operations. Nigeria, on the other hand majorly uses the most common form of contract today, the Production Sharing Agreement (PSA) which is currently preferred by the government than the JVA. Nigerian government has really struggled in participating as an investor in the petroleum sector through the JVA due to increasing funding problem to its joint venture equity holdings hence its preference of the PSA.¹⁴

The PSAs are preferred by the IOCs because it allows them to book the reserves when they are discovered. This may or may not be in line with the legislation of the host country. The main concern, however, lies in the tendency of IOCs to insist on including comprehensive provisions in the agreement either to supplement legislation or compensate for the lack of it. Kenya operates a fairly traditional production sharing system and the contract provide for the participation of the State under a ‘partial carry’ through National Oil Company of Kenya (NOCK). The IOC is solely responsible for costs associated with the exploration phase and from the development phase onwards, the State is required to pay its share of all costs. There is, therefore, a danger that several forms and generations of PSAs would render future legislation pointless, particularly since almost all of them have the so-called ‘stability clauses’ that protect the agreement from

¹³ Author’s interview with Mr. Kalmar Ildstad (Director, Development and Operations, Norwegian Sea, Norwegian Petroleum Directorate, NPD), Stavanger, September 9, 2015

¹⁴ Author’s interview with Engineer Catherine Ngozi Ihome (General Manager, Joint Venture Operations Division, National Petroleum Investment Management Services, NAPIMS), Abuja, June 26, 2015

subsequent legislative changes. Kenyan authorities should, therefore, ensure that the PSAs it enters with the IOCs should be negotiated on the basis of adequate legislation.

The Norwegian JVA is not a common form of contract and there is no any particularly good reason for recommending it for use by Kenya as host country because of the challenge of investing and committing scarce national capital into risky joint ventures. In February 2015 for example, it was reported that the NOCK was seeking to raise US\$1.2 billion through internal sources, external debt and other equity partners in order to finance its share of oil development costs.¹⁵ This clearly confirms that State participation in oil operations commits it to ‘equity stake’ that may become problematic in the future just like in the Nigerian case.

The Kenyan government should understand that the emphasis for State participation is not necessarily a prerequisite for successful resource management.¹⁶ Rather the main objective of State participation should be to help the authorities maintain close control on the direction, tempo and impact of petroleum activities to the Kenyan economy and society as a whole. It should be looked upon as an option that needs careful consideration in the light of the realities, opportunities and capabilities of Kenya as a host country. The authorities should remember that to tie scarce national capital into risky joint ventures can in fact become a heavy burden to Kenya as a country, especially if the investment cannot be protected by professional and sound business management, technical expertise and practical experience.

¹⁵ East African, “Ownership of Oil Exploration Blocks begins to change Hands,” *East African*, November 14, 2015. p. 23

¹⁶ The rationale for State participation is not always purely economic. In fact, economic benefits equal to those provided by State participation can be achieved through conventional taxes. In some cases, State participation is driven by a sense of national pride: governments sometimes believe that it is essential that they have a direct role in the development of their national resources. Another justification, particularly when taking a very small take, is the additional insight into the commercial dimensions of the operations gained from being part of the decision making process. Taking an equity interest in a project means that the State participates on essentially the same terms as other joint venture partners.

Among the points for Kenya to consider in contemplating in participating in the petroleum industry as an investor are the risks associated with exploration and development in the country; the availability of commercial and technical expertise; familiarity with international operations alternative needs within the country for public or private investments, to name just a few. In any case, Kenya would consider negotiating an option to participate commercially once a commercial declaration has been made by the licensees. This way, the country would avoid exposure in the most risky phases of operation and at the same time gain an opportunity to learn the business through active participation albeit at a modest percentage share.

6.3.2 Award of Petroleum Licenses

As shown in Figure 9, 49 (98%) of respondents in Norway and 16 (32%) in Nigeria pointed out that the process and award of petroleum licenses in their respective countries are effective. Therefore, from the licensing system in Norway and Nigeria, there are four main elements that Kenya should thoroughly consider:

1. Licensing rounds: In many host countries, the planning of *licensing rounds* is either absent, weak or not particularly related to the impact on the national economy.¹⁷ There is, therefore, less emphasis on carefully timing and dimensioning allocation rounds to match a desired growth pattern in the national economy. The Norwegian and Nigerian experiences demonstrate that allocation rounds are powerful tools for regulating the tempo of petroleum operations. Unlike in Nigeria, once the impact assessments have been completed, it has been the practice in Norway to announce the intention of the authorities to invite companies to a licence round within a certain general geographical area or areas as the case may be.¹⁸ From this background, in as much as

¹⁷ See Al-Kasim, *Managing Petroleum Resources*, p. 248

¹⁸ Al-Kasim, *Managing Petroleum Resources*, 249

Kenya may have real options to plan its licensing allocation rounds, it should do so to ensure growth in reserves that would in turn maintain the desired levels of operations and revenue generation.

2. *Qualified Licensees*: In many petroleum host countries, it is necessary to screen applicants to licensing rounds before they are declared competent to participate in the bidding process. In other countries the screening of applicants occurs when considering their applications. The basic reasoning behind the need for screening is that by identifying weaknesses in the competence of licensees before allocation, the host country can avert many problems that will arise during the conduct of petroleum operations.¹⁹

In Norway unlike in Nigeria, new applicants are required to fully document their credentials, detailing the company's skills, experience, scope of operations, financial strength, company structure, decision making process, safety codes and standards, attitude to the environment, attitude and track record on enhanced recovery, exploration policy and track-record, the extent to which Norwegian interests are participating in the applicant group, downstream activities, contributes to the strengthening of Norwegian economy, using Norwegian ships and so on.²⁰ After studying the submitted information, the authorities will often visit key areas where the particular company operates in order to see it in action. If it is to be found basically satisfactory, the company may be asked to provide additional information, or to undertake certain improvements in their local organisation before being approved. Kenya, as a host country, is well advised to exert a great deal of effort in order to ensure that only competent oil companies are

¹⁹ Author's interview with Professor Reidar Bratvold (Professor of Petroleum Investment and Decision Analysis, University of Stavanger; and Lecturer, Norwegian Institute of Technology, Trondheim), Stavanger, September 21, 2015

²⁰ Author's interview with Professor Austvik Ole Gunnar (Professor, Norwegian Institute of International Affairs; BI Norwegian Business School), Stavanger, September 23, 2015

allowed to operate within its territory. For Kenya, thorough selection of partners is a worthwhile investment in good and lasting relationships.

3. Multiplicity of Approach: As compared to Nigeria, multiplicity of approach principle has been one of the most fundamental principles in Norwegian petroleum policy. Since the principle preceded any discovery, it obviously reflected an early belief that several companies through their different interpretations and their varied approach to exploration would enhance the chances of making a discovery.²¹ Kenya's authorities should be advised to utilize the multiplicity approach because competition between oil companies is an important basis for efficiency in petroleum operations. The principle holds true for all phases of activities almost regardless of the circumstances of the host country. Different companies will invariably arrive at different interpretations in a given area and will have different views as to its prospectivity.²² The sum of different interpretations by several oil companies will, therefore, form a wider basis for exploration drilling and this in turn will obviously increase the chances of making discoveries in the country.

In addition to professional divergence in interpretation, different companies will also have different corporate or local circumstances that will influence their choice of one prospect or another.²³ On many occasions, some companies have declined to participate in one round then returned with renewed enthusiasm in succeeding rounds. Different oil companies may also assess a given discovery in different ways and a prospect that one company may consider non-commercial can be of interest to another company. Often, a company will seek to farm out part

²¹ See Al-Kasim, *Managing Petroleum Resources*, p. 205

²² Author's interview with Mr. Morten Mauritsen (Managing Director, Esso Norge AS and the Lead Country Manager, ExxonMobil Companies in Norway), Stavanger, October 16, 2015

²³ Silje Aslaksen, "Oil and democracy: More than a cross-country correlation?" *Journal of Peace Research*, Vol. 47, no. 9, (2010): 421-431, 426

of its share in a prospect or a licence in the hope of sharing the risk of exploration or delineation with other oil companies that evaluate the prospect differently.²⁴

Kenya should, therefore, seriously consider introducing *diversity in licensees*, not just a handful of first-comers, for example Tullow Oil Company and African Oil. The Norwegian experience shows that variety in licensees, through healthy competition, will help attain more favourable terms to Kenya as host country. More importantly, variety would lead to more efficient exploration in terms of higher resource growth and lower unit discovery cost. It also improves the chances for developing discovered resources. In development operations, variety of expertise would help benchmark the performance of individual players against one another, thus helping to improve the overall efficiency in operations.

4. Work Programme: From a very early stage, the Norwegian authorities made it clear that they were not interested in bonuses nor were they interested in monetary bidding as a form of realizing advanced value for the petroleum resources. The underlying reasoning for this was the conviction that bonuses would ultimately divert attention from the real objective of licensing, namely to achieve optimal exploration of the resource potential through a commitment to invest in drilling and seismic mapping by the licensees.²⁵ It was realized that cash bonuses would weaken the government's position in demanding what was considered to be an optimum work programme. Instead, after paying bonus the licensee would either settle for a milder work programme, or argue that it should be left to its own discretion.

²⁴ Silje Aslaksen, "Oil and democracy," p. 429

²⁵ Author's interview with Professor Arnfinn Nergaard (Professor of Marine Engineering and deeper water petroleum technology, University of Stavanger, and Lecturer, PETRAD Faculty, Stavanger), Stavanger, September 28, 2015

Kenyan authorities should not be more interested in obtaining the ‘maximum’ work programme, but rather in the ‘optimum’ (i.e. the most effective) way to explore the prospects in the particular block. This, therefore, means that the cost of seismic surveys and of exploratory drilling has to be carefully designed so as to reduce the risk of drilling dry holes and maximize the chances of commercially exploitable discoveries. A prime consideration in this exploration strategy is, on one hand, the realization that premature or imprudent exploration cost would ultimately reduce the net revenues from the resources for both the government and the licensees.²⁶ On the other hand, a reduction in unit exploration cost would in effect lead to maximization of the value of the resources. The fact that the Kenyan government is itself contemplating in becoming an investor in exploration and subsequent development costs further underlies the wisdom of this approach.

For the licensing system to function properly, however, Kenya must provide an overall environment of constructive competition that is seen to be fair in rewarding initiative, creativity and constructive co-operation. These objectives challenge the Kenya’s petroleum administration to manifest fairness, competence and integrity in designing its petroleum licensing system.

6.3.3 Tempo Regulation (Prolong Production Phase)

In Figure 9, 46 (92%) of respondents in Norway and 15 (30%) in Nigeria argued that the tempo regulation of petroleum production in their countries are efficient. The data portrays the state of tempo regulation in the two countries. While Norway looked at the prospect of petroleum riches in a relaxed and skeptical way when oil was discovered back in the 1960s, Nigeria was under pressure to gain access to petroleum resources with aim to obtain instant wealth. Nigeria was,

²⁶ Author’s interview with Professor Austvik Ole Gunnar (Professor, Norwegian Institute of International Affairs; BI Norwegian Business School), Stavanger, September 23, 2015

therefore, prepared to accept less optimal terms and conditions in order to start petroleum activities as soon as possible.

The Norwegian and the Nigerian experiences, therefore, suggest that the benefit of the petroleum activities to the overall economy increases over time. This indicates that Kenya should aim for a long duration of the production phase. Since oil reserves were discovered in Kenya in 2012, the pressure from oil companies, local politicians and unions expecting to benefit from the oil production has been strong, making it politically virtually impossible for the government to prevent rapid production in the coming years as shown by the fact that the country is ready to commence oil production in March 2016 and exportation in June the same year.²⁷ Thus, if Kenya aims to prolong the production phase, exploration and development phases should be delayed a bit in order to also delay the discovery and development of some of the oil reserves in the country.

In addition, Kenya should, not be under pressure to gain access to petroleum resources (or revenue) in order to rectify its economy as was the case with Nigeria. This means that the country should not be prepared to accept less optimal terms and conditions in order to start activities or maintain them at a certain level. The authorities should carefully balance between, on the one hand the desire to accelerate petroleum operations, and, on the other hand to avoid shocks to the economy and way of life as a consequence of excessive stimulation by petroleum operations. This will help in maintaining a steady level of investment thus sustaining petroleum development operations and securing future level of petroleum production.

