DECOMMISSIONING OF OIL AND GAS INSTALLATIONS IN UGANDA: An analysis of the Regulatory Framework pertaining to oil and gas installations.

EMMANUEL CHRISTOPHER KAKENGA M21M23/013

DECEMBER 2022

A DISSERTATION SUBMITTED TO THE FACULTY OF LAW IN PARTIAL FULFULMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF LAWS IN OIL AND GAS LAW AT THE INSTITUTE OF PETROLEUM STUDIES KAMPALA IN AFFLIATION TO UCU.

DECLARATION

I, **EMMANUEL CHRISTOPHER KAKENGA** declare that I am the author of this paper and that any assistance received in its preparation is fully acknowledged and disclosed in the paper. I have also cited sources from which I used information, ideas or words, either quoted directly or paraphrased. I certify that the paper was prepared by me specifically for the partial fulfilment for the degree of Master of Laws in Oil and Gas at Uganda Christian University.

EMMANUEL CHRISTOPHER KAKENGA
M21M23/013
Signature:
Date:

APPROVAL

This	s I	Disse	rtatio	n	report	has	been	under	the	direct	sup	ervision	of	and	examined	l prio	r to
submission to Uganda Christian University BY																	
					• • • • • • •											••	
Associate Prof: GEORGE.W.K.L.KASOZI																	
			Dat	e:								• • • • • • • • • • • • • • • • • • • •					

DEDICATION

I dedicate this paper to my late father John Wycliffe Elias Kakenga a petroleum engineer who contributed to the development of the petroleum sector in Uganda rising through the ranks to the position of commissioner, my dear late mother Margaret Kawuma Kakenga who single handedly provided, mentored, nurtured and pushed me to be the best version of myself, my wife Sumaya Nalukenge for the much needed support while undertaking this course and my children Matthew, Megan, Mason, Monte and Emmanuella basically for the love and affection exhibited while pursuing this chapter of my life.

ACKNOWLEDGMENT

I give all glory to God, without the air that I breathe, health and provision, it would not be possible for me to complete this course on the first try considering I started the course during the Covid 19 Pandemic.

My immediate family, wife and children, that had to tolerate me locking myself up in the bedroom for hours on end attending the zoom classes but still checking on me and feeding me, I thank u.

I appreciate and thank the staff and lecturers at the Institute of Petroleum Studies Kampala that painstakingly undertook this mantle to educate me and many a time in the wee hours of the morning.

I would like to finally thank my supervisor Prof. George W.K.L Kasozi for the guidance accorded to me to enable me produce this master piece.

ABSTRACT

The purpose of this study was to analyse the regulatory framework pertaining to Oil and Gas installations and in so doing to highlight the lapses if any and the consequences associated with the said lapses. The research shall also point out the advantages of rectifying those lapses to the benefit of the Uganda while benchmarking mature jurisdictions on the same subject matter.

For this research, the researcher took a doctrinal legal research approach dependent on evaluating Acts of Parliament, Statutes, Regulations in force, Government Policies on Oil and Gas, legal concepts, principles of law, cases concerning decommissioning of oil and gas installations.

Its analytical framework was based on principal agency theory given the different stakeholders in the Oil and Gas industry that are dependent on one another for example the Host Government and its Citizens being that Uganda holds naturals resources in trust for its citizens, the Host government and International Oil Companies(IOCs), Petroleum Regulatory authority(PAU) and IOCs etc because of the interwoven dependency of the stakeholders in the Oil and Gas industry to execute and perform their obligations under the production sharing agreements for each stakeholder's benefit.

The research reviewed Ugandan laws beginning with the supreme law of the land which is the 1995 constitution that caters for exploitation of natural resources, Acts of parliament specifically providing for decommissioning of oil and gas installations for example the Petroleum (Exploration, Development and Production) Act 2013, The Petroleum (Refining, Conversion, Transmission and Midstream storage) Act 2013 and supporting regulations, environmental laws like the National Environment Act 2019, Occupational health and safety Act 2006 for employee safety and several international laws such as the UNCLOS, Stockholm declaration etc.

The Ugandan regulatory framework indeed provides for decommissioning albeit it lacks detail on both the decommissioning plan and fund. Although the Ugandan Oil and Gas industry is in its infant stages and decommissioning will not happen for another 20-30 years, there needs to be adequate preparation for it. Uganda together with Tanzania have commissioned 1433km pipeline from Kabaale, Hoima to Tanga in Tanzania, plans to build a refinery are underway, storage facilities, processing plants etc therefore the law should require specific detail on how

to decommissioning each one of these installations separately to prevent environmental disasters like in Nembu, Nigeria where oil wells were not properly capped.

The lack of a specified amount for the fund or provision in the law to ensure that the amount deposited by the IOCs is sufficient to cover decommissioning expenses is a lapse in the regulatory framework as well which ought to be addressed to prevent situations where the Government of Uganda is left with the decommissioning bill or that the money is not enough and shoddy work is done leading to environmental disasters.

The paper concludes that in order for Uganda to succeed in the Oil and Gas industry, industry best practices in all the petroleum activities need to be followed to be adhered to despite the fact that our laws appear weak on all matters pertaining decommissioning of oil and gas installations.

The following recommendations are proposed: Sensitize the public to understand better the oil and gas industry and the obligations of the IOCs during production and upon cessation of petroleum activities, strengthening enforcement of the legal and institutional framework to ensure compliance, amend or enhance laws to cater for the lapses identified, educate the public on the potential hazards of the oil and gas industry so they can put IOCs and their leaders to account.

TABLE OF CONTENTS

DECLARATION	2
APPROVAL	3
DEDICATION	4
ACKNOWLEDGEMENT	5
ABSTRACT	6
TABLE OF CONTENTS	8
CHAPTER ONE:	11
1.0 INTRODUCTION	11
1.1 Background of the Study	12
1.2 Statement of the Problem	17
1.3 Purpose of the Study	18
1.4 Research Questions	19
1.5 Significance Of The Study	19
1.6 Scope of the Study	20
CHAPTER 2: LITERATURE REVIEW	21
Introduction	21
2.1 Literature review	21
CHAPTER 3: RESEARCH METHODOLOGY	25
Introduction	25
Geographical scope.	25
Content scope	25
Time scope	25
Theoretical literature review.	25
Research Design	26
Target population.	26

Sample and its determination
Sampling techniques
Data collection methods27
Sources of data
Legal Context/Research setting/Framework
Data Collection Strategy28
Comparative analysis
Ethical considerations
CHAPTER FOUR: THE LEGAL FRAMEWORK GOVERNING DECOMMISSIONING IN
UGANDA30
Introduction30
The regulatory framework in Uganda30
The Constitution of the Republic of Uganda, 1995, as amended30
Statutory legislation
Contracts
International law35
An analysis of International Law on Decommissioning in the oil and gas sector39
Generally Accepted International (Global) Rules and Standards
IMO Guidelines41
International (Regional) Rules, Standards and Recommended Practices and Procedures43
The Offshore Protocol to the Kuwait concerning Marine Pollution Resulting from
Exploration and Exploitation of the Continental Shelf43
The Dumping and Offshore Protocols to the Barcelona Convention for the Protection of
the Mediterranean Sea against Pollution44
Interaction between Regional and Global Rules: Complementarity and Fragmentation45
Carralianian
Conclusion
CHAPTER FIVE: A COMPARISON WITH OTHER DEVELOPED JURISDICTIONS48

Overview of UK Petroleum Legal Framework	48
The Legal Framework for Decommissioning in United Kingdom	50
Lessons for Uganda	53
Conclusion	56
CHAPTER SIX: FINDINGS, RECOMMENDATIONS AND CONCLUSION	58
Introduction	58
Summary findings	58
Positive findings	58
Potential threats	58
Recommendations	61
Conclusion.	62
REFERENCES	63

CHAPTER ONE:

1.0 INTRODUCTION:

The focus of this research paper shall be seeking to illustrate why it is necessary for Uganda to have in place an adequate decommissioning plan of the oil and gas installations by citing the potential hazardous effects of the Oil and `Gas industry and whether the legal and regulatory framework is sufficient to address all potential hazards associated with oil and gas installations when the petroleum activities have come to an end.

Oil and Gas are finite resources therefore all the subsequent activities involved in their discovery and production shall cease at some point in time and so shall the need for the installations that have been set up by international oil companies (IOCs).

It is no secret that the oil and gas industry is a costly business venture but at the same time very highly rewarding in terms of revenue albeit at the expense of the environment due to its high levels of pollution to mankind, water resources, marine life, land and animals therefore there is need for the recognition and implementation of industry best practices in all activities in the oil and gas industry to ensure that environmental degradation is avoided or at least minimized.

The installations set up by IOCs in the exploration and production of oil and gas for example refineries, storage facilities, treatment plants, pipelines etc are potentially hazardous because a wide range of chemicals are utilized within them either to drill, clean, purify or refine the crude oil which will therefore necessitate for their safe removal or decommissioning in accordance with the best industry best practices once the petroleum activities have come to an end.

Exploration, Development and production of Petroleum in Uganda is governed by the Petroleum Exploration, Development and Production Act¹, the Petroleum (Refining, Conversion, Transmission and Midstream Storage Act², National Environment Act³ and the supporting regulations which provide for a decommissioning fund and plan.

² Act No. 4 of 2013

¹ Act No. 3 of 2013

³ Act No. 5 of 2019

However, the provision for the decommissioning plan and fund alone are not sufficient without considering the aspects of health and safety while implementing the decommissioning.

The Upstream and Midstream Acts also provide for the safety measures that licensees should undertake while decommissioning oil and gas installations albeit in tandem with the Occupational Health and Safety Act ⁴and any other government institution or department that carries out similar duties.

This study therefore shall review the relevant laws above in light of the best industry practices in several jurisdictions to establish whether the legal and regulatory framework in Uganda is up to per with the rest of the world or if indeed we have surpassed the average standard set.

1.1 Background of the Study

Wayland⁵ is said to have been the first person to record hydro carbon occurrences in the Albertine Graben and the potential of oil and gas in Uganda in the 1920s.⁶ Subsequently in 1938 the deepest well called Waki–B–1 was drilled following drilling of several wells during further investigations.

In 1984 an aero—magnetic survey was carried out to locate potential areas in the western part of the country that could harbour oil and Gas, thereafter tha petroleum unit within the Department of Geological survey and mines was established also leading to the enactment of Uganda's first oil and gas legislation, the Petroleum (Exploration and production) Act 1985.⁷

In the early 90's experienced companies in exploration like Petro Fina in 1991 and later Uganda General works Engineering Company in 1993 showed interest in Uganda's resources but failed to follow through with any production and left until other interested petroleum companies privy to the seismic survey information picked up the interest, therefore Heritage Oil and Gas limited (Heritage), Hardman Petroleum and Energy Africa (Hardman) were granted licenses between 1997 and 2004.

⁵ E.J Wayland was a government Geologist in 1920

⁴ Act No. 9 of 2006

⁶ www.pau.go.ug

⁷ www.pau.go.ug

Further drilling of wells in 2005 from the advice of Ugandan experts on land instead of the lake in Kaiso, Tonya, Hoima District led to the striking of oil on the 6th of January 2006 in the Mputa 1 well which was announced as the first commercially viable discovery in Uganda⁸.

More discoveries were subsequently made in the following areas, Lyec, Ngege, Kasamene, Ngiri, Waraga, Nzizi, Kigogole, Ngara, Kajubilirizi (Kingfisher), Taitai, Nsoga, Karuka, Mpyo, Gunya, Ngassa, jobi–East, Wahrindi.

In 2008 the National Oil and gas policy was approved to provide general oversight and guidance for the country's emerging oil and gas sector.⁹ Thereafter in line with the policy, legislation was enacted to update the

The Petroleum (Exploration, Development and Production) Act ¹⁰ and The Petroleum (Refining, Conversion, Transmission and Midstream) storage Act¹¹, with supporting regulations on technical, health, environment and national content were enacted.

The legislation enacted provides for the policy, legal and regulatory framework of the sector together with the institutional framework under three key institutions, the Ministry of Energy and Mineral Development through the Directorate of Petroleum to set policy, promoting investment and licensing, the Petroleum authority of Uganda responsible for monitoring and regulation of the sector and the Uganda National Oil company responsible for the Government's commercial interests in the sector.

A total of 21 oil and gas discoveries have been made in Uganda to date most of the discovery in Albertine Graben and moreover with only 40% of the exploration concluded in 2015, 17 of these oil wells have been fully appraised and being taken forward for development¹², 9 licenses for production for approximately 14 of the fields were distributed as follows, 5 for Tullow Uganda Operations PTY Limited (Tullow), 3 for Total E and P and 1 to CNOOC Uganda. Tullow subsequently farmed down its assets to TOTAL and CNOOC.

-

⁸ www.pau.go.ug

⁹ The Oil and Gas Sector in Uganda, Directorate of petroleum, Petroleum Authority of Uganda, UNOC

¹⁰ Act No. 3 of 2013

¹¹ Act No. 4 of 2013

¹² The Oil and Gas Sector in Uganda, Directorate of Petroleum, Petroleum Authority of Uganda, UNOC

Towards the end of 2017, the Government of Uganda signed 3 production sharing agreements and issued one license for Petroleum Exploration, Development and Production over the Kanywataba Contract Area to Armour Energy limited an Australian company, 2 licenses for Petroleum, Exploration, Development and Production over the Ngassa shallow and Ngassa deep contract areas to Oranto petroleum Limited from Nigeria.¹³

Uganda is estimated to hold approximately 6 billion barrels of oil and 1.6 billion barrels of those being recoverable and extraction of all that volume of oil will definitely require infrastructure from drilling, treatment processing transportation etc. Several projects are underway for example the Tilenga project which includes a central processing facility with capacity to process 190,000 barrels of oil per day with over 412 wells and will be drilled on on 35 well pads, the Kingfisher project has a planned central processing facility with a capacity of 40,000 barrels of oil per day and 31 oil wells to be drilled on 4 well pads.

The Government of Uganda executed an agreement for a refinery project in 2018 with the Alebrtine Graben Refinery Consortium (AGRC) which includes a 211 km multi products pipeline from Kabaale in Hoima to Namwambula in Mpigi District.

On the 22nd of May 2019, the Ministry of energy and Mineral Development issued a notice for the second licensing round for Petroleum exploration, Development and Production and listed 5 blocks on offer, Avivi, Omuka, Kasuruban, Turaco and Ngaji.¹⁴

The Government of Uganda has executed an agreement with the Government of Tanzania for the construction of the East African Crude Oil pipeline (EACOP) to ensure that once production begins, transportation of the oil to the market is not hindered. The EACOP stretched 1443km from Kabaale in Hoima district, Uganda to Chongoleani, Tanga in Tanzania vast technological supporting system to keep it functioning.

Uganda therefore has to have a plan for all the infrastructure being utilized and being constructed both onshore and offshore in Lake Albert for that time when the oil and gas has been depleted. As earlier stated in the introduction, oil and Gas are high pollutants to the environment and therefore the need to make sure that decommissioning of the installations that

¹³ Ibid

¹⁴ Notice in Newvision Newspaper of 22n May 2019

were set up for petroleum activities is done according to best industry practices with environment and Health and Safety in mind.

The Petroleum Exploration, Development and Production) Act ¹⁵(PEDP) provides for cessation of petroleum activities and particularly a decommissioning plan¹⁶, where the licensee is obligated to submit the decommissioning plan to the Petroleum Authority before a production license or any other specific licence granted to operate facilities expires or surrendered also before the use of the facility is terminated permanently.

The plan shall constitute proposals for continued use of the facilities, partial or full removal and disposal or complete shutdown¹⁷. The plan should contain information and evaluations that are necessary to make directions under Section $115(1)^{18}$ which stipulates that the Authority can issue directions in relation to the disposal of the installations and also require that it is done within a prescribed time.