²⁷ Bernard Namunane, "Tullow: Oil Exports Next June," *Daily Nation* (Nairobi), Thursday, (25 August 2016), p. 8

6.3.4 Improve Oil Recovery

The improvement of oil recovery in the two countries are totally different as shown by the data in Figure 9; 48 (96%) of the respondents in Norway and 18 (36%) in Nigeria argued that improved recovery of oil is sufficient. One of the most spectacular features of the Norwegian resource management is without doubt the achievements in the field of improved oil recovery (IOR).²⁸ As compared to Nigeria, Norway has achieved a lot of improvement in both production profiles and ultimate recovery of oil compared to conventional methods of production. Success in applying IOR technologies and practices has resulted in increasing the average oil recovery for the whole Norwegian Continental Shelf (NCS) and this remarkable achievement has been only possible through the active co-operation between the authorities and the oil companies involving joint research projects, pilot production schemes and consultations.²⁹

Kenya should show great interest in the Norwegian IOR experience. In particular, it should find the approach of joint reservoir studies and pilot IOR schemes with the licensees particularly promising since the approach tends to unite the two sides in pursuing win-win objectives. Most of the IOR technologies and field practices used in Norway's offshore are even easier to apply on land as in the case of Kenya. Since the IOR potential represents a key source for relieving the shortage of supplies in the immediate future, the Kenyan authorities unlike Nigerian authorities should, therefore, co-operate with IOCs in order to realize this potential in practice.

²⁸ IOR here means improvement in both production profiles and ultimate recovery of oil compared to conventional methods of production.

²⁹ Author's interview with Ms. Inger Lise Stromme (Director, Data Management and Organization, NPD), Stavanger, September 9, 2015

6.3.5 Health Safety and Environmental (HSE) Protection Issues

In most host countries around the world, the concern for HSE protection seems to be overshadowed by other priorities. However, serious oil companies today are very much concerned with maintaining high HSE standards on a global basis.³⁰ In this respect they are their own ‘flag bearer’ when it comes to maintaining standards.

In Figure 9, all the 50 (100%) respondents in Norway and 8 (16%) in Nigeria agreed that their respective governments have sufficiently integrated resource management functions with HSE protection. Unlike in Nigeria, Norway has shown the merit of integrating the resource management functions with those related to HSE protection.³¹ While in Nigeria environmental degradation particularly in the Niger Delta is an ongoing problem, the HSE has always been a top priority for Norway and a prerequisite for allowing petroleum operations to take place. The fact that Norway is a fishing and shipping nation has further underlined the focus on HSE. The oil companies have not only respected these objectives but have fully embraced them as their own.

In the Kenyan case, the requirement for proper resource management should, therefore, be indivisible from the requirement to protect the local communities from possible damages arising from petroleum operations as seen in Nigeria’s Niger Delta region. By integrating – or at least closely coordinating – the two functions, it is possible for the government to consider both aspects as two sides of the same coin. This should be considered important for Kenya because the government’s time-window and scope for influencing major decisions by the licensees are limited. In practice, the best time for the Kenyan authorities to exert influence is when

³⁰ See Al-Kasim, *Managing Petroleum Resource*, p. 250

³¹ Author’s interview with Mr. Ole Jorgen Melleby (Head of Health, Safety and Environment (HSE) Management Section, Petroleum Safety Authority, PSA-Norway), Stavanger, September 15, 2015

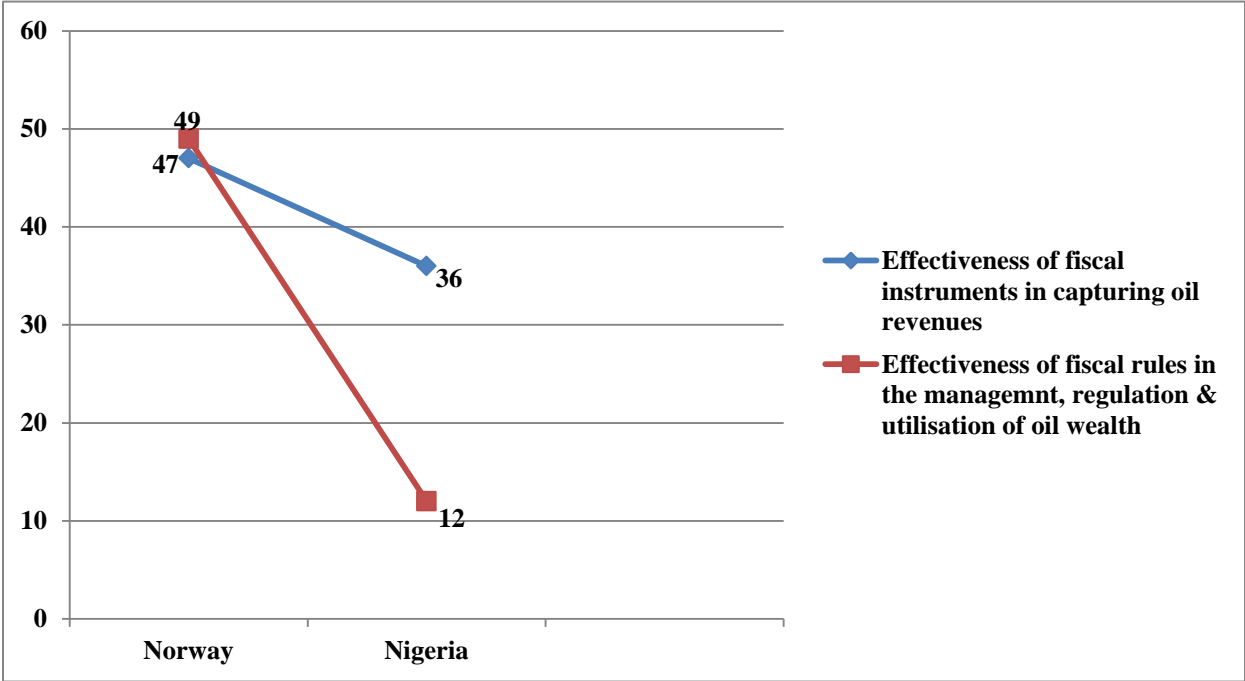
considering the field development plans for approval. To exert such influence efficiently and constructively, the authorities have to monitor the work leading to the submission of the development plan.

In order to benefit from petroleum operations while protecting the people's health, safety as well as the environment, the Kenyan authorities should make the HSE as one of the prerequisites for allowing petroleum operations to take place in the country, particularly in Turkana County³² where most oil reserves have been discovered. There should be a principle of control that makes sure that the licensees are responsible for maintaining the government's standards for HSE by developing their own codes and procedures. The authorities' role should be to ensure that the companies' codes and procedures are adequate to meet the HSE objectives, and also ensure through audits that the companies adhere to these codes and procedures. However, there should be co-operation between the authorities and oil companies on how to pursue HSE objectives so as to make petroleum operations viable within reasonable sets of norms and standards.

³² See Figure 14, p. 176

6.4 A critical analysis of the effectiveness of the Fiscal Regimes employed in extracting, managing and regulating oil revenues accrued from the Petroleum Industry in Norway and Nigeria

Figure 10: Effectiveness of Fiscal Regimes in Petroleum Industries in Norway and Nigeria



The researcher asked the participants in Norway and Nigeria the questions revolving on issues of effectiveness of the fiscal instruments employed by their respective countries in generating oil revenues and fiscal rules in the management, regulation and utilization of oil revenues. On the first aspect, 47 (94%) of the respondents in Norway and a staggering 36 (72%) in Nigeria agreed that fiscal instruments used by their countries in capturing oil revenues are effective. On the second aspect, 49 (98%) of the respondents in Norway and 12 (24%) in Nigeria agreed that the fiscal rules employed by their respective countries in the management, regulation and utilisation of oil wealth are effective. On average, 48 (96%) of the respondents in Norway as compared to

24 (48%) in Nigeria argued that the fiscal regimes employed by the Norwegian and Nigerian governments are effectively helping in extracting, managing and regulating revenues that accrues from the petroleum industry. From this data, it can be observed that the fiscal regimes employed by the Norwegian government are effectively helping in extracting, managing and regulating revenues that accrues from the petroleum industry than those employed by the Nigerian government.

6.4.1 The Design of the Fiscal instruments (Tools) to capture oil revenues

Both Norway and Nigeria have captured bulk of resource rents by designing different fiscal instruments to generate revenues that accrue from the petroleum industry. However, the effectiveness of such fiscal instruments becomes another issue altogether as shown by the 47 (94%) of the respondents in Norway and 36 (72%) in Nigeria in Figure 10. Norway's tax system is characterized by high rates, but the oil sector is particularly highly taxed (currently at 78%)³³ to ensure that Norway reaps a large share of the oil revenues generated. However, taxation in Norway is viewed as stable and transparent, which increases the attractiveness of investments from the IOCs.³⁴ Additional revenues are ensured for the State by the fact that the government assumes a passive ownership share in all fields via the SDFI. This is also a design that ensures that Norway reaps an important part of the revenues, while still providing the oil companies with profitability and incentives to ensure that they participate and make rational investment and production decisions. In Nigeria, huge revenues are obtained from the sale of crude oil and gas followed by the revenues from Petroleum Profit Tax (PPT).

³³ See Norwegianpetroleum.no, *Tax System*, p. 3

³⁴ Author's interview with Mr. Lars Erik Aamot (Director General, Department of Oil and Gas, Norwegian Ministry of Petroleum), Oslo, October 7, 2015

According to the Kenya's current legal framework that governs petroleum sector, [Petroleum (Exploration and Production) Act, Cap 308 of 1986]³⁵, the bulk of the country's revenue would be expected to come from three principal sources: a share of oil production that is allocated to the government [profit oil]; a 'windfall tax' that is imposed when oil price is over US\$50 per barrel; and, the right to participate (hold an equity stake) in oil operations, whether directly or through the NOCK. However, Kenya should also borrow from the Norwegian and Nigerian experiences and come up with a tax system that will be seen as stable and transparent, implying that IOCs will see it as profitable and attractive for business purposes. This means that the Kenyan State has to balance the fine ambition of extracting the maximum value from the economic rent while ensuring that the fiscal instruments do not 'penalise' the IOCs for investing in petroleum activities in the country. The Kenya's authorities should design the fiscal regime that is instrumental in pitching the value proposition of the petroleum sector to the IOCs. The fiscal regime design is thus a crucial aspect in encouraging sustainable development of petroleum resources in Kenya as a host country.

6.4.2 Oil Wealth Accumulation, Management and Utilization

Accumulated assets can then be used to fuel demand during bust cycles to avoid prolonged recessions and debt overhang, save wealth for future generation and easy transition when scarce resource become depleted. In Figure 10, 49 (98%) of the respondents in Norway and 12 (24%) in Nigeria agreed that the fiscal rules employed by their respective countries in the management, regulation and utilisation of oil wealth are effective. Although Norway and Nigeria have both been able to establish Sovereign Wealth Funds (SWFs), only Norway has been able to accumulate significant assets. So far, Norway has been able to save a large share of the

³⁵ Petroleum (Exploration and Production) Act, 1986], p. 23

petroleum revenues as compared not only to Nigeria but also to most of the oil-rich countries in the world.³⁶ It is important to note that, the Norwegian Global Pension Fund (GPF) in particular, has been hailed for its good governance and transparent investments.

Unlike in the case of Nigeria, the fiscal rule of spending oil revenues in Norway ensures that the spending of the oil revenues will last for long, for the benefit of both the current and the future generations. When the direct revenues from petroleum production diminish in the future, this will be compensated by the return from the GPF. In the Norwegian fiscal rule, unlike in Nigeria where the oil revenues are shared and distributed on a monthly basis, the spending of oil revenues depends on the size of the Pension Fund at the beginning of the year. This implies that there is no direct link between oil revenues and spending within the same year. All government net revenues from the petroleum sector are transferred to the Fund. However, the Fund is integrated in the ordinary government budget, so in case of a deficit in the ordinary budget, there is an automatic deduction from the Petroleum Fund. This idea is to avoid the politicians from ‘pretending’ to be saving in the Fund while they at the same time borrow to finance the ordinary budget spending.