The Authority is given the power under the Act to request for further information and evaluations from the licensee or request a new or amended decommission plan if it is not satisfied with the one it received from the licensee.¹⁹

In any event, the Act provides that unless the authority consents or directs otherwise, the decommissioning plan shall be submitted at the earliest four years, but at least 2 years before the time when the use of a facility is expected to be terminated permanently.

The PEDP Act²⁰ further provides for a decommissioning fund ²¹, where a decommissioning fund for each contract area or any other facilities operated in relation to a licence or permit for purposes of costs related to the implementation of the decommissioning plan. The fund shall only be applied to the approved activities in the decommissioning plan.²²

¹⁵ Act No. 3 of 2013

¹⁶ Section 112

¹⁷ Section 112(2 and 3) PEPD Act 2013

¹⁸ Section112(4)PEDP Act 2013

¹⁹ Section 112(5)PEDP Act 2013

²⁰ Act No. 3 of 2013

²¹ Section 113(1)

²² Section113(2)PEDP Act 2013

Any liability for damage or inconvenience caused by the disposal or abandonment of a facility or other implementation of a decommissioning plan shall be borne by the licensee ²³and in the event that there is more than one person, all those responsible be shall be jointly and severally liable²⁴.

Most of the damage that is likely to happen as a result of decommissioning a petroleum facility is environmental and health and safety therefore the PEDP Act²⁵ provides that licensees or any other person that undertakes any duties functions powers under the PEDP Act²⁶in relation to petroleum activities should comply with the environment principles and safeguards prescribed by the National environment Management and any other law applicable laws²⁷.

The PEDP Act²⁸ requires that petroleum activities are carried out with a high level of safety in accordance with technological developments, best petroleum industry practices, the Occupational Health and Safety Act²⁹ and any other applicable law.³⁰

The occupational health and safety Act³¹deals with all matters concerning health and safety at work and the work space³² and highlights matters of building structure and their integrity, dangerous chemicals, waste disposal, fire, machinery, protective gear etc.

The National Environment Act³³is the parent legislation dealing with the management and regulation of the environment in Uganda. The Act stipulates the environment management principles ³⁴that have to be adhered to by all persons carrying out activities listed in the 1st to 3rd schedule to the Act.

The Act further lists the activities that require to submit project briefs before commencement of any works, petroleum activities are listed under item 13 and also listed under item 21 as

²⁴ Section 118(3) PEDP Act 2013

²³ Section 118(1)

²⁵ Act No. 3 of 2013

²⁶ Act. No. 3 of 2013

²⁷ Section 3(1)

²⁸ Act No. 3 of 2013

²⁹ Act No.9 of 2006

³⁰ Section 140(1)

³¹ Act No. 9 of 2006

³² Long title Act. No. 9 of 2006

³³ Act No.5 of 2019

³⁴ Section 5 National Environment Act 2019

mandated to undergo and environmental impact assessment³⁵, decommissioning oil and gas is included.

Since Uganda has both onshore and offshore petroleum development plans, national laws are mainly utilized for onshore petroleum activities however the fact that Uganda plans to development petroleum activities on the lake Albert which is likely to spread across to the democratic Republic of Congo, international law, treaties and conventions play a role in the implementation and guidance to the decommissioning and abandonment of petroleum facilities. Lake Albert in which petroleum activities shall be carried out feeds into the White Nile that flows to South Sudan and beyond.

Uganda therefore, while it has the sovereign right to exploit its own resources by carrying out petroleum activities within its jurisdiction it has to ensure that its activities do not cause harm to the neighbouring states as stipulated under principle 2 of the Rio declaration on environment and development 1992.

The research shall therefore identify the likely adverse impacts that a weak legal and regulatory framework is likely to cause both domestically and internationally and the fact that no immediate plans for decommissioning are being considered only for the fact that the issue of decommissioning shall not surface but for another 20 to 40 years.

1.2 Statement of the Problem

The problem with the PEDP Act³⁶ and Midstream Act³⁷ that particularly provide for decommissioning is that not only do they lack detail on the decommissioning process but also lack a contingency plan for the decommissioning process considering the fact that decommissioning of petroleum activities is a future occurrence, 30-40 years.

Uganda's petroleum industry is still in its infant stages therefore we have to wait a while before the laws on decommissioning are tested however one thing for sure is that for a period of 30-40 years, a lot will happen that if not contemplated at least from examples of mature jurisdictions, Uganda will be left with the burden.

_

^{35 5}th Schedule Act No. 5 of 2019

³⁶ Act No.3 of 2013

³⁷ Act No. 4 of 2013

There is no particular provision or guideline on the decommissioning plan stated in the PEDP Act,³⁸, National Environment Act ³⁹ and the Occupational health and Safety Act⁴⁰, the law only assumes that the IOC's will apply best industry practices.

Oil and gas is a highly sensitive industry with many variants and therefore the need for particularisation especially in a country like Uganda which is not conversant with the industry and also known for non-compliance with regulations.

More has to be done to ensure compliance because even older jurisdictions have also fallen victim to the vice of failure to implement a decommissioning plan to the letter for example the Brent Spar incident where it was found that Shell had left a huge number of gallons of oil in the abandoned facility offshore which was a major environmental risk.

The fact that decommissioning plans will take another 30 or so years to be implemented, brings about issues of inflation which is also likely to affect the fund, money deposited may end up being less for the job. The PEDP Act⁴¹ does not address this issue as well.

1.3 Purpose of the Study

The purpose of the study is to establish whether the provisions made in the legal and regulatory framework in the Oil and Gas industry in Uganda are sufficient to address the concerns associated with decommissioning of petroleum installations, specifically:

- (i) To highlight the reasons why compliance, enforcement and the need for a sufficient legal and regulatory framework to specifically cater for the decommissioning is important.
- (ii) Comparison of the Ugandan legal and regulatory framework to other experienced and mature jurisdictions that have evidence of implementation of both successful and failed decommissioning plans and what can be learned from those experiences

-

³⁸ Act No. 3 of 2013

³⁹ Act No. 5 of 2019

⁴⁰ Act No. 9 of 2006

⁴¹ Act No. 3 of 2013

- (iii) If the legal and regulatory framework in the Oil and Gas industry in Uganda incorporates industry best practices.
- (iv) Recommendations to improve the legal and regulatory framework to cater for changing times, compliance and better enforcement mechanisms.

1.4 Research Questions

The following questions shall guide this research paper.

- (i) Does Uganda have a satisfactory legal and regulatory framework in relation to decommissioning?
- (ii) What are the likely impacts of a failed or weak legal and regulatory framework in Oil and Gas?
- (iii) Is the Ugandan legal and regulatory framework at per with experienced and mature jurisdictions in Oil and Gas?
- (v) What lessons can be learned from the successes and failures of the experienced and mature jurisdictions in Oil and Gas?

1.5 Significance of the Study

This research on the need to have a strong legal and regulatory framework needs to be conducted because of the lasting negative environmental effects that the oil and gas industry can have on the nation and to all the bio diversity in place, not forgetting the social impacts associated with poor management of the oil and gas industry.

Proper implementation of best industry practices in our legal and regulatory framework on matters of decommissioning will save the country the liability left behind by the IOCs once they have concluded their petroleum activities not forgetting the conservation of the environment and protection against the social impacts to the surrounding communities

This research by comparison with other experienced and mature jurisdictions like Mexico, United Kingdom and the United States of America that have long carried on similar exercises shall educate or show the best industry practices formulated over time to ensure that decommissioning of petroleum installations is done in a safe manner.

This research shall show that although the Ugandan legal and regulatory framework has provided for decommissioning, some important observations like the time factor have not been put into consideration, rehabilitation of the affected areas and mandatory restoration of the affected areas to their original state.⁴²

1.6 Scope of the Study

This research shall focus on the petroleum activities in Oil and Gas in Uganda right from the exploration, development and decommissioning of the facilities to paint a picture of the adverse impacts the said activities shall have on Uganda if left unattended however paying special attention to the last phase of the activities which is decommissioning and post decommissioning. International experiences shall be advanced to help shape the research considering Uganda has only just begun its exploration and plans for development are underway therefore no known first-hand experiences on decommissioning yet in Uganda.

⁴² International Alert, Oil and Gas in Uganda, a Legislator's guide ,Oil discussion paper No. 1

CHAPTER 2: LITERATURE REVIEW

Introduction

The purpose of this review is to analyse scholarly works on the subject of decommissioning in the Oil and Gas industry to ascertain whether their findings and recommendations can be implemented within the setting of Uganda considering the fact that Uganda's Oil and Gas industry is still in its infant stages. The scholarly material on Oil and Gas in Uganda is very limited especially that on decommissioning therefore lessons will have to be learned from the international arena from experienced and mature jurisdictions.

2.1 Literature review

Martin in his article states that the national laws and the Host Government contract determine the legal framework for onshore decommissioning whereas the offshore decommissioning legal framework is determined by international conventions, Regional Conventions, National law and the Host Government Contract.⁴³

He goes on to say that whereas most countries do not have a legal and regulatory framework to manage the decommissioning process and if they did, they have not been put to the test as the mature jurisdictions in the Gulf of Mexico with more than 4000 installations and over 1000 successful decommissioning's through the U.S federal Minerals management Service regulations, he does not mention what made those successful and what is in place for new entrants in the industry to follow.

Martin recognizes the fact that most countries have not had the opportunity to test their legal and regulatory framework regarding decommissioning however given the financial implication in decommissioning oil and gas facilities, he ought to have expressed the concern of inflation considering these countries still have a long time to wait before they can actually implement their decommissioning plans. The legal and regulatory framework alone is not sufficient to address the situation.

He mentions of the successes of several decommissioning's in the North Sea and cites the most well-known incident of the Brent Spar however it was not without fault, green peace activists

⁴³ adr.governance.inc , Decommissioning of International Petroleum Facilities, evolving issues

took to the abandoned installation and discovered that thousands of gallons of residue oil was still left on the abandoned facility leading to an international incident. The technical issues of decommissioning therefore should have also been highlighted to identify the lapses in judgment or carrying out the said duties of decommissioning.

He also mentions that laws on decommissioning in the UK and US require the operator to submit a decommissioning plan to the responsible ministry much like the requirement under our own laws to submit to the Petroleum Authority however no mention is made about the need to involve the communities that reside in close proximity of the installations to be decommissioned yet they are likely to be affected.

Komugisa et'al⁴⁴ in their paper raise several issues about the provision for the decommissioning fund made in the Ugandan laws for example the fact that payment of money into the fund before undertaking the decommissioning process may result in insufficient provision being made for the exercise and the government being left with the residue liability of costs involved in the completion.

They also raise the issue of inflation in costs considering the time frame it will take to implement the decommissioning plans and make reference to the UK where they have used an approach of requiring that the IOCs pay 100% of the amount for decommissioning to the fund and an additional 50% to cater for any inflation. This they claim would be sufficient to curb the deficiency in the fund in the future however no mention is made about utilizing a progressive approach since even our Production sharing agreements have adopted the use of the progressive approach when sharing royalties.⁴⁵ That is to say, as and when prices of commodities or Oil increase, the fund is adjusted accordingly depending on the prevailing circumstances in the economy at the time, this will also reduce the strain on the IOCs having to pay 150% of the cost putting in mind that any balance of money not utilised remains the property of the Republic of Uganda.

Komugisa et al in their paper do not discuss the appropriation of the fund neither do they mention the areas that require the most attention and allocation from the fund. The reader is

⁴⁵ Domestic and International Taxation in Uganda, The law Principles and Practice, second edition Joseph.O.Okuja

⁴⁴ Ugandan legal Framework on decommissioning fund; Is there an Achilles heel, and can lessons from the UK help

therefore not informed about the areas that need focus during the decommissioning exercise nor is the reader informed about estimated amounts ordinarily involved in either an onshore or offshore decommissioning exercise. It would be a nice and clear picture to paint to fully appreciate the subject.

Kasanga⁴⁶ clearly states that decommissioning the oil and gas facilities in Uganda is at the tail end of the project timelines and neither are there any plans in place to prepare the population for that exercise and he goes on to show how lucrative the exploration and production in the Albertine region will be, to the tune of USD 50 billion dollars.

What Kasanga does not capture in his blog is the impacts of this highly lucrative business so he can also raise awareness to those reading the blog moreover it is on the Ministry of Information, Technology and National Guidance website most suited to spread the word. The rewards of the oil and gas industry are quick to be sold to the public but not the impacts on society and bio diversity, no wonder like he says no plans are under way yet to prepare the approximately 160,000 people that will be affected once the resources come to an end.

Professor Kasimbazi⁴⁷ emphasizes that the citizens of Uganda are guaranteed a clean and healthy environment under Article 39 of the constitution of the Republic of Uganda and highlights the adverse impacts that exploration and development of oil and gas shall have on the water, air, land, wildlife and social impacts, however he conspicuously does not make reference to any remedies or precautions the IOCs should take to prevent or minimize the adverse impacts. Whereas it is the duty of the National environment Management authority to ensure compliance with environmental guidelines, authors of scholarly works should ensure that both sides of the arguments are well articulated in their works for the reader to fill any gaps on the study.

The advisory report by the Netherlands Commission for Environmental Assessment (NCEA)⁴⁸ while addressing the concern of a decommissioning plan for the pipeline, indicated that it should be included in the Environmental and social impact assessment report clearly stipulating the roles of all the stake holders however the IOCs opposed this idea being done in the early stages claiming that decommissioning will not happen for a long time and the plan may be affected by future developments however true as it may be, no mention of such future

⁴⁶ Prepare for life after Oil and Gas 21st February 2019, www.ict.go.ug

⁴⁷ Legal and Environmental Dimensions of Oil exploration in Uganda

⁴⁸ Advisory review of resubmitted environmental and social impact assessment for the East African Crude Oil Pipeline, 22nd October 2020

developments is made and how the plan may be affected, IOCs are not new entrants in the Oil and Gas business and therefore in most cases know what to expect at the finish line considering they have done the same work in similar terrains before. The lack of willingness to start early incorporating the decommissioning plan in petroleum activities is wrong and will lead to a lacuna in our legal and regulatory framework because it will not be tested early enough.

Tumusiime⁴⁹ et al while giving a guide to oil and gas laws in Uganda highlighted the features of the intended laws proposed at the time in 2010-2011 intended to give effect to the National Oil and Gas Policy 2008 and focused on the obvious issues like revenue management, environment management in general, regulatory aspects but seemingly for an oil and gas industry that is just beginning to take shape.

The guide does not particularise decommissioning nor does it pay any significant attention to it, in fact it only mentions it in one paragraph 2.3.1 where it states that the IOCs should submit a decommissioning plan.

In my view, by not highlighting the relevance of a well thought out decommissioning strategy clearly shows that the author does not believe that it is of utmost urgency considering the fact that Uganda is only just beginning its journey in the exploration and development of its oil and gas resources.

_

 $^{^{\}rm 49}$ International Alert, Oil and Gas laws in Uganda, A legislator's Guide, May 2011

CHAPTER 3: RESEARCH METHODOLOGY

Introduction

In order to find solutions to the research problem, this part will go over the research design, study population, sample size, research tools, data collection methodologies, data analysis, and study limits.

Geographical scope.

The focus of this research will be on decommissioning in Uganda's oil and gas sector. It will look into Ugandan legislation as well as international norms that govern decommissioning.

Content scope.

The laws that govern Uganda's oil and gas sector are the subject of this research. It also encompasses international oil and gas laws, regulations, and practices. There is also literature referred to in relation to the oil and gas industry, notably decommissioning. The information also includes a comparison of decommissioning in the oil and gas sector from different jurisdictions.

Time scope

It will take four months to complete this study. The research material, on the other hand, stretches back to the late 1800s, when oil was first discovered, and contains all following literature on the use, development, and status of the oil and gas sector around the world. Newly generated content on Uganda's oil and gas sector, which began in 2009 and continues to this day, will be given special attention.

Theoretical literature review.