As opposed to Nigeria, Norway has the so-called ‘spending rule’ which aims to reduce expenditure pressure and insulate the budget from oil price volatility. The fiscal rule guarantees that the GPF will never be reduced in expected terms. Only the real return (interest minus inflation) from the fund, currently estimated at 4%, can be used for non-petroleum government budget deficits. This feature serves an important role in reducing the risk that economic fluctuations induced by variation in the oil price and in the activity in the oil sector are amplified by variation in the spending of the oil revenues. The petroleum wealth is invested abroad via the

³⁶ See SWF Institute, p. 2

GPF. If part of the Pension Fund were to be invested in Norway, it would lead to increased domestic demand, which would push up the Norwegian cost level, leading to a larger loss of the traded sector. In effect, the Dutch Disease might emerge.

Kenyan government MUST create a SWF with adequate legal backing to save for ‘the raining day.’ This fund should be managed transparently and sustainably for the benefit of not only the country’s present generation but also the future generations. Moreover, the National Assembly in consultation with the Senate should clearly and carefully draw satisfactory criteria and formula that stipulate how the oil revenues would be shared and distributed between the national government and the 47 county governments. Furthermore, the country has to exercise prudent fiscal policy during boom cycles by paying back debts and saving foreign exchange through resource fund. Kenya MUST de-link oil revenue from public expenditure to avoid unsustainable levels of public expenditure. Unlike in Nigeria, when oil revenues increase, it will be important that Kenya (at both national and counties levels) follows the prudent fiscal management of Norway. A procyclical increase of public consumption during boom cycles will cause dangerous, long term effects for the Kenyan economic development if countercyclical fiscal rules are not effectively adhered to in the country.

For Kenya, the choice of where to invest the oil money might well be different from Norway but more or less the same as Nigeria. While some of the wealth should probably still be invested abroad to ensure return in foreign currency in the future to pay for imports when petroleum exports diminish, part of the petroleum revenues should be used for important domestic investments, for example development of the country’s infrastructure (e.g. roads, oil pipelines); stabilization of the economy; enabling the Kenyan companies to have satisfactory access to capital improving public sector capital; building human capital through education, research and

technology; saving for future generations of Kenyans; and provision of other needed social amenities throughout the country.

The Kenyan government should restrict spending of oil revenues, and view resource extraction as asset sales rather than value added in production. Moreover, oil revenue that enters the government ordinary budget should be invested in capital that is capable of stimulating growth. It is a fact that there would be strong lobbying and political pressure to invest in prestigious projects, or projects giving rents to domestic politicians, businessmen or worker groups. Thus, if Kenya was to open up for limited domestic investments, it would need to take even more caution that this is done in a diligent and transparent manner.

In general terms, Kenya must practice adequate fiscal discipline and wise spending on ‘necessary projects’ and not ‘prestigious projects.’ Moreover, the macro-economic policy must be market driven in such a way that the economic environment would be conducive to private investment and must continuously promote market-oriented sustainable development. Kenya must do everything right in terms of macro-economic policy to avoid economic overheating and exchange rate appreciation. The Kenyan authorities should remember that by substituting most oil rents with productive investments, wealth will theoretically never decline in the country.

6.5 Conclusion

In conclusion, petroleum policy, institutional design and organisation, regulatory practices and fiscal regimes have all contributed to the management of oil resource in Norway and Nigeria. From the findings, 48/50 (96%) of the participants in Norway as compared to 16/50 (32%) in Nigeria argued that their respective government have effectively managed oil resource in their countries.³⁷ This statistics in general shows that Norway has a better performance in the management of oil resource than Nigeria. This, therefore, confirms the basic assumption of this study that Norway has a better performance in the management of oil resource than Nigeria while drawing some practical lessons for Kenya as a newly emerging petroleum host country.

The findings in this Chapter have, therefore, answered the research questions as well as confirmed the four hypotheses stipulated in this study: the petroleum policies have played a significant role in the development of petroleum industry in Norway than in Nigeria; the institutional design and organisation in the petroleum industry in Norway has the competence to contribute in the management of petroleum resources unlike in Nigeria; the regulatory practices governing petroleum industry in Norway encourages sustainable development of petroleum resources better than in Nigeria; and finally, the fiscal regimes employed by the Norwegian government are effectively helping in extracting, managing and regulating revenues that accrues from the petroleum industry than those employed by the Nigerian government. In general, the findings have shown the reasons as to why Norway has a better performance in the management of oil resource than Nigeria. This, therefore, confirms why Norway is being labeled as ‘an iron of stability’ while Nigeria referred to as ‘a resource curse’ when it comes to the management of oil resource.

³⁷This is the average of the data presented in Figures 7, 8, 9 & 10 (see pages 111, 119, 124 & 137)

At this infancy stage of petroleum development, Kenya has already become an attractive investment location in the global oil business, particularly for upstart mid-sized oil companies and Asian national oil companies looking to increase their international activities. Sentiment remains upbeat for new finds in Kenya's oil and gas concessions (see Figure 13, p. 179). As eluded by Africa Oil CEO Keith Hill, "there are not many places left on earth where you can put together an acreage portfolio like this... Good contract terms, good support from the government – there are not that many happy hunting grounds left..."³⁸

Although no country should directly and fully 'copy paste' the experience of another due to the unique circumstances in each country, it is clear that the Kenyan government has a lot to learn from the management of oil resource in Norway and Nigeria. Some of the solutions pursued by Norway and Nigeria can be of relevance to Kenya provided they are carefully adapted to local context, conditions and objectives. It is, therefore, prudent for the Kenyan government to develop a sound national petroleum policy; competent institutional structure and organization; comprehensive legal and regulatory frameworks; and, effective fiscal regimes that will see Kenyans gain from the petroleum activities. This will also ensure transparency and accountability in the petroleum industry which will play a key role in effective sustainable management and fair distribution of oil resource produce, as envisaged under the Constitution. This will further aid in influencing proper governance of the petroleum industry in the country.

³⁸ Yusuf Hussain, "Canada's Africa Oil Corp. sees promise in Kenya," *Financial Post*, 24 October, 2013. p. 3

CHAPTER SEVEN

SUMMARY, CONCLUSION AND RECOMMENDATIONS

7.1 Summary

Chapter One provided the layout of the study. The Chapter contains the introduction; background of the study; statement of the research problem; research objectives; research questions; literature review; research justification; conceptual framework; research hypotheses; research methodology; definition of key concepts in the study; and, the chapter outline.

The study endeavoured to critically analyse why Norway has a better performance in the management of oil resource than Nigeria, with major aim of drawing some practical lessons for Kenya. In addressing the research objectives, questions and hypotheses, the study particularly focused on critically examining four main aspects as they determined and influenced the manner in which the two countries managed their respective oil resource: petroleum policy, institutional design and organisation, regulatory practices, and fiscal regimes aspects in the management of oil resource in the two countries. The logic structure of this study took on a qualitative approach, with a case research design intended to permit in-depth study of fundamental of oil management in the two countries. Purposive sampling method was relevant to this study since it was used to select respondents to participate in the study on the basis of their relevance to the research questions, theoretical position, analytical framework, and most importantly the argument or explanation that is very developed. Interview schedules and document analysis were two main data collection methods used in this study while summative content analysis was used to analyse the data collected. This study was confined in analysing the management of oil resource in Norway and Nigeria in a qualitative sense to restrict the scope while giving a broad overview.

Chapter Two investigated the role played by petroleum policies in the development of petroleum industry in Norway and Nigeria. The analysis demonstrated that petroleum policy lays a foundational benchmark and is crucial in the management of petroleum resources in the host country. Without sound and consistent policies, resource development and management becomes ad hoc, uncontrolled and is not likely to benefit the State and/or its people. The findings demonstrated that even though Norway and Nigeria share similarities in terms of the discovery of oil, production capacity and the economy driven by the oil wealth; their petroleum industries have evolved and developed very differently as a result of the petroleum policies pursued by their respective authorities. While on one hand Norway has been cautious and prudent with its petroleum industry, with policies spanning a longer time horizon, Nigeria on the other hand, has routinely experienced short-term petroleum policies as a result of the changing political governance, each of which tried to shape the industry in a manner most profitable to those in power. Moreover, Norway benefited from having some industrial experience before oil resource was ever discovered. The case was certainly not the same in Nigeria, which was not only overwhelmed with its new found wealth but also by its political economy characterised by competition among its own people to gain a bigger share of the ‘oil pie.’

Chapter Three delved in examining whether the institutional design and organization in the petroleum industry in Norway and Nigeria have the competence to contribute in the management of petroleum resources in the two countries. The findings have showed that an institutional setup and competence is essential to facilitate the management of petroleum resources in the host country. While Norwegian petroleum sector has competent institutional design and organisation that is characterised by clear separation of roles with an extremely successful national oil company (NOC), Statoil, Nigeria’s case even though sector organisation shows a clear separation

of roles on the surface, the functional dynamics are littered with duplication of functions, weak governance and low technical capacity. The governance indicators indicate that Norway's better score makes its petroleum sector more attractive to international oil companies (IOCs) than Nigeria's, which creates conditions apt to effective management of petroleum resources.³⁹

Chapter Four critically assessed on how the regulatory practices governing petroleum industry in Norway and Nigeria have contributed in the sustainable development of petroleum resources in these countries. The analysis confirmed that the development of a sustainable society is vital in any nation's economic development both in the short and long term periods. Unlike the Nigerian regulatory approach, the Norwegian approach to regulate its petroleum industry has contributed in the sustainable development of petroleum resources while balancing the needs of the Norwegian society with the need to remain profitable and attractive to the IOCs. Whereas the Norwegian approach carefully considers the entire lifecycle of the petroleum operations, the Nigerian one seems a bit truncated and staccato. Moreover, there is only one single transparent and streamlined licensing process for Norway, while the process is complicated for Nigeria based on a variety of model agreements the government uses to engage with IOCs. Unlike in Nigeria, every petroleum development phase in Norway is carefully thought of, streamlined and transparent, which helps assess the risk and reward in each stage.

Chapter Five examined whether the fiscal regimes employed by the Norwegian and Nigerian governments are effectively helping in extracting, managing and regulating revenues that accrues from the petroleum industry. The analysis shows that an important prerequisite for the stability of petroleum operations is that the frame conditions in general and the fiscal regime in particular

³⁹ See Natural Resource Governance Institute (NRGI), [Accessed October 18, 2016] <http://www.resourcegovernance.org/our-work/country/norway>; <http://www.resourcegovernance.org/our-work/country/nigeria>

must have predictable flexibility. The frame conditions at the margins of economic feasibility should avoid distorting incentives and should deliberately aim at aligning the interests of both the State and the IOCs towards acquiring mutual benefits. For both Norway and Nigeria, the fiscal regimes are a function of domestic petroleum production and also create significant economic value. The findings in this Chapter have shown that while fiscal regimes have efficiently helped Norway to accumulate, manage and regulate huge wealth from the petroleum industry, inefficiencies in revenue collection, management and regulation have negatively impacted the Nigerian State and its population. Short time horizons of competing elites lead to policies geared more at creating niches for middlemen than establishing a favorable long-term investment climate.

Chapter Six provides data analysis, presentation and findings of the management of oil resource in the context of Norway and Nigeria, particularly from four main aspects: petroleum policy; institutional design and organisation; regulatory practices; and fiscal regimes. It also draws some practical lessons of oil resource management for Kenya as an emerging petroleum host country.

Chapter Seven summarises the whole study pointing out the key issues discussed in the first five Chapters; give a broader conclusion for the study; and, provides major policy recommendations for the government of Kenya and academic recommendations for further research.