The findings and analysis of this study will be based on the principal-agency theory. The theory of the principal-agent. The essential ingredient of the principal-agency theory, according to Chiappori and Salanie, as quoted by Basheka, is that the agent must have a clear grasp of the principal's needs and the ability to meet those needs competently. The principal must closely monitor the agents' performance and devise reward mechanisms that encourage the desired results. Indeed, when a procurement contract is clearly specified and organized, it is simple for the principal and agent to meet each other's needs in an efficient manner, resulting in timely contract execution.

The different stakeholders in the oil and gas industry like the host state, IOCs, several contractors and suppliers and service providers and the way their relationship is intertwined for one goal justifies the use of the use of the principal-agent theory for this study.

The theory is relevant to the research because it emphasizes the importance of strong contractual and negotiation requirements and specifications, as well as an objective process for monitoring the feasibility of oil and gas projects. When contract requirements, team roles, duties, and KPIs are clearly specified, it will be simple for the principal and agents to meet each other's demands in an efficient manner, resulting in timely contract execution at the predetermined performance level.⁵⁰

Research Design

This study will be based on a qualitative design, which will comprise interviews and structured questionnaires directed at specific groups of people, particularly those having accurate information that is critical to the research's progress. Data will also be analyzed using published papers and literature relevant to the topic in question. This design will be used by the researcher since it allows them to compare multiple variables at the same time.⁵¹

Target population.

This study will be carried out in the different stakeholders of the oil and gas sector in Uganda. The research will be conducted by certain organizations and ministries in Uganda that are responsible for policymaking and whose policies have an impact on the country's political wellbeing and, as a result, on relevant projects such as those that require project financing.

The target population is intended to be specific to the Ministry of Energy and Mineral Development of Uganda, as oil and gas projects fall under this ministry, the Ministry of Finance, as some of the approval personnel for the financing of these projects fall under this ministry, the Bank of Uganda, as a key strategist to ensure that the money accessed for the projects is repaid, and the Parliament of Uganda, as the legislative arm of the country where policies are enacted.

More importantly, this study will centre on the people living around the areas affected by the operations of the oil and gas sector. These are central to the research since their rights vis a vis the exploitation of the resource automatically shall be affected. It will also be concerned with the International Oil Companies that are in charge of carrying out the exploration and exploitation of the resource.

⁵¹ Sekaran U, Research Methods for Business: A skills building approach. New York John Wiley & Sons Inc, (2003)

⁵⁰ Oluka, P &Basheka C, Determinants and constraints to effective procurement contract management in Uganda, a practitioner's perspective 2012

Sample and its determination

The sample size will be determined by requirements that are relevant to the topic at hand. The officials accountable for the important concerns that are critical to the research's success and upbringing will be the targeted population in the organizations mentioned earlier. Because sampling allows for a higher level of confidence while looking for findings, it will be used.

Sampling techniques

Because conducting research on the complete population is challenging, sampling is essential. The process of selecting a proper sample, or a representative fraction of a population, in order to determine parameters or characteristics of the entire population is known as sampling. In order to conduct this study, purposeful sampling will be employed as a sample technique.

It tries to classify information that is useful to a more in-depth investigation. It also entails locating and selecting individuals who are knowledgeable about or have experience with the chosen issue. In addition, convenience sampling will be used in the study. This sampling method entails locating and selecting respondents based on their availability for the study. Convenience sampling is a method for obtaining a representative sample.

Data collection methods

Data will be acquired from key informant interviews with key and specific persons from various organizations that have been emphasized, as well as document evaluations, in order to perform the research in a qualitative manner. A researcher will pick a sample of respondents from a population and give a standardized questionnaire to them in survey research. A written document completed by the individual being surveyed, an internet questionnaire, or a face-to-face interview are all examples of questionnaires or surveys.

Sources of data

The researcher intends to rely on both primary and secondary sources of data.

Primary data will be collected via structured questionnaires, which will necessitate the administration of the survey.

Secondary data will be gathered through an examination of numerous publications and reports that pertain to the study's effectiveness. This will include both domestic and international articles.

Legal Context/Research setting/Framework

1. Focus in this research shall be had on the provisions of the Petroleum (Exploration, Development and Production) Act ⁵², The Petroleum (Refining, Conversion, transmission and Midstream) Act⁵³, the Petroleum (Exploration, Development and Production) regulations 2016, The Occupational Health and Safety Act⁵⁴, The national Environment Act ⁵⁵and relevant supporting regulations for their importance to the exercise of decommissioning because of the guidelines set therein.

2. The research however shall not be limited to the Ugandan legal and regulatory framework, comparisons shall be made with foreign jurisdictions like Norway's Act No. 29 of 1996 on petroleum activities and the Nigeria's Petroleum Act.

3. The research shall also share internationally documented disasters like the Piper Alpha in northern Scotland as case studies to highlight the consequences of a weak legal and regulatory framework in the petroleum industry and further the Brent Spar incident in the North Sea in the Brent oil field operated by Shell United Kingdom to highlight the effects of a poor decommissioning strategy and legal framework.

Data Collection Strategy

This research is purely qualitative by using library and desk research methods where articles, the legal and regulatory framework, institutional framework, international treaties and conventions, regional treaties and conventions, government published data and national policies on Oil and gas will be traversed to assist in the research process.

The research shall employ the use of textbooks in the discipline under research together with newspapers and websites on the internet for journals and institutions that are involved in the relevant discipline.

⁵² Act No. 3 of 2013

⁵³ Act No. 4 of 2013

⁵⁴ Act No. 9 of 2006

⁵⁵ Act No. 5 of 2019

Comparative analysis

This research shall employ the use of qualitative comparative analysis since the research is centred around the regulatory framework of Uganda, it would be prudent for the researcher to compare other jurisdictions' regulatory framework to be able to answer the research questions herein.

Ethical considerations

The purpose of ethics in this study is to ensure that no one is hurt or suffers negative effects as a result of the research. The researchers' goal will be to preserve the respondents' rights by assuring that none of the respondents will be identified throughout the research or subsequent thesis, and that the respondents will be chosen without bias, providing them trust. By getting an introductory letter from Uganda Christian University's academic registrar, the researcher will also attempt to tell the respondents about the research's grounds and aim. Furthermore, the researcher will be able to advise the respondents that permission from the company's management was obtained before to the start of the research project.

CHAPTER FOUR: THE LEGAL FRAMEWORK GOVERNING DECOMMISSIONING IN UGANDA.

Introduction.

This study looks at the various laws and practises that make up Uganda's legal framework for oil and gas decommissioning. This includes the constitution, as well as basic and secondary legislation. It also contains international law and guidelines tailored to the oil and gas sector.

The regulatory framework in Uganda.

The Constitution of Uganda governs Uganda's regulatory structure. The succeeding laws adopted by the parliament and the relevant minister are based on the Constitution. The contracts that bind the IOCs, the government, and the NOC come next. Then there's public finance, and finally international law.

The Constitution of the Republic of Uganda, 1995, as amended.

The supreme law of the land is the Constitution.⁵⁶, The Constitution takes precedence over all other laws governing oil and gas in Uganda. All other legislation governing the OGM sector must relate to and be consistent with the Constitution's provisions, or they stand to be declared null and void to the extent of their variance.

The Constitution, which protects natural resources such as water, wetlands, minerals, oil, fauna, and flora on behalf of the people of Uganda, is the foundation for successful resource management and administration of Uganda's oil and gas resources.⁵⁷ Not only is it concerned with the exploitation of the resources but with protecting the environment while the resources are being exploited, the right to a clean and healthy environment therefore is an inherent right in the Constitution.⁵⁸

Control of all minerals and petroleum above or beneath any land or seas in Uganda is vested 'in government on behalf of the people of the republic of Uganda', according to a 2005 amendment to the Constitution.⁵⁹ Even with this new amendment, the Constitution retains the public trust doctrine, which states that natural resources are held in trust for the people by the government; or, in other words, that people are the principals appointing the government to manage resources on their behalf by the government. This connection requires the government

⁵⁶ Article 2 of the Constitution of the Republic of Uganda, 1995, as amended

⁵⁷ Objective no. 13 of National Objectives and Directive Principles of State Policy.

⁵⁸ Article 39 of the Constitution of the Republic of Uganda, 1995 as amended

⁵⁹ Article 244 of the Constitution of the Republic of Uganda, 1995, as amended

to account to its citizens as principals/owners, ensuring that they are involved in the management of their affairs either directly or through elected officials.

The Constitution empowers parliament to make legislation governing the extraction of minerals and petroleum, the distribution of royalties derived from oil exploitation, the payment of indemnities resulting from petroleum and mineral exploitation, and the repair of derelict lands. Article 79 states that parliament has the ability to establish laws on any subject for the purposes of development and good government, among other things.

Statutory legislation.

The Petroleum (Exploration, Development, and Production) Act⁶¹ regulates all oil operations, including those associated with offshore drilling.⁶² The law grants the government ownership of all petroleum in Ugandan waterways, stating that "the whole property in, and control over, petroleum in its natural condition in, on, or under any... waters in Uganda is vested in the Government on behalf of the Republic of Uganda."⁶³

As a result, the preceding provision makes it illegal to intermeddle with petroleum in Ugandan waterways, which includes the Ugandan portion of Lake Albert, without the government's permission, permit, or license.⁶⁴ The Act gives the Minister of Energy and Mineral Development broad authority to provide such authorizations in the form of licenses or permits for offshore petroleum operations in Uganda.⁶⁵ He has the authority to revoke such authorization under specified circumstances and to approve a licensee's voluntary surrender of any such license. The Minister also has the authority to issue policies and regulations governing all aspects of offshore oil and gas operations, including decommissioning.⁶⁶

The Act establishes the 'Petroleum Authority of Uganda,' a body corporate with the authority to regulate and enforce the Act's provisions as well as all other laws pertaining to the industry.⁶⁷ 'The Authority's duty is to oversee and regulate petroleum exploration, development, and production in Uganda,' it says. It has the authority to ensure that licensees comply with the provisions of this Act and its Regulations, as well as other Ugandan laws and the terms of the production sharing agreements.⁶⁸

⁶⁰ Ibid

⁶¹ Act No. 3 of 2013

⁶² International Business Publication, Uganda: Business Law Handbook (Global Publications 2013) 225

⁶³ The Petroleum (Exploration, Development and Production) Act, 2013, Section 4(1)

⁶⁴ Ibid, section 5(1) and (2)

⁶⁵ Ibid, section 8(a)

⁶⁶ Ibid, section 8(b). Government of Uganda, Energy Policy of Uganda 2012, 7-12.

⁶⁷ The Act confers on the Petroleum Authority a corporate personhood meaning that it can sue and be sued. See the Petroleum Act, s.9(2).

⁶⁸ Supra note 13, Section 10 (2)(i)

The Petroleum Authority therefore must verify that a licensee follows relevant rules, the Act's provisions, and any other decommissioning legislation. It also has the authority to review and monitor "the end of petroleum activity and decommissioning," including offshore. In respect to the Authority's functions, the Minister may issue written instructions to it.⁶⁹

The Act establishes a variety of licenses and permits that the Minister can issue with the Petroleum Authority's approval. It includes a reconnaissance permit, as well as exploration and production permits. In this context, a reconnaissance permit is a non-exclusive permission granted by the Minister to a person to conduct preliminary appraisal or geological activities, primarily to determine the presence of oil in Ugandan seas. It grants the permit holder this privilege for an eighteen-month term from the date of issuing.⁷⁰ The Minister issues an oil exploration license to a person, allowing them to conduct exploratory activities in Ugandan waters for the aim of discovering petroleum.

The Minister issues a production sharing agreement or any other agreement to the party after the application for a license is granted. The Minister is responsible for selecting a licensee through a competitive bidding procedure that has been approved by the Ugandan Cabinet, which is led by the President.⁷¹ Regardless, the Minister, in collaboration with the Petroleum Authority, has the authority to accept an application for an exploration license outside of a formal bidding process. An exploration licence is valid for two years and can be renewed for another two years.⁷²

In this context, a Petroleum Production License is the Minister's authorization to an oil company to do all activities related to recovering and evacuating oil from a Ugandan offshore oil deposit.⁷³ Upon declaration of interest, it is usually issued to the former holder of an offshore exploration licence in connection to the particular field involved. If there is no such interest, the Minister has the authority to issue the production license to another enterprise. This could be done through a private application from a specific oil company or a competitive bidding process.⁷⁴

In any scenario, the former exploration licence holder or applicant is normally asked to present a field development plan as part of the indication of interest or application.⁷⁵ This field development plan must provide extensive information on how such offshore oil installations

⁶⁹ Ibid, Sections 10(2)(f) & 13(1)

⁷⁰ The Petroleum Act, section 2(2).

⁷¹ Ibid, section 70(1)

⁷² The Petroleum (Exploration, Development and Production) Act, 2013, sections 53(1) & 61(a)

⁷³ Ibid, section 61(b).

⁷⁴ Ibid, sections 2(1) & 69(4)

⁷⁵ Ibid, section 71(1)(b)

will be decommissioned.⁷⁶ The production license is generally valid for twenty years, but it can be extended for additional five years.⁷⁷

With the approval of the Petroleum Authority, the licensee is required to submit a decommissioning plan within four years of receiving a license or two years before the offshore oil facility becomes redundant, whichever comes first.⁷⁸ If the licensee voluntarily surrenders his or her license, the application must be submitted at least two years before the licensee surrenders his or her license. The preferred option for decommissioning is intended to be included in the decommissioning plan, which could be reuse, removal fully or partially, or abandonment.⁷⁹

The Petroleum Authority will provide a direction to the licensee or owner of the offshore oil facility (where there is a transfer of ownership) based on this plan on how and when it will be carried out.⁸⁰ According to the Act, the licensee and owner of an offshore facility must ensure that the Petroleum Authority's directive is followed.⁸¹

It establishes a decommissioning fund that will be utilized to carry out the plan for the decommissioning of offshore oil facilities. Repetroleum Authority will decide the cost that will be charged every calendar quarter to pay a percentage of the expected future cost of decommissioning of facilities that will be placed in the fund. The licensee is responsible for recovering such decommissioning costs, subject to any cost recovery limitations imposed by petroleum agreements or regulations. The Act delegates fund management to a body comprised of government and licensee representatives. Subsequent rules promulgated under the Act will determine the ratio of such representation.

The payment of money into the fund is triggered by three different ways. 'Payment into the fund shall commence from the calendar quarter in which- (a) petroleum production has reached fifty percent of the aggregate recoverable reserves as determined in an approved development plan and any subsequent reappraisal of such initial recoverable reserves; (b) five years before the license expires; or (c) on notice of surrender,' according to the Act.⁸⁶ The licensee and the

⁷⁶ Ibid, section 77(3)(o)

⁷⁷ Ibid, section 80(6)

⁷⁸ Ibid, section 112(1) and (2)

⁷⁹ Ibid, section 112(3)

⁸⁰ Ibid, section 112(1) and section 115(1)

⁸¹ Ibid, section 115(4) and (5)

⁸² Ibid, section 113(2)

⁸³ Ibid, section 113(4)

⁸⁴ Ibid, section 113(5)

⁸⁵ Ibid, section 113(8)

⁸⁶ Ibid, section 113(3)

owner of the facilities (where the licensee is no longer the licensee) must reimburse the cost and expenditures if the money in the fund is insufficient to cover the plan's implementation.⁸⁷ The provision for the creation of a fund as the single choice for decommissioning security is laudable because it is often regarded as the most secure financial security. The third-party guarantee and a parent company guarantee are two other sorts of decommissioning security methods. A third-party guarantee is a promise from a financial organization, such as a bank or an insurance company, that they will fund decommissioning at a specific future date. Even though certain oil-producing countries still allow it as a decommissioning security option, it is frequently overlooked because the institution '...may be unable to provide the cash at a later date.' When a parent business agrees to cover decommissioning if the licensee defaults, this is known as a parent company guarantee. 'Future events may degrade the creditworthiness of oil giants... [and] this alternative is not popular with governments,' it is claimed. In comparison to other security systems, the decommissioning fund is regarded as "the safest and most dependable security mechanism" because it guarantees the availability of funds for decommissioning.