7.2 Conclusion

The general objective of this study was to critically analyse why Norway has a better performance in the management of oil resource than Nigeria with aim of drawing some practical lessons for Kenya. The management of petroleum resources is invariably a complex task. It typically involves a multitude of considerations, uncertainties and risks. According to Al-Kasim, the choices open to decision makers depends on a number of prerequisites and constraints, ranging from local to global, from purely technical, purely commercial to social.⁴⁰ Moreover, the circumstances vary in time and space as well as from the vantage point of the decision makers. Because of the numerous variables involved, it is perhaps dangerous to single out a few sets of factors that have an overriding influence on resource management. However, at risk of oversimplification, this study only focused on gauging and examining the contribution of petroleum policy; institutional design and organization; regulatory practices; and, the fiscal regimes; in the management of oil resource in Norway and Nigeria.

While studying the role of petroleum policy in the development of petroleum industry in Norway and Nigeria, a striking observation is the significant role played by historical factors in the management of oil resource in the two countries. While Norway benefited from having not only a homogenous population, resources in similar geological terrains of the deep-shore but also prior industry experience, Nigeria possessed neither, which further complicated the value creation dynamics in this country. It would be fair to say that Norway has been lucky with favourable terms and policy interventions coming in at the right time to maximise the value creation. Nigeria on the other hand survived through periods of political instability that created short time horizons for the policy makers who tried to ‘organize’ the industry so as to seek

⁴⁰ See Al-Kasim, *Managing Petroleum Resources*, p. 121

favourable terms for themselves and not for the State and society as a whole. Nigerian petroleum sector has thus exhibited the classic '*Roving Bandit Effect*.' In general, while the Norwegian petroleum policy has been well formulated with a long-term outlook to contribute to the sustainable development and management of petroleum resources, the Nigerian petroleum policy is short-lived depending on the political government in power.

The Norwegian model of separation of functions in the petroleum sector has been instrumental in creating a high-performing sector, which has indeed created more value for the State. On the other hand, Nigerian petroleum sector has witnessed a lot of shuffling but has, so far, only created more ambiguity and duplication of functions resulting in institutional inefficiencies. Norway has been able to leverage synergies between Statoil and domestic competitor Norsk Hydro to control most of the high performing reserves on the NCS. More importantly, when the State intervenes in the functions of the NOC, it is to ensure more favourable terms to propel Statoil into achieving technical competencies on par with its IOCs peers. Nigeria on the other hand lost sight of building technical competencies while paradoxically placing Nigerian National Petroleum Corporation (NNPC) at the centre stage. While Statoil plays a purely commercial role, with the State merely being a majority shareholder with minimal interference, the NNPC, however, sits at the complicated political nexus between the State and the IOCs, neither having financial independence nor the benefit of making independent commercial decisions.

Norway has been prudent to create and enforce regulations to gradually reduce dependence on IOCs' know-how to manage its petroleum resources. Nigeria has failed to do so. Nevertheless, it should be noted that Nigeria did make strides learning through its OPEC colleagues and gained higher equity participation, the same way that Norway learnt through UK's experience. However, political instability and patronage becoming inextricable part of the petroleum

operations have ‘eaten’ into the value created for Nigeria. Norway, therefore, has benefited from having a streamlined model agreements framework for engaging with the IOCs. Nigeria on the other hand, and rightly so, indulged in various model agreements based on the risk associated with developing petroleum resources. This has been instrumental in increasing indigenous participation and development of marginal fields. While it does create value in creating more domestic capacity, it should be observed that the domestic companies would be fragmented and it would still be a while before one competent champion emerges among them to compete on level grounds with the IOCs counterparts. Unlike the Nigerian approach, the Norwegian approach to regulate petroleum industry has enabled Norway to balance the needs of Norwegian society with the need to remain attractive to oil companies to ensure the sustainable development of petroleum resources. The Norwegian illustration considers the entire lifecycle of the petroleum operations while the Nigerian seems a bit truncated and staccato. Unlike in Nigeria, every petroleum development phase in Norway is carefully thought of, streamlined and transparent, which helps assess the risk and reward in each stage.

While the fiscal regimes in Norway and Nigeria are both sound and do seem to create a lot of economic value for the States, the regime administering capacity on Nigeria’s end makes one wonder if the State is actually able to extract the rent that it’s own regimes make theoretically possible. Moreover, Norway has accumulated significant oil wealth into a transparently managed Sovereign Wealth Fund (SWF) and adopted strict fiscal rules to regulate the utilization of the oil revenue to ensure that it benefits both the current and the future generations. In Nigeria, although the government has created a SWF to accumulate the oil wealth in it, the fiscal discipline in the distribution and utilization of this wealth is lacking, particularly at the State and local levels of government in the country.

7.3 Recommendations

7.3.1 Policy Recommendations for the Kenyan Government

1. Formulate a sufficiently consistent Petroleum Policy with a long-term outlook

The Kenyan authorities MUST formulate a petroleum policy that is sufficiently institutionalized and consistent with long term national objectives in order to avoid profound changes whenever new governments come into power. Moreover, the slogan of ‘developing petroleum resources for the benefit of all the people’ should seriously be adhered to by the authorities throughout.

2. Build a Joint Co-operation between the State Administration and Oil Companies

The Kenyan government should try to attract international oil companies (IOCs) by providing a conducive and profitable environment. The government should be objective in its dealing with all commercial interests and should recognize where technological challenges require joint efforts between the authorities and the IOCs. The government should see international expertise as essential for sustainable resource development since the combination of domestic and international knowledge and effort ensures the maximum value for the country’s petroleum resources. Therefore, the aim of the Kenya’s national petroleum policy should be to maintain a balance between the interests, rights, obligations and benefits of all the participants in the exploitation of petroleum resources.

3. Develop National Expertise and Local Content through domestic participation in petroleum sector

Kenya lacks previous knowledge of petroleum operations and it is still in the early stages of petroleum activities. Moreover, it has no experience in dealing with oil companies or licensing

issues. Since the government's petroleum administration is its window to the industry, the Kenyan government should diligently build technical competence in its petroleum administration to direct, control and manage petroleum industry. The government should, particularly invest in training personnel which will contribute in the building of technical capacity in the petroleum sector, both in administrative and technological fronts. This will enable the government to gradually accumulate and build its own technical competence. Moreover, the government should also provide financial resources to petroleum administrative agencies to enable them to discharge their roles efficiently and competently. Therefore, the institutions involved in petroleum administration should have the necessary technical skills, financial resources and legal authority to perform their responsibilities without being manipulated or undermined by political leadership, economic elites or any other groups.

In addition, Kenya should exert its utmost in order to develop national expertise in petroleum sector and encourage participation by its domestic industries, universities, technological and research institutions. The clear goal of the State here should be to make sure that the Kenyan local companies participate and thereby build up expertise in the industry. To benefit from the transfer of know-how and expertise from the IOCs operating in the country, the Kenyan government should utilise the policy of optimising the local content by inviting IOCs to contribute in the development of expertise within the petroleum industry.

4. Enhance high Degree of Transparency and Integrity

Kenyan government MUST practice high degree of integrity, openness and transparency by disseminating and disclosing to the public all the data and information related to the nature of petroleum contracts entered between the government and the IOCs, criteria for awarding

licenses, cost of petroleum resource exploration, development and production, health safety and environmental issues. The Kenyan authorities must understand and appreciate the fact that the Kenyan citizens have as much right to information related to the extraction of their petroleum resources as foreign shareholders. The information related to petroleum operations should be made available to the public and relevant stakeholders for their scrutiny and comments. Here lie not only great challenges but also great benefits to Kenya in the case of success. Presently, the government of Kenya has disseminated and disclosed very little detailed information on the prospects of Kenya's oil.

5. Clearly separate the Regulatory and Commercial interests of the State

The Kenyan government should clearly separate the government entities performing regulatory functions from those looking after its commercial interests (National Oil Corporation of Kenya, NOCK). Moreover, Kenya as a host country should tie the minister or Cabinet to national interests, for example by having to seek the approval of parliament; this would reduce the risk of power being abused to serve more limited party or other interests.

Competition among different oil companies, both domestic and foreign will only serve the interest of Kenya as a host country if there is a fair and impartial judge who will criticise and reward justly (regulatory organ with purely regulatory interests). The NOCK does not fit the bill of impartiality, simply because it has its own business interests to protect and promote. This is likely to colour its judgement as a regulatory body. Therefore, to ensure that the petroleum industry takes important public interests into account and that petroleum resources are utilised as effectively as possible, the Kenyan government should structure and organise its petroleum industry with clearly defined areas of responsibilities to avoid duplication of roles, inefficiency

and corruption issues. However, for this to work effectively, the normal mechanisms of democratic governance must function well within the State.

6. Licensing System

Kenya should have greater emphasis on carefully timing and dimensioning allocation rounds to match a desired growth pattern in the national economy. The allocation rounds are powerful tools for regulating the tempo of petroleum operations. Once the impact assessments have been completed, the Kenyan government should announce the intention of the authorities to invite companies to a licence round within a certain general geographical area or areas as the case may be. As much as Kenya may have real options to plan its licensing allocation rounds, it should do so to ensure growth in reserves that would in turn maintain the desired levels of operations and revenue. Moreover, Kenya, as a host country, is advised to exert a great deal of effort in order to ensure that only competent oil companies are allowed to operate within its territory. For Kenya, thorough selection of partners is a worthwhile investment in good and lasting relationships.

7. Regulate the Tempo of Petroleum Production

If Kenya aims to prolong the production phase, exploration and development phases should be delayed a bit in order to also delay the discovery and development of some of the oil reserves in the country. In addition, Kenya should not be under pressure to gain access to petroleum resources (or revenue) in order to rectify its economy. This means that the country should not be prepared to accept less optimal terms and conditions in order to start activities or maintain them at a certain level. The authorities should carefully balance between, on the one hand the desire to accelerate petroleum operations and on the other hand to avoid shocks to the economy and way of life as a consequence of excessive stimulation by petroleum operations. This will help in

maintaining a steady level of investment thus sustaining petroleum development operations and securing future level of petroleum production.

8. Integrate Resource Management functions with Health Safety and Environmental (HSE) Protection

In the Kenyan case, the requirement for proper resource management should, therefore, be indivisible from the requirement to protect the local communities from possible damages arising from petroleum operations as seen in Nigeria's Niger Delta region. By integrating – or at least closely coordinating – the two functions, it is possible for the government to consider both aspects as two sides of the same coin. This should be considered important for Kenya because the government's time-window and scope for influencing major decisions by the licensees are limited. In practice, the best time for the Kenyan authorities to exert influence is when considering the field development plans for approval. To exert such influence efficiently and constructively, the authorities have to monitor the work leading to the submission of the development plan.

9. Accumulate Wealth in a transparently managed Fund and Adopt strict Fiscal Rules for regulation, distribution and utilization of resource (oil) revenues

Kenyan government MUST create a sovereign wealth fund (SWF) with adequate legal backing to save for 'the raining day.' This Fund should be managed transparently and sustainably for the benefit of both the country's present generation and the future generations. Moreover, the National Assembly in consultation with the Senate should clearly and carefully draw satisfactory criteria and formula that stipulate how the oil revenues would be fairly shared and distributed between the national government and the 47 county governments. Furthermore, the country has

to exercise prudent fiscal rules during boom cycles by paying back debts and saving foreign exchange through resource fund. Kenya MUST de-link oil revenue from public expenditure to avoid unsustainable levels of public expenditure. Unlike in Nigeria, when oil revenues increase, it will be important that Kenya (at both national and counties levels) follows the prudent fiscal management of Norway. A procyclical increase of public consumption during boom cycles will cause dangerous, long term effects for the Kenyan economic development if countercyclical fiscal rules are not effectively adhered to in the country.

7.3.2 Academic Recommendations for Further Research

This study presented a comparative analysis of oil resource management in Norway and Nigeria through the lenses of four main aspects (policy, institutional organisation, regulatory practices and fiscal regimes) to restrict the scope while giving a broad overview. The study did not quantify the value that each of the aspects or framework actually contributes to the management of petroleum resources. An interesting research could result from quantifying the contributions of each of the aspects discussed in the study in the sustainable development and management of petroleum resources. Moreover, the quality of the political leadership that will drive petroleum resource management in a host country is outside the scope of this study. A study of the leadership and management principles of the political elite in the two countries would shed light on this question.

REFERENCES

- Aarsnes, Frian and Petter F., Lindgren, *Fossil Fuels – at What Cost? Government Support for Upstream Oil and Gas Activities in Norway*, (New York: International Institute for Sustainable Development, 2012)
- Adepetun, Sola, “Production Sharing Contracts: the Nigerian Experience,” *JENRL*, Vol. 13, no. 1, (1995): 12-21, 17
- Al-Attar, Abdulaziz and Osamah Alomair, “Evaluation of Upstream Petroleum Agreements and Exploration and Production Costs,” *OPEC Review*, Vol. 29, no. 4, (2005): 243-266, 248
- Amaraegbu, A., Declan, “Violence, Terrorism and Security Threat in Nigeria’s Niger Delta: An Old Problem Taking a New Dimension,” *African Journal of Political Science and International Relations*, Vol. 5, no. 4, (2011): 4-29, 12
- Ascher, William, *Why Do Governments Waste Natural Resources? Policy Failures in Developing Countries*, (Washington, DC: Johns Hopkins University Press, 1999)
- Asekunowo, O., Victor, and Sam A. Olaiya, “Crude oil revenue and economic development in Nigeria (1974-2008),” *OPEC Energy Review*, Vol. 36, no. 1, (2012): 138-169, 145
- Atsegbua, A., Lawrence, “The Nigerian Oil and Gas Industry Content Development Act 2010: An Examination of its Regulatory Framework.” *OPEC Energy Review* 479, 36 (4), (2012), p. 8
- _____, “Acquisition of Oil Rights under Contractual Joint Ventures in Nigeria,” *Journal of African Law*, Vol. 10, no. 37, (1993): 10-29, 13
- _____, “The Development and Acquisition of Oil Licences and Leases in Nigeria,” *OPEC Energy Review*, Vol. 23, no. 1, (1999): 55-77, 59
- Auty M., Richard, *Sustaining Development in Mineral Economies: The Resource Curse Thesis*, (London and New York: Routledge, 1993)
- _____, *Resource Abundance and Economic Development*, (Oxford: Oxford University Press, 2001), p. 18
- Baker Institute Energy Forum, *The changing role of NOCs in International Energy Markets: Report Series*, (Houston: Rice University, 2007)
- Barma, H., Naazneen et al., *Rents to Riches? The Political Economy of Natural Resource-led Development*, (New York: World Bank, 2012)
- Baunsgaard, Thomas, “Fiscal Policy in Nigeria: Any Role for Rules?” Working Paper 03/155, (Washington, DC: International Monetary Fund, 2003)
- Bent, Flyvberg, “Case Study” in *The Sage Handbook of Qualitative Research* (4th edition), ed. Norman K. Denzin and Yvonna S. Lincoln, (Thousand Oaks, CA: Sage Publishing, 2011)
- Bernard Namunane, “Tullow: Oil Exports Next June,” *Daily Nation* (Nairobi), Thursday, (25 August 2016)
- Bindemann, Kirsten *Production Sharing Agreements: An Economic Analysis*, (Oxford: Institute for Energy Studies, 1999)
- Boscheck, Ralf, “The Governance of Oil supply: An Institutional Perspective on NOC control and the questions it poses,” *International Journal of Energy Sector Management*, Vol. 1, no. 4, (2007): 366-389, 375
- Bougrine, Hassan “Oil: Profits of the Chain Keepers,” *International Journal of Political Economy*, Vol. 35, no. 2, (2006): 35-53, 38

- Brent, Nelsen, *The State Offshore: Petroleum, Politics and State Intervention on the British and Norwegian Continental Shelves*, (Jos: Centre for Democratic Studies, 1991), p. 184
- British Petroleum, *BP Statistical Review of World Energy June 2016*, ed. 65, (London: BP, 2016), p. 2, [Accessed August 26, 2016],
<https://www.bp.com/content/dam/bp/pdf/energy-economics/statistical-review-2016/bp-statistical-review-of-world-energy-2016-full-report.pdf>
- Brunnschweiler N., Christa and Erwin H. Bulte, "Natural Resources and Violent Conflict: Resource Abundance, Dependence, and the Onset of Civil Wars," *Economic Paper Series*, Vol. 78, no. 8, (2008): 34-48, 22
- Bunter, A., Michael *The Promotion and Licensing of Petroleum Prospective Acreage*, (London: Kluwer Law International, 2002). p. 13
- _____, "A New Approach to Petroleum Licencing," *Oil, Gas and Energy Law Intelligence*, Vol. 1, no. 1, (2003): 12-32, 23;
- Central Bank of Nigeria (CBN), *Annual Report 2012*, (Abuja: CBN, 2012), 6.
<http://www.cenbank.org/Out/2013/RSD/2012%20Annual%20Report.pdf>
- Chuku A. Chuku, "Linear and Asymmetric Impacts of Oil Price Shocks in an oil importing and Exporting Economy: The Case of Nigeria," *OPEC Energy Review*, Vol. 36, no. 1, (2014): 413-443, 421
- Claes, H., Dag, *Statoil: Between Nationalisation, Globalisation and Europeanization*, (Oslo: University of Oslo Press, 2010)
- Collier, Paul and Anke Hoefler, "Greed and Grievance in Civil War," *Oxford Economic Papers*, Vol. 56, no. 4, (2004): 563-595, 575
- Davis, M., Jeffrey, Rolando Ossowski and Annalisa Fedelino, (eds.), *Fiscal Policy Formulation in Oil Producing Countries*, (Washington, D.C.: International Monetary Fund, 2012)
- Dunning, Thad *Crude Democracy: Natural Resource Wealth and Political Regimes* (Cambridge, UK: Cambridge University Press, 2008a)
- East African, "Ownership of Oil Exploration Blocks begins to change Hands," *East African*, November 14, 2015. p. 23
- Ebeku, S., Kaniye, "Oil and the Niger Delta People: The Injustice of the Land Use Act," *Law and Politics in Africa, Asia and Latin America*, Vol. 35, no. 2, (2002): 201-231, 212
- Eifert, Ben, Alan Gelb and Nils B. Tallroth, "The Political Economy of Fiscal Policy and Economic Management in Oil-Exporting Countries" in *Fiscal Policy Formulation and Implementation in Oil Producing Countries*, eds. Jeffrey M. Davis, Rolando Ossowski and Annalisa Fedelino, (Washington, D.C.: International Monetary Fund, 2003)
- Ekong, K. Christopher and Ekpeno L. Effiong, "Oil Price Shocks and Nigeria's Macroeconomy: Disentangling the Dynamics of Crude Oil Market Shock," *Global Business Review*, Vol. 16, no. 6, (2015): 920-935, 926
- Eregha, B., Perekunah and I. R., Irughe, "Oil Induced Environmental Degradation in the Nigeria's Niger Delta: The Multiplier Effects," *Journal of Sustainable Development in Africa*, Vol. 11, no. 4, (2009): 28-39, 32
- Farouk, Al-Kasim, *Managing Petroleum Resources: The 'Norwegian Model' in a Broad Perspective*, (Oxford: Oxford Institute for Energy Studies, 2006a), p. 8
- Fraser, Robert, "Licencing Resource Tracts: a Comparison of Auction and Discretionary Systems," *Resource Policy*, Vol. 17, no. 4, (1991): 271-283, 278

- Geir, S., Braut and Preben H. Lindoe, "Risk regulation in the North Sea: A Common Law perspective on Norwegian Legislation," *Safety Science Monitor*, Vol.14, no. 1, (2010):67-98, 12
- Gill Pael et al., "Methods of data collection in qualitative research: interviews and focus groups," *British Dental Journal*, Vol. 4, no. 6, (2008): 291-295, 292
- Gillies, Alexandra "Obasanjo, the Donor Community and Reform Implementation in Nigeria," *The Round Table*, vol. 96, no. 392 (2007): 569-586, 574
- Gordon, Richard and Thomas Stenvoll, *Statoil: A Study in Political Entrepreneurship*, (James A Baker III Institute for Public Policy: Rice University Press, 2007)
- Heller, Patrick, *The Nigerian Petroleum Industry: Key Upstream Questions for the National Assembly*, (New York: Revenue Watch Institute, 2009)
- Hosman, Laura, "Dividing the Oils: Dynamic Bargaining as Policy Formation in the Nigerian Petroleum Industry," *Review of Policy Research*, Vol. 26, no. 5, (2009): 609-632, 613;
- Human Rights Watch, *Chop Fine: The Human Rights Impact of Local Government Corruption and Mismanagement in Rivers State, Nigeria*, (New York: Human Rights Watch, 2007a)
- Humphreys, Macartan, Jeffrey D. Sachs and Joseph E. Stiglitz, ed., *Escaping the Resource Curse* (New York: Columbia University Press, 2007)
- Hunter, Tina, "Comparative Law as an Instrument in Transnational Law: The Example of Petroleum Regulation," *Bond Law Review*, Vol. 21, no. 3, (2009): 42-45, 43
- _____, "The Offshore Petroleum Regulatory Frameworks of Australia and Norway," *Oil, Gas & Energy Law Intelligence* vol. 18, no. 4 (2010): 18-56, 23
- _____, "The Role of Regulatory Frameworks and State Regulation in Optimising the Extraction of Petroleum Resources: A study of Australia and Norway," *The Extractive Industries and Society*, Vol. 1, no.1, (2014): 48-58, 52
- Idemudia, Uwafiokun, "The Resource Curse and the Decentralization of Oil Revenue: The Case of Nigeria," *Journal of Cleaner Production*, Vol. 35, no. 1, (2012): 183-193, 189
- Ike, Oguine, "Nigeria's Oil Revenues and the Oil Producing Areas," *The Journal*, Vol. 4, no. 10, (2000): 4-10, 6
- Ikein, A., Augustine, *The Impact of Oil on a Developing Economy: The Case of Nigeria*, (New York and London: Praeger Publisher, 1990), p. 12
- Ikelegbe, Augustine, "Economy of Conflict in the Oil rich Niger Delta Region of Nigeria," *African and Asian Studies*, Vol. 5, no. 1, (2006): 23-56, 26
- Ikporukpo, Chris, "Petroleum, Fiscal Federalism and Environmental Justice in Nigeria," *Space and Polity*, Vol. 8, no. 3, (2004): 321-354, 332
- Jeffrey A. Frankel, *The Natural Resource Curse: A Survey*, (Cambridge, MA: National Bureau of Economic research, 2010)
- Jennifer, Mason, *Qualitative Researching* (2nd ed.), (London: Sage publications, 2002)
- Kaasen, Knut, "Scope of Joint Operating Agreements in Norway," *Marius Yearbook*, Vol. 281, no. 1, (2001): 45-72, 53
- Kaiser, Mark, and Allan G. Pulsipher, *Fiscal System Analysis: Concessionary and Contractual Systems Used in Offshore Petroleum Arrangements*, (Louisiana: Centre for Energy Studies, 2004)
- Karl L., Terry, *The Paradox of Plenty: Oil Booms and Petro-States*, (Berkeley: University of California Press, 1997)