Contracts

These are agreements Uganda has executed with various IOCs and other firms for the exploration and production of oil and gas. For reasons of confidentiality, the actual contracts are not widely available to citizens; nonetheless, Uganda has model contracts that are used while negotiating with other IOCs.

Model Production Sharing Agreement for Petroleum Exploration, Development And Production Or Petroleum Development And Production In The Republic Of Uganda.

This is a model that will help the Ugandan government enter into contracts for oil exploration, development, and production. It is made up of 34 articles that spell out each party's responsibilities to the other.

The model provides for how participating interests are to be shared between the parties; the responsibilities and grant of rights; the requirement of exploration work programmes; budgeting; the aspect of discovery, development and production; keeping of records, writing reports and keeping data; the aspect of bonuses paid to government; royalties to government; participation of the State in the OGM; recovery of cost/cost oil; production sharing; the aspect of taxation; valuation and measurement of petroleum; transportation of Oil by pipeline;

⁸⁷ Ibid, section 113(6)

⁸⁸ Mark Saunder and Nabarno Nathanson; 'Abondonment Agreements' in Martyn R. David (ed) in *Upstream Oil and Gas Agreements: With Precedents* (Sweet & Maxwell 1996) 235

marketing and lifting; domestic requirements; the aspect of natural gas; training of local expertise, research and employment of locals; title to assets; foreign exchange control; assignment of participating interests; the aspect of prevention of danger to person, property or environment; dispute resolution; force majeure; annual acreage rentals; termination of contracts; accounting and audits; notice; the laws applicable to the contract; the representation of the entire agreement and its amendment; waiver clauses; and the concept of confidentiality All of these clauses will be adjusted according to the government of Uganda's agreements with other entities for petroleum exploration, development, and production.

International law.

Under the 1958 Continental Shelf Convention, which was later carried over to the UN General Assembly (GA) Resolution 1803 on Permanent Sovereignty over Natural Resources in 1962, international law recognizes a state's sovereignty over its natural resources. A supplementary UN Resolution 3281 (XXIX), Charter of Economic Rights and Duties of States, was approved by the UN General Assembly in 1974 to emphasize that a host country completely owns and controls petroleum resources under its jurisdiction. Because the host countries acknowledged permanent sovereignty, they were able to nationalize or expropriate foreign firm assets. They could only do so if they were compensated in conformity with the host state's laws and international law and for grounds of public usefulness, security, or national interests. The Energy Charter Treaty (ECT), agreed in 1994 between the then-newly emerging former Soviet Union republics of resource-rich Central Asia and Europe, as well as Japan, Russia, and Turkey, has a more complex and modern version of this norm.

Article 18 of the ECT recognizes permanent sovereignty over natural resources, but reiterates the standard expropriation tests: it can only be done in the public interest; it cannot be discriminatory; it must follow due process of law; and it must be accompanied by prompt, adequate, and effective compensation. The ECT also includes a thorough investment protection component (Part III of the Treaty), which has been the norm for investment treatment in a number of subsequent Bilateral Investment Treaties (BITs).

The Energy Charter Secretariat, the ECT's executive body, established a model intergovernmental and host-government cross-border pipeline agreement for natural gas, which has served as the foundation for a few pipeline deals in Central Asia, including the Baku-Aktau pipeline agreement. The UN Convention on the Law of the Sea Treaty offers fundamental norms and international rules for offshore exploration and the laying of subsea pipelines, including rules on offshore removal and disposal obligations.

The importance of marine boundaries in present international relations, on the other hand, has expanded in tandem with the extension of national maritime jurisdictional boundaries in the previous 50 or 60 years. This is because, at the moment, an acre of sea could be worth more than an acre of barren land, particularly if there is oil or gas beneath the surface or beneath the seabed. As a result, establishing maritime boundaries has become a major problem for coastal states, and just a few of them have a complete set.⁸⁹

According to geographers, just 180 limits have been agreed upon so far, much fewer than the 400 possible bounds. The reasons for this are that, in the absence of any incidents or natural resources, countries do not view boundary-making as a priority. Furthermore, underdeveloped countries frequently lack ready access to the professional guidance that hydrographers are expected to provide. Despite this, some of them have negotiated borders, for example, due to the oil industry's support. 90

Chatham House recognized two possible reasons of maritime boundary disputes during a meeting of the International Law Discussion Group on February 14, 2006: contested sovereignty over land and overlapping entitlements to maritime rights and jurisdiction. It was highlighted in the former that two countries can claim the same island or a portion of the mainland. The applicable norms of international law, such as those on the acquisition of sovereignty, look to human action (occupation and administration) of the area to determine this problem.

On the latter, it was highlighted that there may be overlapping claims for 12-mile territorial waters, 200-mile EEZs, and continental shelf that could stretch beyond 200 miles between nearby or opposing States. Overlaps are more common now than they used to be, thanks to the extension of rights to a 200-mile limit. The relevant norms of international law for resolving overlapping claims are those on maritime boundary delimitation. The United Nations Convention on the Law of the Sea (UNCLOS), as well as national practice and jurisprudence, contain these regulations.

Article 33 of the UN Charter calls for the peaceful resolution of disputes through procedures chosen by the parties. Negotiation is always a part of these methods. If negotiations fail,

0

⁸⁹ Chatham House. 2006. "Methods of resolving maritime boundary disputes", available at; https://www.chathamhouse.org/sites/default/files/public/Research/International%20Law/ilp140206.doc (accessed on 15th January, 2022)

⁹⁰ Ibid

⁹¹ See Eritrea v Yemen, Award on Territorial Sovereignty and Scope of the Dispute, (1998) XXII RIAA 211, PCA.

conciliation, good offices (e.g., the UN Secretary General), arbitration (ad hoc or according to UNCLOS Annex VII), or judicial settlement (ICJ/ITLOS) may be used.

Resolving any sovereignty discrepancies, establishing a complete boundary, a partial boundary, or a shared territory, or combining some of those ways are all options for resolving conflicts and disputes over overlapping entitlements. In accordance with international law, maritime boundaries must be created by agreement. Disputes and disagreements over sovereignty will be settled by determining which state has the most activity on the contested region.

The International Court of Justice (ICJ) is the United Nations' principal judicial organ, consisting of 193 member nations. ⁹² As a result, it has the responsibility of resolving any issues that may develop between these countries utilizing international law and other sources as established by the law. ⁹³ The United Nations Convention on the Law of the Sea is the most international convention invoked by the ICJ (UNCLOS). ⁹⁴

The main criticism of the UNCLOS has been that Articles 74(3) and 83(3) of the Convention, which are the only provisions that deal directly with the obligations of States "pending agreement" on delimitation, do not contain any express rules prohibiting the prohibition of any specific oil and gas activities in the disputed area. Instead, they place an open-ended commitment on States to refrain from any actions that could threaten or obstruct the eventual delimitation agreement. However, the question of what types of economic activities would jeopardize or obstruct the ultimate delimitation agreement remains unanswered.⁹⁵

Previously, any actions linked to digging wells, erecting installations, or appropriating petroleum in contested territories were subject to an international responsibility to refrain from doing so. 96 This requirement appears to stem from traditional law, such as the UNCLOS, and is also represented in customary international law as a broad obligation of 'mutual restraint.' Seismic exploration surveys, on the other hand, have long been regarded 'legally legitimate,' even when done without the approval of other interested parties. The explanation given for the distinction is that, whilst the former activities can have a long-term physical influence on the disputed area's marine ecosystem, seismic surveys, due to their transient nature, cannot.

⁹³ Article 38 of the Statute of the International Court of Justice

⁹² Article 92 of the Charter of the United Nations, 1945

⁹⁴ United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3.

⁹⁵ Yiallourides C. "Oil and Gas Development in Disputed Waters Under UNCLOS", available at; https://core.ac.uk/download/pdf/82962947.pdf (accessed on 15th January, 2022)

⁹⁶ Lagoni R. 1984. "Interim Measures Pending Maritime Delimitation Agreements", UCL Journal of Law and Jurisprudence, AJIL 345.

Case law from before the 1982 Convention, such as the North Sea Delimitation Cases⁹⁷the Aegean Sea Case ⁹⁸, and the Fisheries Jurisdiction Case⁹⁹ provided justification for such a theory that tends to stray from contemporary international law.

Given that UNCLOS only went into effect in 1994, most, if not all, of these cases were decided under the 1958 Continental Shelf Convention. However, there were no rules or procedures in the 1958 Convention dealing with the rights and obligations of States pending delimitation. Such measures, such as Articles 74(3) and 83(3), were not introduced until the 1982 Convention, which was 24 years later.

Currently, all coastal States are entitled to a continental shelf region extending at least 200 nautical miles (nm) from their coastline baselines, over which they have sovereign rights to explore and use their subsea natural resources under both conventional and customary international law. These rights are ipso facto and ab initio in the sense that they do not require any specific legal acts or declarations to be enacted.¹⁰¹

Similarly, all coastal States are entitled to an Exclusive Economic Zone (EEZ) extending up to 200 nautical miles from their coastlines, over which they have sovereign rights to explore and exploit their offshore natural resources, though this zone applies to both non-living and living resources, such as oil and gas, as well as fisheries.¹⁰²

If a State's continental shelf or EEZ rights overlap with those of another State, a marine delimitation process must be undertaken to identify where the dividing line between the two entitlements rests.¹⁰³

This framework establishes a key distinction between the right to a certain maritime area and the delimitation of that region between two or more adjacent or opposing coastal States. On the one hand, delimitation is in question or becomes necessary only when overlapping claims occur; on the other hand, the inherent nature of a coastal State's sovereign rights over its

⁹⁸ 1976

⁹⁷ 1969

^{99 1974}

 ¹⁰⁰ Convention on the Continental Shelf (adopted 29 April 1958, entered into force 10 June 1964) 499 UNTS 311
 101 David M. 1999. "Joint Development of Common Offshore Oil and Gas Deposits: "Mere" State Practice or Customary International Law?", AJIL 771, 775.

¹⁰² Article 57, UNCLOS

¹⁰³ Douglas MJ & Philip MS. 1988. "Ocean Boundary Making: Regional Issues and Developments" Croom Helm, p. 17

¹⁰⁴ Daniel PO (ed). 1982. "The International Law of the Sea", Clarendon Press, Vol. 1, pp.691-692

continental shelf means that this maritime area belongs to the State regardless of whether it has been delimited previously or not.¹⁰⁵

As a result, the International Court of Justice (ICJ) decided in the Libya/Malta case that the issues of continental shelf entitlement on the one hand and continental shelf delimitation on the other are not only separate but also complimentary. Indeed, the delimitation procedure cannot be used to circumvent or negate each state's general right to its section of the continental shelf under international law. As a result, maritime delimitation is used to establish a dividing line between areas that already belong to one or both of the affected States, rather than determining a State's right to a continental shelf and/or an EEZ.

As a result, if a maritime boundary dispute is brought before the ICJ, the court will be guided by the foregoing technique in determining the amount of each party's claim.

As a result, international law governs various elements of the oil and gas industry. Starting with the crucial aspects of onshore and offshore oil, as well as dispute resolution and the remainder of the topics addressed above.

An analysis of International Law on Decommissioning in the oil and gas sector.

Following decades of offshore resource exploitation, the issue of managing and removing platforms and installations built for this purpose has become essential. The number of installations nearing the end of their useful lives is growing. Since the 1980s, the subject of removing obsolete platforms and installations has become a point of discussion. Exploration of resources has expanded to unprecedented depths and distances as a result of technological advancements in the oil and gas industry, increasing the number of structures in the sea and their impacts on the seabed. There were just two offshore drilling rigs in the globe in 1950, for example. Nonetheless, by 1988, the number of installations had risen to 750, ¹⁰⁶ and there are today about 7000 offshore platforms involved in hydrocarbon extraction around the world. ¹⁰⁷ Abandoned and decommissioned installations represent two major issues: first, they can jeopardize navigational safety, and second, they can be damaging to the marine environment.

¹⁰⁵ Churchill R. & Ulfstein G. "Marine Management in Disputed Areas: The Case of the Barents Sea", Routledge, p. 86

¹⁰⁶ Z. Gao, 'International Law on Offshore Abandonment: Recent Developments, Current Issues and Future Directives', in Z. Gao (ed.), Environmental Regulation of Oil and Gas, London-The Hague-Boston, 1998, at 144. ¹⁰⁷ 'There are around 6.500 installations worldwide, about 4.000 of which are in the US Gulf of Mexico, 950 in Asia, 700 in the Middle East, and 400 in Europe,' according to Möller; L. Möller, 'UN law on decommissioning offshore installations,' in M. Hammerson (ed.), Oil and Gas Decommissioning, Global Business Publishing, London, 2013, at 33. Y. Lyons, 'The New Offshore Oil and Gas Installations Abandonment Wave and the International Rules on Removal and Dumping,' 29 The International Journal of Marine and Coastal Law (2014) 480–520, at 480; Y. Lyons, 'The New Offshore Oil and Gas Installations Abandonment Wave and the International Rules on Removal and Dumping,' 29 The International Journal of Marine and Coastal Law (2014) 480–520, at 480.

Because the exploitation of resources on the continental shelf should not result in any "unjustifiable interference" with navigation, fishing, or the conservation of the sea's living resources, the Geneva Convention on the Continental Shelf required the complete removal of abandoned and decommissioned installations as early as 1958. This rule, on the other hand, was primarily intended to combat unjustified interferences with other authorized uses of the sea and seabed. 109 The environmental aspect of the law of the sea was not a primary focus of the drafters in the early stages of its development, and this approach was later confirmed with the approval of the United Nations Convention on the Law of the Sea in 1982. (UNCLOS). 110 Nonetheless, the latest generation of installations have been designed and built with environmental protection and the applicable regulatory framework in mind. The first generation of structures, built between 1950 and 1960, were actually created without regard for the possibility of their removal or abandonment. Only in the late 1980s did the subject of dealing with historic structures become a source of concern for governments. Even the agreements reached during that time period on cooperative management and exploitation of offshore resources did not include any particular provisions in this regard. The regulations relating to pollution prevention and reduction solely applied to oil and gas extraction and transportation.¹¹¹

The international community, on the other hand, had looked into the matter earlier. The earliest moves toward worldwide management of the problem can be traced back to the Stockholm Declaration¹¹² of the United Nations Conference on the Human Environment, which was adopted in 1972. 'States have [...] the sovereign right to exploit their own resources pursuant to their own environmental policies,' states Principle 21, emphasizing their 'responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction' [emphasis added]. The connection to offshore activities is clear, and it refers to their growth in the 1970s.

¹⁰⁸ Art. 5, par. 5, of the 1958 Geneva Convention on the Continental Shelf, made in Geneva on 29 April 1958, entered into force on 10 June 1964.

¹⁰⁹ Art. 5, par. 1, of the 1958 Geneva Convention on the Continental Shelf.

¹¹⁰ Signed at Montego Bay on 10 December 1982, entered into force on 16 November 1994. Regarding the negotiations preceding the adoption of UNCLOS in 1982, Treves emphasized that 'le respect généralisé dont font l'objet les activités en matière pétrolière de ces temps de crise de l'énergie (années 1970) explique (...) le moins d'attention et de réglementation qu'a reçu jusqu'ici la pollution dérivant de ces activités'; cf. T. Treves, La pollution résultant de l'exploration et de l'exploitation des fonds marins en droit international, in Annuaire Français de Droit International, 1978, at 828.

¹¹¹ M. Bathurst (ed.), Joint Development of Offshore Oil and Gas, A Model Agreement for States for Joint Development with Explanatory Commentary, London, 1989, at 355 ff.

¹¹² Declaration of the United Nations Conference on the Human Environment, Stockholm, 5–15 June 1972, available at http://www.unep.org

Twenty years later, in 1992, Chapter 17 of Agenda 21, titled 'Protection of the Oceans,' specifies governments' responsibility in terms of preventing and combating' marine environment deterioration due to offshore operations,' and includes provisions such as:

States, acting individually, bilaterally, regionally or multilaterally and within the framework of IMO (International Marine Organization) and other relevant international organizations, [...] should assess the need for additional measures to address degradation of the marine environment [...] (c) From offshore oil and gas platforms, by assessing existing regulatory measures to address discharges, emissions and safety and assessing the need for additional measures. (para. 17.30).

This text, which was adopted before UNCLOS came into force, emphasized a gap in the system relating to offshore installations and the necessity for regulatory action in this area. 113

It is worth noting that, even than two decades after the passage of Agenda 21, numerous ambiguous areas remain, notably with regard to the regime for abandoned or decommissioned platforms and installations. One can wonder if there is a general obligation to demolish obsolete structures, and if so, what that obligation is. Furthermore, whether or not removing abandoned and obsolete facilities and platforms is in the best interests of the maritime ecosystem might be debated. In fact, several examples in actuality demonstrate the possibility for former industrial structures to be converted into artificial reefs that provide habitat for specific fish species.¹¹⁴

Generally Accepted International (Global) Rules and Standards

IMO Guidelines

The obligation of partial removal is justified by financial considerations surrounding the operation, as stated in the UNCLOS, and reinforced by the 1989 IMO Guidelines. These Guidelines were prepared by the International Maritime Organization (IMO) in accordance with its competences in the field of maritime safety and are thus primarily concerned with

¹¹³ The accident of the Deepwater Horizon drilling rig owned by the oil company British Petroleum (BP) in the Gulf of Mexico in April 2010 and its aftermath highlighted the gray areas that exist in this area of activity and related regulations. See, among others, R. Abeyratne, 'The Deepwater Horizon Disaster – Some Liability Issues,' in Tulane Maritime Law Journal, 2010, at 125 ff.; C. Chatterjee, Anna Lefcovitch, The Gulf of Mexico Oil Disaster: some Legal Issues, in Amicus curiae: journal of the Society for Advanced Legal Studies, 2010, at 17 ff

¹¹⁴ M.J. Kaiser, Y. Yu, B. Snyder, 'Economic feasibility of using offshore oil and gas structures in the Gulf of Mexico for platform-based aquaculture,' in Marine Policy (2010) 699 ff.

¹¹⁵ IMO, Resolution A.672 (16), of 19 October 1989, paras 3.6, 3.8, 3.12. In this regard see R. Beckman, 'Global Legal Regime on the Decommissioning of Offshore Installations and Structures', in M. Nordquist et al., The Regulation of Continental Shelf Development, Rethinking International Standards, Martinus Nijhoff, Leiden, 2013, at 266.

navigational safety. 116 They deal with fisheries and the environment to a lesser extent because the IMO's mandate does not include broad environmental control.

The Guidelines stipulate that the processing of installations is done on a case-by-case basis by the coastal State. As a result, they have a great degree of adaptability, which contributes to their success with coastal states. It is addition, the Guidelines call for the removal of facilities that are less than 75 meters deep and weigh less than 4000 tons. The option of partial removal or abandonment of structures remains, however, in circumstances where their removal is not technically feasible (first generation structures), when removal is too expensive, or when removal poses an unacceptable risk to people or the environment. The Guidelines also provide for the option of repurposing the installation, such as as an artificial reef for fisheries development. This is consistent with Article 60(3)'s general removal requirements, which provide that the removal procedure must take into account not just the safety of navigation, but also "fishing, the protection of the marine environment, and the rights and duties of other States."

The goal of environmental conservation occasionally clashes with the duty to dismantle an installation when the latter has become an artificial habitat for natural resources, primarily for specific fish species, as indicated by the 1989 IMO Guidelines.¹¹⁹ When it becomes a barrier to fishing and other legitimate uses of the water, an abandoned or decommissioned offshore

_

¹¹⁶ Current Maritime Issues and the International Maritime Organization, The Hague-Boston-London, 1999, at 260. S. Rosenne, 'The International Maritime Organization Interface with the Law of the Sea Convention,' in M.H. Nordquist, J.N. Moore (eds.), Current Maritime Issues and the International Maritime Organization, The Hague-Boston-London, 1999, at 260. UNCLOS demands the IMO's involvement as the competent international agency in 72 areas, 19 of which are not shared with other organizations, according to the author (such as FAO, ILO, or ICAO). The IMO has control over 19 sectors, including the creation of guidelines for the disposal of offshore structures. On the role of the IMO in the development of international rules and standards, see A. Chircop, (n32), at 429; S.N. Nandan, S. Rosenne (eds.), United Nations Convention on the Law of the Sea 1982, A Commentary, vol. II, Dordrecht-Boston-London, 1993, at 587; T. Treves, (n5) at 206.

¹¹⁷ T. Treves, Codification du droit international et pratique des Etats in le droit de la mer, in Recueil des Cours de l'Académie de droit international de la Haye, 1990-IV, at 205

¹¹⁸ Some authors claim that paragraph 3 of Article 60 does not impose any absolute obligation as to the removal of facilities but rather suggests general criteria for determining the removal procedures in specific cases; see S.N. Nandan, S. Rosenne (eds.) (supra note 67) at 585.

There are even references to certain structures having a "beneficial" environmental effect as they develop into habitats for commercially important species; see K. Bangert, 'Environmental Protection – Offshore, Oil and Gas Production,' in U. Karpen (ed.), Maritime Safety – Current Problems of Baltic Sea Use, Baden-Baden, 2005, 88; P Macreadie. 'Rigs to Reef: Will Artificial Habitats Benefit the Deep Sea?,' Frontiers in Ecology and the Environment (2011) 455. A. Fowler and B. Booth, 'Rigs to Reef: Will Artificial Habitats Benefit the Deep Sea?,' Frontiers in Ecology and the Environment (2011) 455. '[t]here are three approaches by which installations and structures could be employed to create artificial reefs,' according to Beckman. First, the upper section of the structure could be removed and the bottom left in place, with enough clearance to avoid posing a navigational hazard. Second, with enough clearance, the structure may be toppled on site without posing a threat to navigation. Third, the building might be dismantled and pieces of it relocated to attract marine species to certain areas.'; R. Beckman, 'Global Legal Regime on the Decommissioning of Offshore Installations and Structures', in M. Nordquist et al., The Regulation of Continental Shelf Development, Rethinking International Standards, Martinus Nijhoff, Leiden, 2013, at 275.

installation that has created an artificial habitat for some species may still be deemed pollution. As a result, states must strike a balance between environmental concerns, particularly the need to safeguard living resources, on the one hand, and pollution prevention and control on the other. More precisely, states are caught between Articles 208 and 214, which deal with pollution caused by seabed activities, and Articles 56, 61, 117, and 118, which deal with the protection of living resources. The Guidelines do not provide any additional guidance on how to achieve this balance, leaving coastal states with a significant amount of discretion.

International (Regional) Rules, Standards and Recommended Practices and Procedures

Both UNCLOS Articles 208.5 and 210(4) allude to the need to develop regional measures to regulate pollution from seabed activities and dumping, respectively. Four regional seas agreements include particular laws or instruments governing the decommissioning and/or dumping of offshore infrastructure. Each regional system's content is briefly discussed and analyzed in order of the strength of its provisions about installation dumping.

The Offshore Protocol to the Kuwait concerning Marine Pollution Resulting from Exploration and Exploitation of the Continental Shelf

The Kuwait Regional Convention for Co-operation on the Protection of the Marine Environment¹²⁰ from Pollution's Offshore Protocol of 1989 allows for partial removal in the interests of navigation and fishing safety (Article XIII(1)(b)). Any rules published by the regional organization must also be considered by contracting states. However, the MEMAC (Marine Emergency Mutual Aid Centre)¹²¹ has not yet developed such recommendations for decommissioning sites. Nonetheless, it has implemented the Guidelines on Requirements for Conducting Environmental Impact Surveys and Producing Environmental Impact Systems (hereinafter, Guidelines on Requirements for the Conduct of Environmental Impact Survey). The terms of reference of the assessment, according to the Guidelines on Requirements for the Conduct of Environmental Impact Survey, require consideration of "[p]lans for removal of any plant or equipment, and any reclamation, restoration, or clearing of the site after cessation of operations" (4.2(j)). The same guideline, on the other hand, recognizes the authority requesting the assessment's broad discretion in striking out any word of reference that is deemed unneeded

121 The Marine Emergency Mutual Aid Centre (MEMAC) was created in 1982 by the Protocol concerning Regional Co-operation in Combating Pollution by Oil and other Harmful Substances in Case of Emergency to the Kuwait Convention. For more information about this regional organisation, see: http://memac-rsa.org/en/home

¹²⁰ Protocol Concerning Marine Pollution Resulting from Exploration and Exploitation of the Continental Shelf, 2065 UNTS 68, available at https://treaties.un.org/doc/Publication/UNTS/Volume%202065/v2065.pdf

by the survey's objectives (4.2.). As a result, the Kuwait Convention does not provide specific responsibilities to supplement the basic legal framework outlined above in terms of decommissioning offshore sites.

The Dumping and Offshore Protocols to the Barcelona Convention for the Protection of the Mediterranean Sea against Pollution

The Protocol for the Prevention of Pollution in the Mediterranean Sea by Dumping from Ships and Aircraft (hereinafter, Barcelona Dumping Protocol, not yet in force) and the Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation (hereinafter, Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from Exploration and Exploitation, not yet in force)¹²² are both included in the 1976 Barcelona Convention for the Protection of the Marine Environment and the Coastal Region (hereinafter, Barcelona Offshore Protocol).¹²³

The Barcelona Dumping Protocol (Article 3.1) applies to platforms and other structures and follows the same logic as the London Convention system, meaning that dumping is prohibited unless it is allowed. The Barcelona Offshore Protocol, on the other hand, is a comprehensive document that tries to cover all aspect of an offshore operation's life cycle. The protocol focuses on the role of both authorizing states and the industry, i.e. the operator, in assessing the environmental impact of a planned activity, monitoring it, and responding to possible emergencies, by establishing a number of mandatory requirements for the authorization procedure (Articles 4–7). Article 5 specifically states that the proposed operator's project must include '(g) The plans for removal of installations as required in Article 20.' Article 20 reinforces and expands on UNCLOS Article 60.3, including elements relating to the role of private actors. The following is taken from the article:

The operator shall be required by the competent authority to remove any installation which is abandoned or disused, in order to ensure safety of navigation, taking into account the guidelines and standards adopted by the competent international organization. Such removal shall also have due regard to other legitimate uses of the sea, in particular fishing, the protection of the marine environment and the rights and duties of other Contracting Parties. Prior to such removal, the operator under its responsibility shall take all necessary

124 S. Trevisanut, 'The Role of Private Actors in the Offshore Energy Industry,' 29 International Journal of Marine and Coastal Law (2014) 645.

¹²² UNEP(OCA)/MED IG.6/7; text available at http://web.unep.org/unepmap/who-we-are/legal-framework

¹²³ UNEP(OCA)/MED IG.4/4; text available at https://wedocs.unep.org/rest/bitstreams/2336/retrieve

measures to prevent spillage or leakage from the site of the activities (Article 20(1), emphasis added).

Furthermore, Article 20 requires coastal states to intervene if the operator "fails to comply with the conditions of this Article." [T]he competent authority shall undertake, at the operator's expense," any necessary action, including the actual removal of the installation.

The Mediterranean Action Plan, ¹²⁵ which was agreed as part of the Offshore Protocol, aims to encourage the implementation of additional safety measures at the regional level between 2016 and 2024. '[s]tablish[ing] a governance framework to support the implementation of the Action Plan, as well as the adoption, enforcement, and monitoring of regional standards, processes, and rules;' '[c]ommon criteria, rules, and processes for the removal of installations and the relevant financial aspects adopted'; and '[c]ommon criteria, rules, and procedures for the removal of installations and the related financial aspects adopted'. ¹²⁶ The Action Plan also calls for the formation of two sub-groups within the Barcelona Convention Offshore Oil and Gas Group (BARCO OFOG), namely the OFOG Sub-Group on Environmental Impact and the OFOG Sub-Group on Health and Safety, to oversee the removal of installations. ¹²⁷

In terms of developing regional standards and guidelines, the document emphasizes the need for Regional Guidelines on the removal of installations and related financial aspects, ¹²⁸ highlighting the shortcomings of the existing global and regional legal framework and the critical importance of clarification and harmonization in this way.

Interaction between Regional and Global Rules: Complementarity and Fragmentation

Offshore oil and gas regulation has evolved in accordance with a liberal regionalist approach. 'Neither to enforce a consistent global standard equivalent to that for ships, nor even a minimum level comparable to that for dumping at sea,' says the UNCLOS. 129 The UNCLOS has so only contributed in part to the establishment of a cohesive legal framework in this sphere, primarily through general duties for maritime environmental protection and partial removal.

¹²⁵ Mediterranean Offshore Action Plan in the framework of the Protocol for the Protection of the Mediterranean Sea against Pollution resulting from Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil, UNEP(DEPI)/MED IG.22/28, available at: https://wedocs.unep.org/rest/bitstreams/8381/retrieve

¹²⁶ Ibid

¹²⁷ Ibid

¹²⁸ Ibid

¹²⁹ A. Boyle, 'Globalism and Regionalism in the Protection of the Marine Environment,' in D. Vidas, Protecting the Polar Marine Environment, Law and Policy for Pollution Prevention, Cambridge University Press, Cambridge, 2000, at 24.

The existence of specific regional instruments is a good development that, on the one hand, fulfils the responsibility set forth in UNCLOS Article 208 and, on the other, advances state practice in this area. Regional approaches appear to diverge on certain crucial topics, such as absolute or relative prohibition of dumping and criteria for awarding dumping licenses, as emphasized in the study of existing instruments. Furthermore, the degree of regional integration varies widely from one regional sea to the next. The OSPAR and Helsinki systems both rely on a well-developed institutional architecture that comprises supervisory and monitoring bodies, respectively, the OSPAR Commission and the Helsinki Commission.

The Meeting of the Countries is in charge of compliance control under the Barcelona Convention, which is carried out through the revision of periodic reports presented by the contracting parties (Articles 18.2 and 27 of the Barcelona Convention; Article 30 of the Barcelona Offshore Protocol). The Kuwait Convention has a similar mechanism in place, where the Council of the Regional Organisation for the Protection of the Marine Environment receives and assesses reports sent by contracting parties (Article XVII). These institutional disparities have an impact on the regional level of implementation of existing requirements as well as the progressive development of rules and standards.

'Regional cooperation may divide the options for, and the efficacy of, international supervision of conformity with environmental norms,' Boyle wisely observes. (...) There is no alternative supervisory mechanism or accountability without an overall worldwide plan analogous to the London [Dumping] Convention. This isn't a rebuke against regionalism. It's more of a warning that regionalism, especially weak regionalism, without an international/global framework cannot address all problems. At the normative and institutional levels, the global framework is insufficiently established to ensure the efficacy of regional cooperation systems and to provide safeguards against their failure.

Under both global and regional mechanisms, partial or complete removal of offshore installations from the seabed is the generally acknowledged rule. The conditions under which the removal is to be carried out, as well as the criteria for exceptions, vary greatly from one treaty system to the next. This is particularly problematic given the large number of installations nearing the end of their useful lives and the potential environmental impact they pose.

The lack of an agreed-upon institutional framework should not be regarded as a barrier to the establishment of a more comprehensive and coherent legal framework. 'If the IMO is not

-

¹³⁰ Ibid

deemed to be the competent international institution for this purpose, then interested States should develop a worldwide convention and hold a global diplomatic conference to examine its adoption.' A specific framework treaty might be a significant step forward for the offshore industry as a whole, as well as the treatment of decommissioned or abandoned sites in particular. Despite the fact that, as Scovazzi¹³² rightly points out, "there is little enthusiasm for a worldwide government," the strict regional model¹³³ has poignantly demonstrated its limitations.