- _____, “Ensuring Fairness: The Case for a Transparent Fiscal Social Contract,” in *Escaping the Resource Curse*, ed. Macartan Humphreys, Jeffrey D. Sachs and Joseph E. Stiglitz, (New York, Columbia University Press, 2007)
- _____, “Understanding the Resource Curse,” in *Covering Oil: A Reporters Guide to Energy and Development*, ed. Svetlana Tsalik and Anya Schiffrin, (New York: Open Society Institute, 2005)
- Kemp, G., Alexander, “An Assessment of UK North Sea Oil and Gas Policies: Twenty Five Years on,” *Energy Policy*, Vol. 8, no. 7, (1990): 599-623, 605
- Khelil, Chakib, “Fiscal Systems for Oil: The Government ‘Take’ and Competition for Exploration Investment,” *The World Bank Publication Policy for the Private Sector*, Note no.46, (2014): 29-42, p. 36.
- KPMG, Nigeria’s oil and gas industry in brief, 2014, p. 4,
[Accessed July 5, 2015]
<https://www.kpmg.com/NG/en/IssuesAndInsights/ArticlesPublications/Documents/Nigerian%20oil%20and%20gas%20Industry%20brief.pdf>
- _____, *The Nigerian Oil and Gas Industry Content Development Act, 2010*, p. 3,
[Accessed July 5, 2015]
<https://www.kpmg.com/NG/en/IssuesAndInsights/ArticlesPublications/Documents/Newletter%20on%20Nigerian%20Oil%20and%20Gas%20Industry%20Content%20Development%20Act%20-%20June%202010.pdf>
- Kretzer, M., Ursula, “Allocating Oil Leases: Over-capitalisation in Licencing Systems based on the size of work programme,” *Resource Policy*, Vol. 2, no. 1, (1993): 299-311, 302
- _____, “Exploration Prior to Oil Lease Allocation: a Comparison of Auction Licencing and Allocations based on Size of the Work Programme,” *Resources Policy*, Vol. 20, no. 4, (1994):12-29, 18
- Kvale Steinar and Brinkmann Svend, *Interviews: Learning the Craft of Qualitative Research Interviewing (2nd ed.)*, (London: Sage publications, 2009)
- Kwanashie, Mike, “Fiscal Federalism, Resource Sharing and Political Economy of Nigeria” in *Resource Control and Democratic Stability in Nigeria*, ed. Uba Sani, (Abuja: Kaduna NCPD, 2001), p. 12
- Lahn, Glada, Valerie Marcel and John Mitchell, *Good governance of the national petroleum sector*, (The Chatham House Document, 2007), p.2, [Accessed July 5, 2016], <http://www.chathamhouse.org.uk/files/9761ggdoc0407.pdf>
- Lawal, T., Kamoru, “Taxation of Petroleum Profit under the Nigeria’s Petroleum Profit Tax Act,” *International Journal of Advanced Legal Studies and Governance*, Vol. 4, no. 2, (2013): 34-49, 39
- Lederman, Daniel and William F. Maloney, ed., *Natural Resources: Neither Curse nor Destiny* (Washington, DC: World Bank, 2007)
- Likosky, Michael, “Contracting and Regulatory Issues in the Oil and Gas and Metallic Minerals Industries,” *Transnational Corporations*, Vol. 18, no. 1, (2010): 1-42, 12
- Lopez, Lislle, *Reconciling Tensions Between Company and State: State-owned Enterprises and the World Energy Supply*, (Cambridge: Cambridge University Press, 2012)
- Martin, A., Timothy “Model Contracts: A Survey of the Global Petroleum Industry,” *Journal of Energy & Natural Resources Law*, Vol. 22, no. 3, (2004):281-340, 296,
- Merriam, B., Sharan, *A Guide to Design and Implementation (3rd ed.)*, (San Francisco: Jossey Bass, 2009)

- Ministry of Petroleum and Energy, *Facts 2003: The Norwegian Petroleum Sector*, (Oslo: 2003), p. 3.
- Mommer, Bernard, *Global Oil and the Nation State*, (Oxford: Oxford University Press, 2002)
- Mugenda M. Olive and Anthony G. Mugenda, *Research Methods: Quantitative and Qualitative Approaches*, (Nairobi: ACTS Press, 1999)
- Natural Resource Governance Institute (NRGI), [Accessed October 18, 2016],
<http://www.resourcegovernance.org/our-work/country/norway>;
<http://www.resourcegovernance.org/our-work/country/nigeria>
- Nigeria Sovereign Investment Authority (NSIA), (2014), [Accessed June 18, 2015]
<http://nsia.com.ng/>
- Nigerian Extractives Industries Transparency Initiative, *Report 2013*, [Accessed May 19, 2015]
<http://eiti.org/files/NEITIEITI-CoreAuditReport-Oil-Gas-2009-2011-310113New-4.pdf>
- Nigerian National Petroleum Corporation (NNPC), *Development of Nigeria's Oil Industry* [Accessed February 23, 2015],
<http://www.nnpcgroup.com/NNPCBusiness/BusinessInformation/OilGasinNigeriDevelopmentoftheIndustry.aspx/>
- Nlerum, E. Francis "Reflections on participation regimes in Nigeria's Oil Sector," *Nigerian Current Law Review*, Vol. 145, no. 1, (2012): 34-56, 14
- Nolan, A. Peter Mark C. Thurber, 'On the State's Choice of Oil Company: Risk Management and the Frontier of the Petroleum Industry,' *Program on Energy and Sustainable Development*, Working Paper 99, (December, 2010)
- Norges Bank Investment Management (NBIM), *About the Fund*, p. 3,
 [Accessed on September 28, 2015], <https://www.nbim.no/en/the-fund/about-the-fund/>.
- Norges Bank Investment Management (NBIM), *Investment Strategy*, p. 12,
 [Accessed September 28, 2015]
<https://www.nbim.no/en/investments/investment-strategy/>
- Norwegian Petroleum Directorate (NPD), (2016), <http://www.npd.no/en/news/Productionfigures/>
 [Accessed August 25, 2016]
- Norwegian Petroleum Directorate (NPD), 'Act 29 November 1996, No. 72 relating to petroleum activities, (Chapter 3, section 3-5),' [Accessed May 12, 2015],
<http://www.npd.no/en/Regulations/Acts/Petroleum-activitiesact/#2-1>
- Norwegian Petroleum Directorate (NPD), *Facts 2013*, [Accessed January 4, 2015],
http://www.npd.no/Global/Engelsk/3Publications/Facts/Facts2013/FACTS_2013pdf/
- Norwegianpetroleum.no, *The Government Revenues*, [Accessed September 28, 2016]
<http://www.norskpetroleum.no/en/economy/governments-revenues/>
- _____, *Emissions to Air*, [Accessed September 25, 2016],
<http://www.norskpetroleum.no/en/environment-and-technology/emissions-to-air/>
- _____, *Management of Revenues*, [Accessed September 28, 2015]
<http://www.norskpetroleum.no/en/economy/management-of-revenues/>
- _____, *Norway's Petroleum History*, [Accessed February 12, 2015],
<http://www.norskpetroleum.no/en/framework/norways-petroleum-history/>
- _____, *The Petroleum Tax System*, [Accessed September 28, 2016]
<http://www.norskpetroleum.no/en/economy/petroleum-tax/>
- Nwokeji, G., Ugo, *The Nigerian National Petroleum Corporation and the Development of the Nigerian Oil and Gas Industry: History, Strategies and Current Directions*, (Houston: Rice University Publisher, 2007)

- Obi, Cyril, "Globalisation and Local Resistance: The Case of the Ogoni versus Shell," *New Political Economy*, Vol. 2, no. 1, (1997): 137-148, 141
- Oksan, Bayulgen *Foreign Investment and Political Regimes: The Oil Sector in Azerbaijan, Russia and Norway*, (Cambridge: Cambridge University Press, 2010)
- Ole Gunnar, Austvik, "Landlord and Entrepreneur: The Shifting Roles of the State in Norwegian Oil and Gas Policy," *Governance*, Vol. 25, no. 2, (2012): 315-334, 328
- _____, "The Norwegian Petroleum Experience as an Example?," *The International Shale Gas and Oil Journal*, Vol. 2, no. 2, (2014): 18-28, 19
- _____, "EU Regulation and National Innovation," in *Innovative Regulatory Approaches Coping with Scandinavian and Europe Union Policies*, ed. Noralv Veggeland (New York: Nova Science Publisher, 2010)
- Onorato T. William and Jay J. Park, "World Petroleum Legislation: Frameworks that Foster Oil and Gas Development," *Alberta Law Review*, Vol. 39, no. 1, (2001):23-48, 31
- Osmundsen, Petter "Risk sharing and Incentives in Norwegian Petroleum Extraction," *Energy Policy*, Vol. 27, no. 9, (1999): 549-555, 552
- Paolo de Sa, "Mineral Policy: A World Bank Perspective," *International and Comparative Mineral Law and Policy*, Vol. 2, no. 1, (2005): 494-499, 497
- Parra, Francisco, *Oil Politics: A Modern History of Petroleum*, (London and New York: I.B. Tauris, 2009), p. 67
- Premium Times, 'Nigeria's State-owned Oil Company, NNPC, Pens its Accounts to Public,' *Premium Times*, (Abuja), Sunday, (October 11, 2015), p. 12
- Robinson, A., James Torvik Ragnar and Thierry Verdier, "Political foundations of the resource curse," *Journal of Development Economics*, Vol. 79, no. 6, (2006): 447-468, 452
- Ross, L., Michael, "Does Oil Hinder Democracy?" *World Politics*, Vol. 53, no. 3, (2001): 325-361, 329
- Russell H., Bernard, *Research Methods in Anthropology: Qualitative and Quantitative Approaches (5th ed.)*, (New York and London: Praeger, 2011)
- Sachs D. Jeffrey and Andrew M. Warner, "The Big Push, Natural Resource Booms and Growth," *Journal of Development Economics*, Vol. 59, no. 1, (1999): 43-76, 47
- _____, "The Curse of Natural Resources," *European Economic Review*, Vol. 45, no. 4-6, (2001): 835-854, 838
- _____, "Natural Resource Abundance and Economic Growth," NBER Working Paper 5398, *National Bureau of Economic Research*, (Cambridge, MA: 1998)
- Segal, Paul, "How to Spend It: Resource Wealth and the Distribution of Resource Rents," *Energy Policy*, Vol. 1, no. 2, (2012): 51:347, 74
- Silje Aslaksen, "Oil and democracy: More than a cross-country correlation?" *Journal of Peace Research*, Vol. 47, no. 9, (2010): 421-431, 426
- Sinding, Knud, *Auctions and Discretion in Oil and Natural Gas Licencing*, (University of Dundee, Centre for Energy, Petroleum & Mineral & Policy Publication, 1999)
- Skancke, Martin, "Fiscal Policy and Petroleum Fund Management in Norway," in Jeffrey M. Davis, Rolando Ossowski and Annalisa Fedelino, (Eds.), *Fiscal Policy Formulation and Implementation in Oil Producing Countries*, (Washington, DC: International Monetary Fund, 2014).
- Smith, J., Daniel, *A Culture of Corruption: Everyday Deception and Popular Discontent in Nigeria*, (Princeton: Princeton University Press, 2007)

- Statoil, *Annual Report 2013*, [Accessed March 21, 2015],
http://www.statoil.com/no/InvestorCentre/AnnualReport/AnnualReport2013/Documents/downloadCentreFiles/01_KeyDownloads/AnnualReport20-F.pdf
- Stevens, Paul, *Resource Impact: A Curse or a Blessing?* (Dundee: Center for Energy, Petroleum and Mineral Law and Policy, 2003)
- Stoeber, Jana, "On Comprehensive Wealth, Institutional Quality and Sustainable Development Quantifying the Effect of Institutional Quality on Sustainability," *Journal of Economic Behavior & Organization*, Vol. 14, no. 3, (2011): 13-16, 15
- Sunnevåg, J., Kjell, "Designing Auctions for Offshore Petroleum Lease Allocation," *Resources Policy*, Vol. 3, no. 26, (2000): 23-45, 15
- Taverne, Bernard, *An Introduction to the Regulation of the Petroleum Industry: An Introduction to Regulation, Economics and Government Policies*, (London: Kluwer International, 2000), p. 23
- _____, *An Introduction to the Regulation of the Petroleum Industry: Laws, Contracts and Conventions*, (London: Kluwer Law International, 1994)
- Thurber C., Mark, and Benedicte T. Istad, "Norway's Evolving Champion: Statoil and Politics of State Enterprise," *Program on Energy and Sustainable Development*, Working Paper no. 92, (May 2010a)
- Thurber, C. Mark, David R. Hults and Patrick R. P. Heller, "Exporting the 'Norwegian Model': The Effect of Administrative Design on Oil Sector Performance," *Energy Policy*, Vol. 39, no. 9, (2011): 5366-5378, 5371
- _____, *The Limits of Institutional Design in Oil Sector Governance: Exporting the 'Norwegian Model,'* (Stanford, CA, USA: PESD, Stanford University Press, 2010c)
- Thurber, C., Mark, Ifeyinwa M. Emelife and Patrick R. P. Heller, "NNPC and Nigeria's Oil Patronage Ecosystem Oil and Governance," *Program on Energy and Sustainable Development*, Working Paper no. 95, (September, 2010b)
- Toft, Peter and Arash Duero, "Reliable in the Long Run? Petroleum Policy and Long-term Oil Supplier Reliability," *Energy Policy*, Vol. 39, no. 2, (2011): 6583-6594, 6587
- Tordo, Silvana, "Fiscal Systems for Hydrocarbons: Design Issues," *World Bank Working Paper*, No. 123, (2007): 23-45, 34
- Tsui, K., Kevin, "More Oil, Less Democracy: Evidence from Worldwide Crude Oil Discoveries," *The Economic Journal* vol. 121, no. 551 (2011): 89-115: 96
- United Nations Department of Economic and Social Affairs, Populations Division (2016), *World Population Prospects: The 2015 Revision*, [Accessed October 5, 2016],
<http://www.un.org/en/development/desa/population/>
- United Nations Development Program (UNDP), *Human Development Reports*, [Accessed October 5, 2016], <http://hdr.undp.org/en/countries/>
- Ushie Vanessa, Oluwatosin Adeniyi and Sabastine Akongwale, "Oil Revenue, Institutions and Macroeconomic Indicators in Nigeria," *OPEC Energy Review*, Vol. 37, no. 1, (2013): 30-52, 43
- Velculescu, Delia "Norway's Oil Fund shows the way for Wealth Funds," *IMF Survey*, (July 9, 2008), p. 12-19: 15
- Victor, G., David, David R. Hults and Mark C. Thurber, *Oil and Governance: State-Owned Enterprises and the World Energy Supply*, (Cambridge: Cambridge University Press, 2011)