Conclusion.

As shown above, the oil and gas industry has built a well-structured and detailed legal framework throughout time. This study examines this paradigm in the context of Uganda; its applicability, efficacy, and assurance.

¹³¹ R. Beckman, 'Global Legal Regime on the Decommissioning of Offshore Installations and Structures', in M. Nordquist et al., The Regulation of Continental Shelf Development, Rethinking International Standards, Martinus Nijhoff, Leiden, 2013, at 280.

¹³² T. Scovazzi, 'Maritime Accidents with Particular Emphasis on Liability and Compensation for Damage from the Exploitation of Mineral Resources of the Seabed, in A. De Guttry et al (eds), International Disaster Response Law, T.M.C. Asser Press, The Hague, 2012, at 457.

¹³³ Tanaka distinguished four models on interaction between global and regional legal frameworks. Under the first model, the regional model, 'the role of the global treaty is very limited and marine pollution it to be regulated promarily by regional treaties.' The other three models are: the global-single regional model; the global-multiple regional model; and the global model. See Y. Tanaka, 'Four Models on Interaction between Global and Regional Legal Frameworks on Environmental Protection against Marine Pollution: The Case of the Marine Arctic,' Ocean Yearbook (2016) at 346.

CHAPTER FIVE: A COMPARISON WITH OTHER DEVELOPED JURISDICTIONS.

Lessons from United Kingdom (UK)

Overview of UK Petroleum Legal Framework

The principal enactment that regulates offshore oil activities in the UK is the Petroleum Act of 1998.¹³⁴ Just like the Ugandan Petroleum Act, it vests the exclusive right to search for and recover petroleum from UK's maritime zones in the Crown.¹³⁵ Similar to the Minister's power to grant licence in Uganda, the UK Secretary of State has the power on behalf of the Crown to grant licences for petroleum activities in UK Maritime Zones.¹³⁶ As a result, several seaward licences are issued in UK.¹³⁷ This includes exploration licences and production licences.¹³⁸ An exploration licence confers upon the licensee a non-exclusive right for three years to search for petroleum in UK maritime zones.¹³⁹ A production licence confers upon the licensee the exclusive right to search or bore for or get petroleum in UK seaward areas.¹⁴⁰ The duration of a production licence varies according to the type.¹⁴¹ These licences are issued through an open bidding competitive process where licence is awarded to the applicant who holds the most promise in terms of optimising the exploitation of UK petroleum resources.¹⁴²

¹¹

Demetris Hadjiosif and Constantinos Yiallourides, 'The Unsung Hero of North Sea Oil and Gas' (2014)5(2)King Student Law Review 52.

¹³⁵ The Petroleum Act 1998 (UK), Cap 17. s. 2(1), (2). See Humphrey Douglas and Others, 'United Kingdom' in David Perks and Others(ed), *Oil and Gas : A Comprehensive Guide to the Regulation of Oil and Gas Projects Jurisdictional Comparisons* (Thomas Reuters 2012) 213.

¹³⁶ Ibid, s. 3. It is important to note that the licensing regime in Northern Ireland and the Isle of Man is different. The Northern Ireland Licensing Regime is governed by the Northern Ireland Petroleum Production Act of 1964 and administered by the Northern Ireland Executive Department of Enterprise, Trade and Investment. See Micheal Bunter, *The Promotion and Licensing of Petroleum Prospective Acreage*(Kluwer law International 2002) 110-114.

¹³⁷ There are also landward licences. See Greg Gordon, 'Petroleum Licenses' in Greg Gordon and Other(eds), *Oil and Gas Law: Current Trend and Emerging Issues* (Dundee University Press 2011) 68.

¹³⁸ Petroleum Licensing (Exploration and Production) (Seaward and Landward Areas) Regulations 2008, Sch 1, Model Cl 2.

¹³⁹ T.C. Daintith and G.D.M. Willoughby, *United Kingdom Oil and Gas Law*(Sweet and Maxwell 2000) 5-3116 ¹⁴⁰ Ibid. The production licence is further divided into the traditional production licence, the frontier licence and the promote licence. See Greg Gordon(n 144) 67.

¹⁴¹ A traditional production licence has a duration of 26 years. An intial term of four years, a second term of four years and a production period of eighteen years. For more details, see Greg Gordon and John Paterson, 'Licensing the Exploration for and Production of Petroleum on the UK Continental Shelf' in Tina Hunter(eds), *Regulation of the Upstream Petroleum Sector: A comparative Study of Licensing and Concession Systems* (Elgar 2015) 107,113.

¹⁴² Oil and Gas Authority, 'Oil and Gas: Licensing Rounds' https://www.gov.uk/guidance/oil-and-gas-licensing-rounds accessed 24 July 2017.

Comparable to the Ugandan regime, the Secretary of State has the power to make regulations prescribing the model clauses in such licences. 143 Pursuant to this provision, the Petroleum Licensing (Exploration and Production) (Seaward and Landward Areas) Regulations 2004 were made. 144 In 2008, the Petroleum Licensing (Production) (Seaward Areas) Regulations were made and subsequently amended in 2009. 145 These Regulations contain the model clauses for the different type of licenses. 146 The Secretary of State also has the power to make regulations on every other spectrum of offshore petroleum activities including decommissioning. 147 In the past, most of the regulatory functions of the Secretary of State, including in relation to decommissioning, were carried out by the Department of Energy and Climate Change (DECC). 148 As a result, DECC produced a Guidance Note for Decommissioning in 2011. 149 Concerns about the potential conflict of interest between revenue collection and risk governance regulation resulted in the divesting of several regulatory functions from DECC. 150 In the first instance, the Oil and Gas Authority was created and given the responsibility of regulating licensing in UK to the extent delegated by the Secretary of State pursuant to the Energy Act of 2016. 151 The Department for Business, Energy and Industrial Strategy (BEIS) which is a merger of Department for Business, Innovation and Skills (BIS) and DECC is currently responsible for decommissioning of offshore oil installations in the UK. 152 However, the BEIS is still using DECC Guidance Note on Decommissioning.

_

¹⁴³Though the licencse is also a contractual instrument between the UK Government and the licensee, the minister uses the model clauses as an instrument of regulation. See Greg W. Gordon, 'Production Licensing on the UK Continental Shelf: Ministerial Powers and Controls' (2015)4(1) LSU Journal of Energy Law and Resources

¹⁴⁴ Greg Gordon and John Paterson(n 148)112.

¹⁴⁵ The Petroleum Licensing (Production) (Seawards Areas) Regulations 2008 contains model clauses that will be incorporated in Seaward Production Licenses. It modifies the scope of the Petroleum Licensing (Exploration and Production) (Seaward and Landward Areas) Regulations 2004 by excluding its application to any Seaward Production Licenses granted after its commencement in 2008 (See The Petroleum Licensing (Production) (Seawards Areas) Regulations 2008, s. 2(2)). It was amended in 2009 by the Petroleum Licensing (Amendment) Regulations 2009 (SI 2009/3283).

¹⁴⁶ Micheal Faure and Others, 'Analysis of Existing Legal Regimes' in Micheal Faure(eds), *Civil Liabilities and Financial Securities for Offshore Oil and Gas Activities* (Cambridge University Press 2017) 99.

¹⁴⁷ The Petroleum Act(UK) (n 142) s. 4(2), s.39(2)(a)(b)(c).

¹⁴⁸ Micheal Faure (n 153)

¹⁴⁹ DECC Guidance Notes on Decommissioning of Offshore Oil and Gas Installations andPipelines under the Petroleum Act 1998 on Decommissioning 2011https://www.gov.uk/guidance/oil-and-gas-decommissioning-of-offshore-installations-and-pipelines > accessed 29 July 2017.

John Paterson, 'Health, Safety and Environmental Regulation on the United Kingdom Continental Shelf in the Aftermath of the Macondo Disaster' (2015-2016) 4 LSU J. Energy L. & Resources 259,269. This development was initiated by Sir IAN Wood, following a review of the legal regime on offshore risk governance in UKCS post—Macondo. See Sir Ian Wood, UKCS Maximising Economic Recovery Review: Final Report (2014).https://www.ogauthority.co.uk/media/1014/ukcs_maximising_recovery_review.pdf accessed 22 July 2017

¹⁵¹ The Energy Act 2016, Cap 20, s.1.

OGA, 'Decommissioning Programme Guidance' (2017) https://www.ogauthority.co.uk/decommissioning/programmes-guidance/ accessed 24 July 2017.

The Legal Framework for Decommissioning in United Kingdom

The Petroleum Act 1998 provides for decommissioning which is detailed in the DECC Guidance Note on Decommissioning.¹⁵³ Section 29 provides that 'the Secretary of State may by written notice require the person (or persons jointly) to whom the notice is given ... to submit to the Secretary of State a programme setting out the measures proposed to be taken in connection with the abandonment of an offshore installation ... (an abandonment programme)'. ¹⁵⁴ In practice, this process is initiated after the approval of a field development plan by the BEIS sending a letter of intention to issue the Section 29 Notice to the operator of the offshore facility involved. ¹⁵⁵ An opportunity is provided for the person to make representations in relation to such Notice. ¹⁵⁶

Consequently, the Notice will be served on any person requiring them to submit such abandonment programme on a designated date.¹⁵⁷ The Act provides that the abandonment programme shall contain among other things, the estimated cost of such decommissioning.¹⁵⁸ It is salient to add that just like the Ugandan regime, the decommissioning option in United Kingdom is reuse, recycle or removal either partly or wholly.¹⁵⁹ The Act and the DECC Guidance Note are silent on the exact timing that the Notice is issued.¹⁶⁰ This gap is essential for some degree of flexibility that will enable such Notice to be treated on a case-by-case basis.¹⁶¹

Remarkably, the potential recipients of such notices are wide, to guard against the possibilities of a default by the licensee in footing the cost of such decommissioning. The Petroleum Act creates a wide option of persons who may receive such notice, including: the operator of such an installation; any person who is a licensee; a person who is a party to a joint operating agreement (JOA) or similar agreements relating to the rights by which a person became a licensee; any person who owns any interest in the installation otherwise as a loan or security;

⁻

¹⁵³ Mohammad Alramahi, Oil and Gas Law in the UK (Bloomsbury Professional 2013) 3.27.

¹⁵⁴ The Petroleum Act, UK (n 142) s. 29(1).

¹⁵⁵ John Paterson, 'Decommissioning of Offshore Oil and Gas Installations' in *Oil and Gas Law: Current Trend and Emerging Issues(n 31)* 314.

¹⁵⁶ The DECC Guidance Note 2011(n 156) para 3.4.

¹⁵⁷ John Pickston, 'Investing in UK Regeneration Projects' in Jonathan Reuvid(eds), *Investment Opportunity in the United Kingdom* (Legend Press Ltd 2014)

¹⁵⁸ The Petroleum Act, UK (n 142) s.29(4)(a).

¹⁵⁹ Zhiguo Gao, 'Current issues of International Law on Offshore Abandonment, with Special Reference to the United Kingdom' (1997) 28(1) Ocean Development & International Law 59.

¹⁶⁰ Marc Hammerson, *Upstream Oil and Gas: Cases, Materials, Commentaries* (Globe Law and Business)455. ¹⁶¹ Paterson(n 162)

¹⁶² The Energy Act of 2008 amends this provision and broadens the horizon of who a licensee is to include 'licensees who have transferred an interest in a licence to another party without the prior approval of the Secretary of State'. See The Energy Act 2008 (UK)s 72.

and any associate company. 163 Section 29 Notices will be generally served on the licensees, operators or parties to the JOA. It is only when there is evidence to show that the licensees, operator or parties to the JOA will not meet the requirements of such decommissioning including financial that other parties may be served too. 164

The Secretary of State, after the service of the Notice or after the submission or approval of a decommissioning plan, may demand financial securities to guarantee the availability of sufficient funds at the time of decommissioning. The Energy Act 2008 amended the Petroleum Act to include a provision that empowers the Secretary of State to require additional information from any of the parties served with a Section 29 Notice to enable him make an informed decision on whether a financial security would be required. The DECC Guidance provides that 'Where the Secretary of State has concerns about the ability of a group of section 29 notice holders to fund the decommissioning of a project he can initiate section 38(4) of the Petroleum Act 1998 to require (financial) security'. A Notice to provide a financial security will 'specify what security is required including the amount, the credit rating of security provider and the timing'. 167

Notwithstanding that it is entirely within the discretion of the Secretary of State to define what financial security would be provided, the DECC Guidance Note provides pointers of what type of security is expected. These include

'cash, irrevocable standby Letters of Credit (LOCs) issued by a Prime Bank, or on demand (performance) bonds from Prime Banks or issued by an Insurer regulated under the Financial Services and Markets Act 2000. For these purposes the security must be issued by a body established in an EU or OECD country with a UK lending or insurance office and which have an AA rating or better as defined by Standard and Poor's, or an equivalent rating by any another recognised rating agency'. ¹⁶⁸

It is important to mention that even in cases where the Secretary of State does not expressly require a security, the BEIS maintains a Decommissioning Security Agreement (DSA) with

¹⁶³ The Petroleum Act(UK) (n 142) s.30(1)(e).

¹⁶⁴ Marc Hammerson and Anthony Martinez, 'Introduction to UK Petroleum Law and Practice' in Marc Hammerson(eds) in *Oil and Gas Decomissioning* (Globe Law Pub 2013)23

¹⁶⁵ The Energy Act 2008(UK), s.73(5).

¹⁶⁶ DECC Guidance Note(n 156)117.

¹⁶⁷ Ibid, 118.

¹⁶⁸ Ibid. 118.

the licensee as a matter of industrial practice.¹⁶⁹ The DSA in each case must fall within the acceptable financial security as contained in the DECC Guidance Note.¹⁷⁰

Testa remarks, and the authors agree, that the UK Decommissioning Financial Security mechanisms is painstakingly designed to protect tax payers against default and the consequent possibility of tax payers footing the cost of such bills. In relation to the decommissioning fund mechanism, the parties involved would be required to pay an upfront cost of the entire estimated decommissioning cost. Just like in the Ugandan Petroleum Act, there is no exact timing on the set up of the fund. Notwithstanding, in the DECC Guidance Note, it was expressed that government is keen to start the decommissioning process at the earliest possible date. 171 Consequently, the requirement of such upfront cost in the case of a decommissioning fund at the earliest possible time eliminates the possibilities of the licence expiring without the licensee or parties involved depositing enough funds to cover the cost of decommissioning. In the same vein, safeguards are put in place in the case of a letter of guarantee or bond from a financial institution to minimise the possibilities of a default. Where a letter of guarantee or bond is required, the two guards against default is that it must be of a minimal rating of AA or Aa2 and within an EU or OECD Country. The financial strength and solvency possibilities of a financial institution are known from their rating. ¹⁷² In EU, where a financial institution is rated from AA and above, it is generally regarded that it would be difficult for the bank to become insolvent in the future in comparison to other financial institutions. ¹⁷³ Given this, the chances of such bank or insurance company involved being unable to produce the fund needed at the time of decommissioning is dismal. Secondly, the EU¹⁷⁴ and OECD¹⁷⁵ have arrangement in place that permits cross-border enforcement of such judgment. This would mean that the UK

¹⁶⁹ Ibid. See Oil and Gas Uk Decommissioning Insight 2015 http://oilandgasuk.co.uk/wp-content/.../2015/11/Decommissioning-Insight-2015-updated.pdf accessed 25 July 2017.

¹⁷⁰ Ibid. See Simon Jackson and Flavia Solimano, 'Decommissioning in the North Sea: Navigating Regulatory Framework and Insuring New Risks' (2016)28 Environmental Law Management 242-244.

¹⁷¹ DECC Guidance Note (n 156) para 3.8.