- Watts, Michael, "Resource Curse? Governmentability, Oil and Power in the Niger Delta, Nigeria," *Geopolitics* vol. 9, no. 1 (2004): 50–80, 72
- Wijnbergen van Sweder, Gaobo Pang and Nina Budina, "Nigeria's Growth Record: Dutch Disease or Debt Overhang?" Working Paper no. 4256, (Washington, DC: World Bank, 2007)
- World Bank, *World Development Indicators 2016*, (Washington, DC: World Bank, 2016), p. 3, [Accessed September 12, 2016], <https://openknowledge.worldbank.org/handle/10986/23969>
- Worldometers, [accessed October 5, 2016], <http://www.worldometers.info/>
- Yin, K., Robert, *Case Study Research: Design and Methods (4th ed.)*, (New York and London: Praeger, 2009)

APPENDICES

Appendix 1: Research Questionnaire

Dear Respondent,

My name is Paulson E. Tadeo, a Graduate student at the Institute of Diplomacy and International Studies, University of Nairobi, Kenya. I am pursuing a Master of Arts Degree in International Conflict Management. In order to partially fulfill the requirements of this degree program, I am undertaking a research study titled: “A Comparative Study of Oil Resource Management in Norway and Nigeria: Lessons for Kenya.” This questionnaire, therefore, is designed to facilitate the collection of data which will contribute in writing my final academic thesis. The information obtained will strictly be used only for academic purpose and treated with utmost confidentiality. Your co-operation is highly appreciated.

(Please, answer all the questions exhaustively and to the best of your knowledge)

PART ONE: Personal Information

Gender: Male Female

Age: 15-24 25-34 35-44
45-54 55+

Level of Education: Primary College
Secondary University

Occupation: _____ Citizenship: _____

PART TWO: Petroleum Policy in the Development of Petroleum Resources

1. a.) Is petroleum policy in the country sufficiently institutionalized to achieve long term national objectives and to avoid profound changes whenever a new government comes into power?

Yes No

b.) Briefly explain your answer in Q. 1.a.

2. To what extent are the petroleum policies of the current government consistent with those of the previous governments?

A larger extent A smaller extent Not consistent at all

3. a.) Does the petroleum policy in the country attempts to enhance efficient co-operation between the State administration and the IOCs?

Yes No

b.) If Yes to Q. 3.a. give examples of such kind of co-operations

4. To what extent has the petroleum policy contributed to the development of national expertise and maximization of local content in the country? ('Local content' is here defined as national employment, the use of national goods and services, and transfer of technology and know-how)

To a larger extent To a smaller extent Not at all

5. a.) Has the government inculcated and secured the democratic features of transparency and openness in it's petroleum policies and practices?

Yes No

b.) Explain your answer in Q. 5.a.

PART THREE: Institutional Organization and Competence in Petroleum Industry

6. a.) Is there a clear division of responsibilities (functions) between the institutions taking care of the State's regulatory and commercial interests in the petroleum industry?

Yes No

b.) Explain your answer in Q. 6.a.

7. a.) Do the institutions administering petroleum operations have the necessary technical capacity, financial resources and legal authority to competently contribute in the management of petroleum resources in the country?

Yes No

b.) Explain your answer in Q. 7. a.

8. How efficient is the model of organisation in contributing to effective management of petroleum resources?

Very efficient Efficient Slightly efficient Not efficient at all

PART FOUR: Regulatory Practices Governing Petroleum Industry

9. a.) How effective are the model agreements (petroleum contracts) and award of petroleum licences in the petroleum sector in the country?

Very effective Effective Slightly effective Not effective at all

b.) Briefly explain your answer in Q. 9.a.

10. To what extent has the State integrated the resource management functions with HSE protection issues?

To a larger extent A smaller extent Not at all

11. a.) To what extent has the petroleum industry complied with international laws and regulations such as the ones stipulated by the EITI?

70-100% 50-69% <49%

b.) Explain your answer in Q. 11.a.

PART FIVE: Fiscal Regimes in the Petroleum Industry

12. a.) Are the fiscal instruments (tools) used in capturing revenues from the petroleum sector effective?

Very effective Effective Fairly Effective Not Effective at all

b.) Explain your answer in Q. 12. a.

13. a.) How the State does manages, regulates and utilizes the revenues that accrue from the petroleum sector?

Very Well Well Fairly Well Poorly

b.) Explain your answer in Q. 13. a.

14. How effective are the fiscal regimes employed in the country in extracting, managing and regulating revenues that accrues from the petroleum industry?

Very effective Effective Fairly Effective Not Effective at all

Appendix 2: Interview Schedule

A. Petroleum Policy in the development of Petroleum Industry

1. Comment on whether petroleum policy in the country is sufficiently institutionalized to achieve long term national objectives and to avoid profound changes whenever a new government come into power (To what extent are the petroleum policies of the current government consistent with those of the previous governments?)
2. Comment on how the petroleum policy in the country attempts to enhance the co-operation between the State administration and the international oil companies (IOCs)
3. Comment on whether the petroleum policy has contributed to the development of national expertise and maximization of local content in the country ('local content' is here defined as national employment, the use of national goods and services, and transfer of technology and know-how)
4. Comment on how the government has inculcated and secured the democratic features of transparency and openness in it's petroleum policies and practices

B. Institutional Organization and Competence in the Petroleum Industry

5. How has the State designed and organized the administration of it's petroleum sector?
6. Comment on whether there is clear division of responsibilities (functions) as well as coordination between the key institutions involved in the administration of petroleum sector in the country?
7. What is the relationship between the government authorities and the national oil company (NOC)?

8. Comment on whether the institutions administering petroleum operations have the necessary technical capacity, financial resources and legal authority in order to competently contribute in the management of petroleum resources in the country

C. Regulatory Practices governing Petroleum Industry

9. Comment on the following:
 - a) Model agreements (petroleum contracts)
 - b) Award of petroleum licenses
 - c) Tempo regulation
10. To what extent has the State integrated the resource management functions with health safety and environmental (HSE) protection issues?
11. What mechanisms are in place to ensure that industry participants work in compliance with both the national and international laws and regulations? (To what extent is the petroleum sector in the country compliant with EITI principles)
12. In general, comment on how regulatory practices governing petroleum sector in the country have encouraged the sustainable development of petroleum resources

D. Fiscal Regimes in the Petroleum Industry

13. How does the State capture revenues from the petroleum sector? (How effective are these fiscal instruments in extracting oil revenues from the petroleum sector?)
14. How does the State manage, regulate and utilize the revenues that accrue from the petroleum sector?
15. Comment on the effectiveness of the fiscal regimes employed in the country in extracting, managing and regulating revenues that accrues from the petroleum industry

Appendix 3: List of Key Informants interviewed in Norway (Oslo and Stavanger Cities)

Fieldwork Period (September – October, 2015)			
No.	Categories of Key Informants	Responsibility (s)	Date of Interview
	Officials from Norwegian Ministry of Petroleum and Energy, Oslo		
1.	Mr. Lars Erik Aamot	Director General, Department of Oil and Gas	7 th , October 2015
2.	Mr. William Christensen	Director General, Department of Climate, Industry and Technology	8 th , October 2015
	Officials from Norwegian Petroleum Directorate (NPD), Stavanger		
3.	Ms. Inger Lise Stromme	Director, Data Management and Organization	9 th , September 2015
4.	Mr. Kalmar Ildstad	Director, Development and Operations, Norwegian Sea	9 th , September 2015
5.	Mr. Gunnar Soiland	Senior Geologist	11 th , September 2015
	Officials from Norwegian Petroleum Safety Authority (PSA-Norway), Stavanger		
6.	Mr. Ole Jorgen Melleby	Head of Health, Safety and Environment (HSE) Management Section	15 th , September 2015
7.	Ms. Anne Vatten	Director of Legal and Regulatory Affairs	15 th , September 2015
	Officials from Norwegian National Oil Company (Statoil AS), Stavanger		
8.	Mr. Arne Sigve Nylund	Head of Development and Production Section	17 th , September 2015
9.	Ms. Margareth Ovrund	Head of Technology, Project and Drilling Section	18 th , September 2015
10.	Mr. Jens Okland	Head of Marketing, Midstream and	18 th , September 2015

		Processing Section	
	Officials from Norwegian State-owned Company (Petoro AS), Stavanger		
11.	Mr. Kjeil Morisbak Lun	Vice President, Licences	10 th , September 2015
	Officials from Norwegian Ministry of Finance, Oslo		
12.	Mr. Amund Holmsen	Director General, The Economic Policy Department	13 th , October 2015
13.	Ms. Nina Bjerkedal	Director General, The Tax Policy Department	14 th , October 2015
	Officials from International Oil Companies operating in Norwegian Continental Shelf (NCS), Stavanger		
14.	Mr. Morten Mauritsen	Managing Director, Esso Norge AS and the Lead Country Manager, ExxonMobil Companies in Norway	16 th , October 2015
	Officials from Extractive Industries Transparency Initiative (EITI), Oslo		
15.	Ms. Dyveke Rogan (2)	Policy and Regional Director, EITI International Secretariat	27 th , October 2015
	Experts and Scholars in Petroleum Resource Management in Norway, Stavanger		
16.	Mr. Farouk Al-Kasim	Senior Geologist, Founder and President of PETROTEAM	8 th , September 2015
17.	Professor Reidar Bratvold	Professor of Petroleum Investment and Decision Analysis, University of Stavanger; and Lecturer, Norwegian Institute of Technology, Trondheim	21 st September 2015
18.	Professor Austvik Ole Gunnar	Professor, Norwegian Institute of International Affairs; BI Norwegian Business School	23 rd , September 2015
19.	Professor Ove Tobias Gudmestad	Professor of Marine Technology,	25 th , September 2015