Edward S. Mason and Robert E. Asher, *The World Bank Since Bretton Wood* (The Brooklyn Institution) 132.
 Harald Hau and Others, 'Bank Ratings what determines their Quality?', European Central Bank, Working Paper Series NO 1484 / OCTOBER 2012 https://www.ecb.europa.eu/pub/pdf/scpw ps/ecbwp1484.pdf?4771c890bb361c9e94f91ad991f035f8> accessed 25 July 2017.

The EU Brussel Regulations EC/44/2001 provides for the conditions for cross-border enforcement of judgements. See Report from the Commission to the European Parliament, the Council and the European Economic and Social Committee on the Application of Council Regulation (EC) No 44/2001 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters http://www.europarl.europa.eu/meetdocs/2009 _2014/documents/com/com_com(2009)0174_/com_com(2009)0174_en.pdf> accessed 25 July 2017.

¹⁷⁵ Hans Christiansen, 'Cross-Border Trade in Financial Services: Economics and Regulation' (2000) 75 Financial Market Trends http://www.oecd.org/finance/financial-markets/1923208.pdf accessed 25 July 2017.

Government can easily levy execution of judgment to redeem such letter of credit or bond in the event of a default by the bank or insurance company.

Notably, the estimation of decommissioning cost for the purpose of the financial mechanism covers 'at least 100% of decommissioning costs... [but also] a risk factor [which in most cases will add 50% to the total cost estimate] to cover the uncertainties surrounding cost calculations'. As a result, the possibilities of inflation or misleading estimates undermining the sufficiency of such decommissioning cost is very slim. Given the overall safeguards put in place to guarantee the availability of sufficient funds for decommissioning, it is almost inconceivable to envisage a possible case of default. The Commenting on this, Holland remarks that 'the current decommissioning regime is structured to ensure that the UK taxpayer should not bear the cost of removing disused structures from the UKCS'. The

Lessons for Uganda

The UK Continental Shelf (UKCS) is a mature jurisdiction characterised by decades of oil activities with 'declining production, ageing infrastructure, small, if any new finds and the prospect of decommissioning of installations'. ¹⁷⁹ As a result, the regulators have developed a high degree of capacity that has made it feasible for them to effectively exercise their discretionary powers in relation to decommissioning security. ¹⁸⁰ The regime also benefits from the advantage of an established relationship between the regulator and the industry, with most of the industrial players and the guarantor financial institution having assets within UK or affiliate jurisdictions. ¹⁸¹ Consequently, the UK Government would, through one means or another, recover such decommissioning cost from any of the recipients of the Section 29 Notice or the guarantor financial institution. ¹⁸² In contrast, Uganda's oil industry is still in the stage of infancy, given that a production licence was issued for the first time in August 2016. ¹⁸³ This

_

¹⁷⁶ DECC Guidance Note (n 156) 120.

¹⁷⁷ Charlie Houston, 'Financing Decomissioning in the Uk Offshore oll and Gas Industry' in Marc Hammerson (eds) in *Oil and Gas Decomissioning* (Globe Law Pub 2013) 137.

¹⁷⁸ Ben Holland, 'Decommissioning Disputes' in Marc Hammerson (eds) in *Oil and Gas Decomissioning* (Globe Law Pub 2013)

¹⁷⁹ Carole Nakhle, 'Do High Oil Prices Justify an Increase in Taxation in a Mature Oil Province? The Case of the UK Continental Shelf' (2007) 35 Energy Policy 4305, 4306.

¹⁸⁰ Glada Lahn and Others, *Good Governance of the National Petroleum Sector:The Chatham House Document*(Royal Institute of International Affairs 2009) 9. Authors write that experience in oil activities is one of the factors that informs human capacity in the oil sector.

Stephen Whitfield, 'In the Crosshairs: Cost Inefficiencies in North Sea Decommissioning' https://www.spe.org/en/ogf/ogf-article-detail/?art=2967> accessed 26 July 2017.

¹⁸² Efe Uzezi Azaino, 'International Decommissioning Obligations: Are there Lessons Nigeria can acquire from the UK'S Legal and Regulatory Framework?' (2013) 16 CEPMLP Annual Review – CAR Volume 17.

^{183 &}lt;u>Elias Biryabarema</u>, 'Uganda gives Tullow Oil, Total Production Licences' (2016) http://www.reuters.com/article/us-uganda-oil-idUSKCN115104> accessed July 2017.

accounts for the dearth of regulatory capacity in Uganda in comparison to UK. Hence, the discretionary powers in UK that allow treatment of the requirement for a decommissioning mechanism on a case-by-case basis would be unsuitable for Uganda. Again, the Ugandan oil industry does not benefit from an established relationship between the industrial players and the regulator.

Notwithstanding, lessons can be garnered from the UK decommissioning regime to fill the loopholes to the extent that will fit the local circumstances in Uganda. In the first instance, the UK Government is keen on initiating the decommissioning process at the earliest possible time after the approval of the field development plan. That way, the issue of financial security is settled early enough. The Ugandan PEDP Act should be amended to include a mandatory duty on the licensee to submit a decommissioning plan within one year of the approval of a field development plan. That way issues of financial security would be addressed early enough starting from the commencement of production.

However, it may be argued that the submission of the plan early may mean that the operator would not rightly capture the actual cost of such decommissioning because it may be too early to efficiently estimate it. The UK legal framework provide valuable lesson in this regard. As already stated, the estimated decommissioning cost in UK is 100% of the estimated decommissioning cost plus an additional 50% intended at covering any upward change in cost. This is contained in DECC Guidance Note. The Ugandan Legal Framework should be amended to contain a similar calculation percentage for decommissioning. Given that this is one of flexible details of decommissioning, ¹⁸⁵ it would not be appropriate to incorporate it in the PEDP Act 2013. Notwithstanding, the PEDP Act 2013 confers on the Minister and the Ugandan Petroleum Authority the powers to make regulations. ¹⁸⁶ They should make a regulation that would incorporate this provision. This would end concerns over miscalculations or the possibilities of the estimated cost not covering the actual cost of such decommissioning.

Furthermore, where a decommissioning fund is required, the UK regime requires payment of the entire cost of decommissioning into a secured fund. ¹⁸⁷ This provides a functional lesson on how the Ugandan Framework could be amended to avoid the possibilities of such installations

¹⁸⁴ Hammerson, Upstream Oil and Gas: Cases, Materials and Commentary (n 30) 439

¹⁸⁵ The percentage could easily change, it is therefore recommended that a regulation which is easier to amend than a secondary law should be used. See US government, 'Laws, Policies and Regulations: Key Terms & Concepts' (2015) http://www.publichealthlawcenter.org/sites/default/files/resources/tclc-fs-laws-policies-regs-commonterms-2015.pdf accessed 26 July 2017.

¹⁸⁶ Section 8 and 9 of the PEDP Act 2013

¹⁸⁷ Testa (n 134). For more commentaries on Uk decommissioning regime, see *European Energy Handbook 2012*, 448.

coming to an end without sufficient money being paid into the decommissioning fund. Given that the production sharing contract is the vehicle through which concessionary rights are granted to licensees, ¹⁸⁸ it may not be possible to require the deposition of the decommissioning cost into the fund at once. However, the Ugandan government can still amend the PEDP Act 2013 to make the most out of the decommissioning fund. It is recommended that the provisions on the triggers of such fund should be amended to require payment into the fund to be triggered only by the immediate commencement of production. ¹⁸⁹ This would increase the size of the fund and reduce the chances of it being insufficient for such decommissioning.

Again, the requirement of a letter of credit or bond from a financial institution of a particular rating as an alternative form of financial security in UK can be imported into the Ugandan framework. It was argued that there is a possibility that a licensee may surrender their licence without having paid enough monies into the decommissioning fund. Similarly, it cannot be entirely dismissed that sufficient funds may not be raised even when payment into the fund is triggered from the beginning of production. Hence, there is an imperative for a back-up financial security mechanism in addition to the fund. As earlier stated, the Petroleum Act provides that the licensee shall indemnify the government for third party liability that might arise from the exercise of their concessionary rights including decommissioning issues. ¹⁹⁰ This provision should be amended to include an obligation on the licensee to provide a letter of guarantee or credit from a financial institution once a field development plan is approved. The letter of credit or guarantee should only be redeemed when the decommissioning fund does not cover the actual cost of such decommissioning or in cases of surrender.

Just like the UK legal framework, the Petroleum Act should expressly require that the financial institution be of a rating not less than AA or Aa2 by the Standard and Poor or Moody's rating agents. This would reduce the risk of such institution becoming insolvent or being unable to provide such decommissioning cost in event that such letter of credit or guarantee would be redeemed. Uganda is a Commonwealth country, ¹⁹¹ and as such has a reciprocal judgment

_

¹⁸⁸ The production sharing contract allows government to retain proprietary rights over such oil, to the extent the company/licensee only take cost and profit oil as remuneration. This stands in contrast with a license where the oil company fully owns the oil and only pay tax or royalties to the government. See T.W. Wälde, 'The Current Status Of International Petroleum Investment: Regulating, Licensing, Taxing and Contracting' (2003) OGEL Archive 13-14, 3; M.B. Umar, 'Legal Issues in the Management of Nigeria's Production Sharing Contracts from a Study of the Nigerian National Petroleum Corporation's (National Petroleum Management Services') Perspective' (2005) 3(1) OGEL 1.

¹⁸⁹ Morankinyo Adedayo Ayoade (n 27) 26.

¹⁹⁰ The Petroleum Act (UK) (n 142) s.181.

¹⁹¹ Uganda joined the Commonwealth in 1962: see Commonwealth 'Uganda' http://thecommonwealth.org/our-member-countries/uganda accessed 26 Jul 2017.

enforcement relations with some Commonwealth countries,¹⁹² including the United Kingdom and Ireland.¹⁹³ It is recommended that such financial institution must be one that is situated in any of the Commonwealth countries with a reciprocal judgment arrangement with Uganda. Consequently, in event of a default from such institution, the Ugandan Government can easily levy execution of such decommissioning cost.

Conclusion

This paper started out with a consideration of the question: to what extent is the Ugandan legal framework adequate and comprehensive to guarantee the availability of sufficient funding and planning for the decommissioning exercise. In addressing this question, the PEDP Act 2013 was examined and it was found that it establishes a decommissioning fund as the only option of decommissioning financial security. It is also identified that the three triggers for the payment of money into the Ugandan decommissioning fund are where the petroleum production has reached fifty percent of the aggregate recoverable reserves as determined in an approved development plan and any successive reappraisal of such initial recoverable reserves; (b) five years before the expiry of the licence; or (c) on issuance of notice of surrender. The decommissioning fund was generally commended as being the best security for decommissioning.¹⁹⁴

Notwithstanding, argument was adduced to show that the provisions are not adequate and comprehensive enough to protect the government from shouldering some or all of the costs of such decommissioning. It is argued that there is the possibility that the fund realised at the end of the estimated recovery after production has reached fifty percent may not be enough to cover the cost of such decommissioning. Secondly, five years may likely not be adequate to raise sufficient funds for decommissioning. In relation to the third trigger, there is also the inherent risk that the fund raised within the one year incubating period between the submission of an application for surrender and the actual surrender of a licence would not be sufficient to cover the actual cost of such decommissioning.

The implication of these gaps were examined in the light of the concept of government ownership of such offshore installations. It was established that the Ugandan Government may

56

¹⁹² This is provided for in the Foreign (Jugdement Reciprocal)Act 1922. See Richard Frimpong Oppong, *Private International Law in Commonwealth Africa* 380.See Hakeem A. Olaniyan, 'The Commonwealth Model and Conundrum in the Enforcement of Foreign Judgement Regime in Nigeria' (2014) 40(1) Commonwealth Law Bulletin 76.

¹⁹³ Michael Quilling, 'The Recognition and Enforcement of Foreign Country Judgments and Arbitral Awards: A North-South Perspective' (2015)11:3 GA. J. INT'L & COMP. L 1.

¹⁹⁴ Altit and Ighiehon (n 93) 261

bear eventual liability for the cost of the decommissioning. The UK legal regime on decommissioning was examined and lessons were recommended for importation to remedy the identified gaps in the Ugandan framework. Karuhanga writes that Uganda hopes to avoid the experiences of other African petroleum producers who started off with bad governance in the sector. Fortunately, the Ugandan oil industry is still at infancy stage. As such, adopting these recommendations would go a long way in achieving effective governance in the Ugandan oil sector.

¹⁹⁵ Elison Karuhanga, 'Uganda', in Eduardo Pereira and Kim Talus (eds), *African upstream Oil and Gas: A practical Guide to Law and Regulation* (Globe Bus Pub Ltd 2015) 555.

CHAPTER SIX: FINDINGS, RECOMMENDATIONS AND CONCLUSION

Introduction.

This chapter summarizes the findings of the research on the above-mentioned thesis. It describes the researcher's observations, results, and discoveries during the course of the investigation. It also made recommendations for removing the fear of external factors and instilling confidence in the laws in place.

Summary findings

Positive findings

The researcher was able to extract a number of findings from the study in respect to Uganda's legal framework in the Oil and Gas sector. The study also discovered new information about the international structure that governs oil and gas, as well as how the two interact.

First and foremost, the researcher noted that Uganda's oil and gas rules are well-defined. Upstream, midstream, and downstream are the three stages of the oil and gas production process. Ugandan laws attempt to offer and accommodate for all of these stages through statute law, and it is well-developed to consider most of the essential aspects of oil and gas, such as pollution and decommissioning, to name a few.

Second, the Ugandan laws controlling oil and gas have an amazing structure. The constitution, which is the supreme law of the land, is at the very top. The parliament and relevant ministers then passed a slew of laws to oversee the sector's functioning. Uganda has prepared sample agreements that prospective contractual parties can consult for guidance on what terms are favourable and acceptable to the government as well as the population. The IFIs have also established a structure before they can fund oil corporations to collect minerals. Finally, there is the issue of international law as it pertains to oil and gas.

Potential threats

Despite the fact that Uganda has much to be proud of, the researcher worries that the threats are slightly greater. According to the findings of the study, if the appropriate steps are not taken, Ugandans may face difficulties.

To begin with, the fear of a resource curse is becoming increasingly real. As the researcher previously stated, a resource curse occurs when a country fails to benefit from its abundant natural resources due to a variety of factors, as the researcher will explain momentarily. The resource curse will become the ultimate scourge for Uganda's economy as a result of this

mismanagement. We stand a good possibility of never benefiting from the resource if the country chooses to take on more debt based on the belief that the oil reserves will readily pay off. When a non-renewable resource is mismanaged indefinitely, the country will be in a worse situation than when it was discovered.

The phrase "Dutch Disease" was popularized by The Economist magazine in 1977 when it examined a situation in the Netherlands following the discovery of enormous natural gas supplies in the North Sea in 1959. The value of the Dutch guilder rose dramatically as a result of the sudden wealth and enormous oil exports, making Dutch exports of all non-oil products less competitive on the global market. Unemployment increased from 1.1 percent to 5.1 percent, while capital investment fell.

The term "Dutch Disease" has become popular in economic circles to describe the paradoxical scenario in which seemingly good news, such as the discovery of enormous oil reserves, has a negative influence on a country's overall economy.

The name comes from the discovery of oil, hence this impact is typically associated with oil and gas discoveries. Uganda has the potential to make the proper judgments so that it does not follow the same road as the rest of the world.

Another immediate threat to the oil and gas sector's growth is corruption. Uganda is well-known for having anti-corruption legislation, and this is undeniable. However, there is a question about how this law will be implemented. Corruption and embezzlement of cash intended for various communities have plagued Uganda in the past. As a result, with the amount of money that the oil and gas sector is capable of bringing to the economy, there is no assurance that this money would ever help Ugandans if the terrible spirit of corruption continues to haunt the country's leaders.