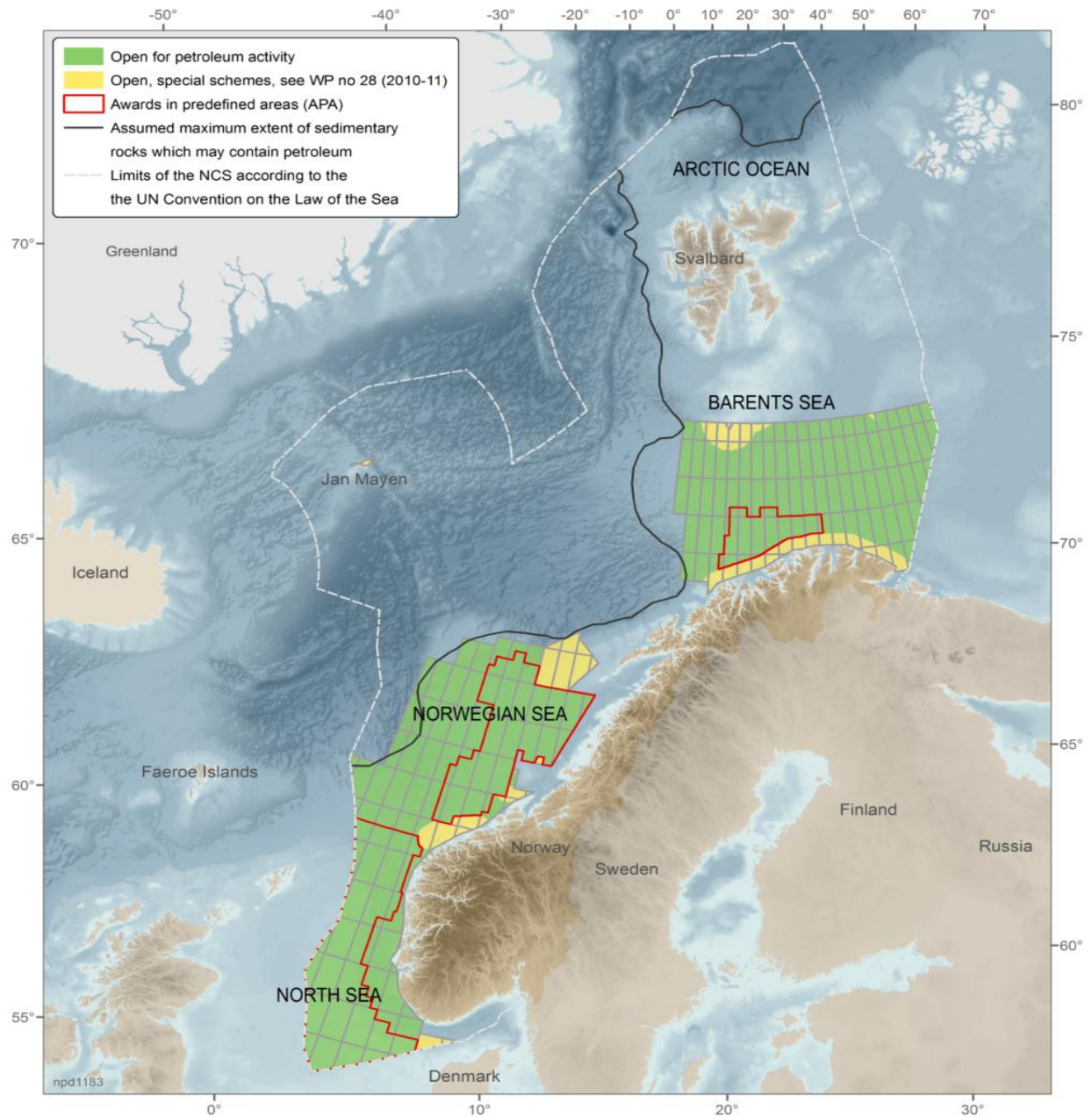
		University of Stavanger	
20.	Professor Arnfinn Nergaard	Professor of Marine Engineering and deeper water petroleum technology, University of Stavanger, and Lecturer, PETRAD Faculty, Stavanger	28 th , September 2015

Appendix 4: List of Key Informants interviewed in Nigeria (Niger Delta, and FCT, Abuja)

Fieldwork Period (June – July, 2015)			
No.	Categories of Key Informants	Responsibility (s)	Date of Interview
	Officials from Federal Ministry of Petroleum Resources, Abuja		
1.	Mr. Michael Dalhat	Director, Planning, Research and Statistics (PRS) Department	9 th , June 2015
2.	Mr. Augustine Ogusi	Director, Nigerian Local Content Development Unit	10 th , June 2015
	Officials from Department of Petroleum Resources (DPR), Abuja		
3.	Mr. George Osahon	Director, DPR	12 th , June 2015
4.	Mr. Emmanuel Bekee	Head, Upstream Monitoring and Regulation	15 th , June 2015
5.	Mrs. Onyebuchi Sibeudu	Head, Safety, Health and Environment	17 th , June 2015
	Officials from Nigerian National Petroleum Corporation (NNPC)		
6.	Dr. Maikanti Baru	Group Managing Director, NNPC	18 th , June 2015
7.	Mr. Bello Rabi	Chief Operating Officer, Upstream	19 th , June 2015
8.	Dr. Victor Babatunde Adeniran	Chief Operating Officer, Ventures	22 nd , June 2015
9.	Mr. Chidi Momah	Legal Adviser	25 th , June 2015
	Officials from National Petroleum Investment Management Services, (NAPIMS)		
10.	Engineer Catherine Ngozi Iheme	General Manager, Joint Venture Operations Division	26 th , June 2015
	Officials from Revenue Mobilization Allocation and Fiscal Commission (RMAFC), Abuja		

11.	Mr. Elias Mbam	Chairman, RMAFC	3 rd , July 2015
	Officials from Federal Ministry of Niger Delta, Abuja		
12.	Professor Anthony Adegbulugbe	General Manager, Budget Office of the Federation (BOF)	6 th July 2015
13.	Dr. Robert Asogwa	Director, Planning and Research, Central Bank of Nigeria (CBN)	8 th , July 2015
	Officials from International Oil Companies operating in Nigeria		
14.	Professor Adebayo Adedeji	External Affairs Manager, Shell Petroleum Development Company of Nigeria Limited (SPDC)	10 th , July 2015
	Officials from Nigeria Extractive Industries Transparency Initiatives (NEITI), Abuja		
15.	Mr. Peter Bagiwa Ogbobine	Director Legal, Delta-Warri South	16 th July 2015
	Experts and Scholars in Petroleum Resource Management in Nigeria		
16.	Dr. Patricks Ogiji	Economist, IMF Nigeria	22 nd , July 2015
17.	Professor Matthew Olarotimi Ajayi	Professor of Political Science and Security, Department of Politics and Strategic Studies, Covenant University	23 rd , July 2015
18.	Mrs. Adedoja Ojelabi,	President, Nigerian Association of Petroleum Explorationists (NAPE)	24 th , July 2015
19.	Professor Humphrey Asobie	Former Chairperson, NEITI	27 th , July 2015
20.	Dr. Kelvin Ikpomwosa	Director of Engineering, Petroleum Training Institute	28 th , July 2015

Figure 11: A map showing Norwegian Continental Shelf (NCS)



Source: Norwegian Petroleum Directorate (NPD), 2016

Figure 12: A map showing Oil blocks in Nigeria's Niger Delta region



Source: Nigeria's Department of Petroleum Resources (DPR), 2016

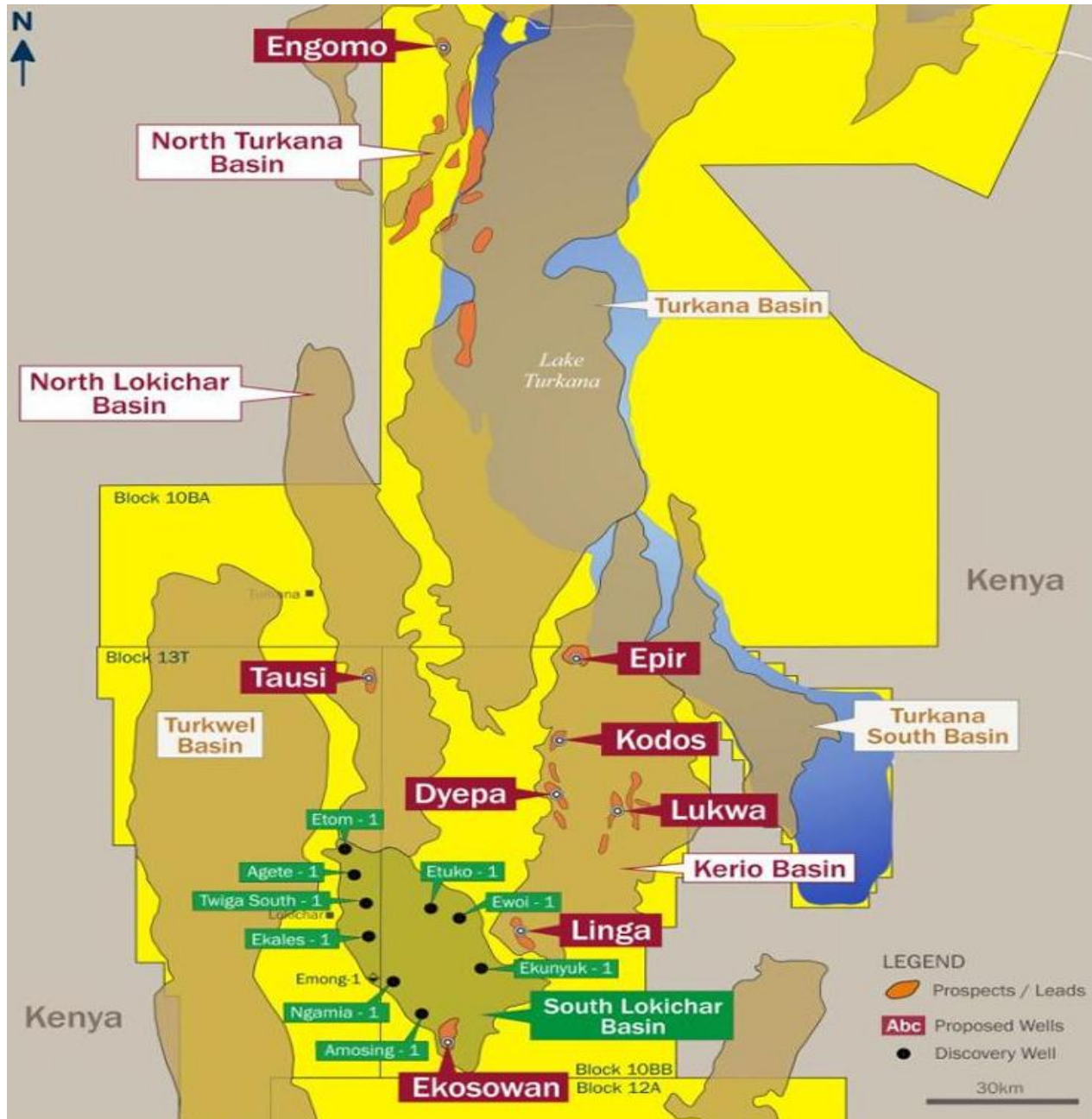
Figure 13: A map showing Oil blocks and Licence holders in Kenya



Operators:	11B Adamantine	L-6 FAR Ltd.	L-15 (relinquished)
1 Afren EAX	12A Tullow	L-7 Anadarko	L-16 CAMAC Energy
2A Simba Energy	12B Tullow	L-8 (under negotiation with Pancontinental)	L-17, L-18 Afren EAX
2B Lion Petroleum	14T NOCK	L-9 Ophir Energy	L-19 Rift Energy
3A Vanoil	L-1A A-Z Petroleum	L-10A, L-10B BG Group	L-20 Pacific Seaboard Investments
3B Vanoil	L-1B CAMAC Energy	L-11A, L-11B Anadarko	L-21 Eni
9 Africa Oil Corp.	L-2 Imara Energy	L-12 Anadarko	L-22 Total
10A (unlicensed)	L-3 A-Z Petroleum	L-13 Zarara Oil & Gas	L-23, L-24 Eni
10BA, 10BB Tullow	L-4 Zarara Oil & Gas	L-14 Lamu Oil & Gas	L-25, L-26 (open)
11A CEPSA	L-5 Anadarko		L-27, L-28 CAMAC Energy

Source: National Oil Corporation of Kenya (NOCK), 2016

Figure 14: A map showing Oil exploration and development in Turkana County, Kenya



Source: Tullow Oil, overview presentation, February 2016, p. 22