Illicit Financial Flows (IFCs) pose a threat. Illicit Financial Flows (IFFs) are defined by the Organization for Economic Cooperation and Development (OECD) as a combination of strategies and practices aimed at shifting financial capital out of a country in violation of national and international laws. This term encompasses all methods and procedures, whether they are merely illegal or not. With corruption looming, it's possible that money embezzled from the oil and gas sector may be transported to nations with tax havens in order to avoid paying taxes to the taxing authority.

It is vital to emphasize that Uganda's weak political institutions and lack of political will play a significant role in illicit cash outflows. In the absence of strong political will, most of the behaviours that promote IFFs thrive, such as tax evasion, transfer pricing, and drug use, to name a few.

The law is currently under fear of being poorly implemented. Uganda has excellent laws that are extensive and well-structured, as previously said. However, earlier attempts to execute this law have failed miserably. The rule of law is not a value prized in Ugandan politics, and as a result, there is concern that the implementation of oil and gas regulations would follow suit. The difference is that this blunder will harm the population and the ecosystem now, as well as for many years to come.

The other danger is inefficient budgeting. There has been a lot of criticism in the recent past about how Uganda has allocated its resources in the face of severe difficulties. If not addressed, poor budgeting might provide fertile ground for the oil curse or the Dutch disease. Budgeting for this sector should be properly thought out, given that it has the potential to fund the entire country's budget in the coming years.

The dissemination of knowledge to citizens is another hazard. In a social compact, the leaders who have been granted the mandate owe transparency and knowledge to the population. Citizens should be able to comprehend what is happening in the oil and gas industry. It's vital to stress that this shouldn't just be about releasing technical reports that only a few informed folks can understand. To guarantee that the communities understand and react to the information, it must be delivered effectively. Participation in the making of some decisions will increase trust in the leaders.

Long-term strategic planning is critical, and if it is not taken into account, there is a risk of not getting the most out of the resource. The country must be able to forecast the potential benefits of various businesses and determine what is best for the country. This will essentially rescue the country from disastrous judgments and ensure the sector's future prosperity.

There is also a risk that the decommissioning fund will be used for purposes other than those for which it was created. It is a requirement that this money be set aside prior to the start of oil drilling to ensure that the licensee cleans up after themselves. This money is passed up to the authorities. If Uganda decides to utilize this money for other purposes and it is not present when decommissioning time comes, it will have a variety of repercussions on the ecosystem and the population who will be using the area once the oil drilling is completed.

There is also concern that the majority of the work done so far has been done without the agreement of the community. This permission should never be based on promises that aren't kept. It must be free, prior, and informed consent, which means that the licensee must first tell the local communities of what will be done so that they can freely assent. Compensation is another issue that must be rigorously adhered to. It must be completed prior to the land being taken over.

Recommendations

Resource-dependent countries with low socioeconomic development frequently don't get the most out of their natural resource richness. These countries are experiencing weak economic growth and have become embroiled in violent conflicts in some situations. Chad, the Democratic Republic of Congo, Guinea, and Mauritania, for example, have the lowest per capita income in the world, with natural exports accounting for nearly 90% of total exports. Unaccountable and mismanaged institutions, combined with the discovery of natural wealth, are thought to be the root cause of economic failure and conflict. Some empirical data reveals a strong link between natural resource dependency and economic growth, which is often referred to as the "resource curse."

It is easier for governments to retain secrecy regarding extractive earnings and expenditures when voters lack a sense of public ownership of state revenues. Furthermore, citizens have little control over the flow of revenue and expenditure when the extraction corporation pays taxes directly to the state. This lack of transparency and ownership over resource revenue creates a lack of accountability and encourages illegal money transfers out of the extractives business.

Apart from mandating public disclosure, several multi-stakeholder initiatives should be established to encourage public disclosure of information. These initiatives should aim to create platforms for debate and empower civil society organizations to use the information and engage with the government for improved transparency and accountability, and ultimately improved development outcomes.

In theory, legislators can assist in the governance of extractive industries in a variety of ways, including ensuring public disclosure of extraction contracts, monitoring compliance with contracts and laws, amending and ratifying legislation on extractive sector management, monitoring the performance of government agencies responsible for extractive sector management, and informing and managing constituent expectations as well as representing constituents' interdependencies.

Furthermore, as the amount of publicly available data on extractive sectors grows, the media's role in making sense of it, particularly investigative journalism, is being increasingly recognized as a critical component of the emerging transparency and accountability agenda.

Lack of transparency and accountability, combined with Illicit Financial Flows, results in the loss of much-needed resources for public initiatives and crucial investments, such as in this time of worldwide pandemic. For developing countries such as those in the East African region,

this can amount to millions of dollars in lost or foregone tax revenues that could have been collected and used to support sustainable economic growth, job creation, poverty reduction, and climate change mitigation, among other things. With billions of dollars anticipated to be illegally transferred out of developing nations each year, countries' efforts to mobilize additional domestic resources in order to reach globally approved SDGs are hampered. As a result, openness should be stressed in order to keep the monies that are now being lost in the extractives sector.

Conclusion.

The blessing of having a valuable resources like oil and gas must be cherished and exploited carefully for future generations' benefit. There have been numerous instances around the world where countries who have been gifted with oil have become the least developed as a result of the curse that comes with it. Uganda must be prepared to carry out all of the rules it has enacted to the letter in order to ensure that our country's development is sustainable.

REFERENCES

A. DOMESTIC LAWS.

- The Constitution of the Republic of Uganda, 1995, as amended
- The Petroleum (Exploitation, Development And Production) Act, 2013
- The Petroleum (Exploration, Development And Production) Regulations, 2016
- The Petroleum (Refining, Conversion, Transmission And Midstream Storage) Act, 2013
- The Petroleum Supply Act, 2003
- The Petroleum (Exploration And Production) (Conduct Of Exploration Operations)
 Regulations, 1993
- Model Production Sharing Agreement for Petroleum Exploration, Development And Production Or Petroleum Development And Production In The Republic Of Uganda

B. INTERNATIONAL TREATIES AND CONVENTIONS

- United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 3.
- Universal Declaration of Human Rights (adopted 10 December 1948 UNGA Res 217 A(III) (UDHR)
- International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR)
- UN General Assembly, International Covenant on Economic, Social and Cultural Rights, 16 December 1966, United Nations, Treaty Series, vol. 993, p. 3
- United Nations, Charter of the United Nations, 24 October 1945, 1 UNTS XVI
- United Nations, Statute of the International Court of Justice, 18 April 1946
- International Labour Organization (ILO), Forced Labour Convention, C29, 28 June 1930, C29
- UN General Assembly, Convention on the Law of the Sea, 10 December 1982
- Organization of African Unity (OAU), African Charter on Human and Peoples' Rights ("Banjul Charter"), 27 June 1981, CAB/LEG/67/3 rev. 5, 21 I.L.M. 58 (1982)
- African Union, Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa, 11 July 2003
- Energy Charter Treaty 2080 UNTS 100, 16 April 1998

C. CASE LAW

- Eritrea v Yemen, Award on Territorial Sovereignty and Scope of the Dispute, (1998) XXII RIAA 211, PCA.
- ICJ reports, Case Concerning the Land and Maritime Boundary between Cameroon and Nigeria (Cameroon V. Nigeria: Equatorial Guinea intervening), Judgment Of 10 October 2002
- North Sea Continental Shelf Cases (Germany/Denmark; Germany/Netherlands) (Judgment) [1969] ICJ Rep 3
- Aegean Sea Continental Shelf (Greece/Turkey) (Interim Measures) [1976] ICJ Rep 3
- Fisheries Jurisdiction Case (United Kingdom/Iceland) (Merits) [1974] ICJ Rep 3.
- Continental Shelf Case (Libya/Malta) [1985] ICJ Rep 15

D. PUBLICATIONS.

- A. Scarborough, Bull, Milton S.Love, 2019. Worldwide oil and gas platform decommissioning: A review of practices and reefing options, Ocean & Coastal Management, Volume 168, 1 February 2019, Pages 274-306
- A.M. Fowlera, P.I. Macreadie et al, 2014. A multi-criteria decision approach to decommissioning of offshore oil and gas infrastructure, Ocean & Coastal Management, Volume 87, January 2014, Pages 20-29.
- Alidri Agatha, 'Traditional Wisdom in Land Use and Resource Management Among the Lugbara of Uganda: A Historical Perspective' (2016)1 SAGE 12
- Anne G. Wallice, 'Natural Resource Ownership and Use Rights Under Civil, Islamic, and Customary Legal System' (2016) https://law.wm.edu/academics/intellectuallife/researchcenters/postconflictjustice/documents/Wallice_naturalresource%20Ownership.pdf accessed 17 January 2022.
- B. Anifowose, D.M. Lawler et al, 2016. A systematic quality assessment of Environmental Impact Statements in the oil and gas industry, Science of The Total Environment, Volume 572, 1 December 2016, Pages 570-585
- B. Sommerab, A.M. Fowler et al, 2019. Decommissioning of offshore oil and gas structures Environmental opportunities and challenges, Science of The Total Environment, Volume 658, 25 March 2019, Pages 973-981.

- Boschee, Pam, 2012. Decommissioning Challenges in the Gulf of Mexico, Oil and Gas Facilities, Vol.1; Iss. 2.
- C E Mcglade 'A Review of the Uncertainties in Estimates of Global Oil Resources'
 (2012) 47 Energy 264; Shepherd M, 'Factors Influencing Recovery From Oil and Gas
 Fields' in Shepherd M(eds), Oil Field Production Geology (AAPG Memoirs 2009) 37.
- Chatham House. 2006. "Methods of resolving maritime boundary disputes", available at; https://www.chathamhouse.org/sites/default/files/public/Research/International%20La
 - https://www.chathamhouse.org/sites/default/files/public/Research/International%20Law/ilp140206.doc (accessed on 15th January, 2022)
- Churchill R. & Ulfstein G. "Marine Management in Disputed Areas: The Case of the Barents Sea", Routledge, p.86.
- D O Salawu, 'Bringing the House Down: Decommissioning Issues in Nigeria's Upstream Oil and Gas Sector' (2013)12(4) OGEL 11
- D Testa, 'Dealing with Decommissioning Costs of Offshore Oil and Gas Field Installations: An Appraisal of Existing Regimes' (2014) 12(1) OGEL 12.
- D.R. Langenkamp, 'Comments on the Draft Uganda Petroleum Bill 2010' (2010)8(4) OGEL 5.
- Daniel PO (ed). 1982. "The International Law of the Sea", Clarendon Press, Vol. 1, pp.691-692
- David M. 1999. "Joint Development of Common Offshore Oil and Gas Deposits: "Mere" State Practice or Customary International Law?", AJIL 771, 775.
- Douglas MJ & Philip MS. 1988. "Ocean Boundary Making: Regional Issues and Developments" Croom Helm, p. 17
- E Okello, 'Comparative Study of the United Kingdom and Uganda's Decommissioning Legal Regimes on Oil and Gas installations: The Extent to which Uganda can adopt or benefit from it', LLM Dissertation, University of Birmingham, 2013, 40-44.
- Elau Emmanuel, 'Enforcement of civil judgements –responsible law enforcement authorities, Procedural obstacles and current issues in Uganda' (2016) 3 Librairie Africaine d'Etudes Juridiques 92
- Elias Biryabarema, 'Uganda gives Tullow Oil, Total Production Licences' (August 30, 2016) http://www.reuters.com/article/us-uganda-oil-idUSKCN115104 accessed January 20th 2022.

- Felix Njini and Fred Ojinmbo, 'Tullow, Total Uganda Oil Exports may Delay on Infrastructure' (2016) http://www.worldoil.com/news/2016/11/14/tullow-total-uganda-oil-exports-may-delay-on-infrastructure accessed January 20th, 2022.
- Francesco V.A., 2016. An Overview On The Decommissioning Process In The Oil And Gas Sector. [online] available at;

 https://www.lexology.com/library/detail.aspx?g=06ad2b58-2646-4cbf-9c5f-f5de60145a41 (accessed on January 21st, 2022)
- Francesco V.A., 2016. An Overview On The Decommissioning Process In The Oil And Gas Sector. [online] available at; https://www.lexology.com/library/detail.aspx?g=06ad2b58-2646-4cbf-9c5f-f5de60145a41 (accessed on January 21st, 2022)
- International Business Publication, Uganda: Business Law Handbook (Global Publications 2013) 225
- J. Komugisa; N. Chinwa Ole; "Ugandan Legal Framework on Decommissioning Fund: Is There an Achilles Heel, and Can Lessons from the UK Help?" OGEL 2 (2018), www.ogel.org URL: www.ogel.org/article.asp?key=3753
- Jeom Kee Paik and Anil Kumar Thayamballi, Ship-Shaped Offshore Installations: Design, Building, and Operation (Cambridge University Press 2007) 456
- Lagoni R. 1984. "Interim Measures Pending Maritime Delimitation Agreements", UCL Journal of Law and Jurisprudence, AJIL 345.
- Mark Saunder and Nabarno Nathanson; 'Abondonment Agreements' in Martyn R.
 David (ed) in Upstream Oil and Gas Agreements: With Precedents (Sweet & Maxwell 1996) 235
- Maurice Enenu, 'Oil decommissioning plan will save our environment' (2012) http://www.monitor.co.ug/OpEd/Commentary/Oil-decommissioning-plan-will-save-ourenvironment/689364-610762-sgro24z/index.html accessed 17 January 2022
- Mckenna Group, 'Conducting oil and gas activities in Uganda' (2016) 5.
 https://cms.law/en/content/download/279335/6964336/version/1/file/Conducting%20
 Oil%20%26%20Gas%20Activities%20-%20Uganda.PDF accessed 17 January 2022
- Ministry of Energy and Mineral Development, 'Enhancing National Participation in the Oil and Gas Industry in Uganda' (2011) VII http://www.eisourcebook.org/cms/Feb%202014/Uganda,%20Enhancing%20National %20Petroleum%20Participation.pdf accessed 14 January 2022.

- N.M. Lomonaco, 'How to Finance Decommissioning in The Offshore Petroleum Industry? The Role and Importance of Decommissioning Funds' (2013) CEPMLP Annual Review - CAR Volume 16.
- Oluka, P &Basheka C, Determinants and constraints to effective procurement contract management in Uganda, a practitioner's perspective 2012
- Peter Cameron, 'Tackling the Decommissioning Problem' (1999) 14(2) Natural Resources & Environment 122.
- R. Higgins, "Abandonment of energy sites and structures" [1993] 6 J. En. & Nat. Res L. 8.
- Reuters Ltd, 'UPDATE 2-Uganda Ups Oil Reserves Estimate by 85 pct, finds Natural Gas' (July 1, 2015) http://www.reuters.com/article/uganda-oil-idUSL5N0QZ1EW20140829 accessed January 20th, 2022.
- S. Esterhuyse, M. Avenant, et al, 2016. A review of biophysical and socio-economic effects of unconventional oil and gas extraction Implications for South Africa, Journal of Environmental Management, Volume 184, Part 2, 15 December 2016, Pages 419-430
- Sekaran U, Research Methods for Business: A skills building approach. New York John Wiley & Sons Inc, (2003)
- Ugandan Civil Society, 'Civil Society Coalition on Oil in Uganda', 20
 http://platformlondon.org/wp-content/uploads/2012/01/Contracts-Curse-Uganda-Platform-CSCO.pdf accessed January 20th, 2022.
- V. Parentea, D. Ferreirab et al, 2006. Offshore decommissioning issues: Deductibility and transferability, Energy Policy, Volume 34, Issue 15, October 2006, Pages 1992-2001.
- Vladimir Alvarado and Eduardo Manrique, 'Enhanced Oil Recovery: An Update Review' (2010)3 Energies 1526
- West, S. 2014-07-30. The Decommissioning of Offshore Oil and Gas Installations and Structures in Nigeria and South Africa in the context of international best practices.
 University of Cape Town
- Yiallourides C. "Oil and Gas Development in Disputed Waters Under UNCLOS", available at; https://core.ac.uk/download/pdf/82962947.pdf (accessed on 15th January, 2022)