

**AN ANALYSIS OF THE LEGAL AND REGULATORY FRAMEWORK FOR THE  
PROTECTION OF BIODIVERSITY FROM THE IMPACT OF THE UPSTREAM  
PETROLEUM INDUSTRY IN KENYA.**

**BY**

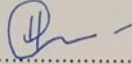
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**G62/35247/2019**

**THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE MASTER OF LAWS (LL.M)**

**DECLARATION**

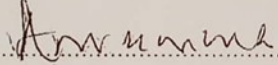
I hereby declare that this research project is my original work and has not been presented to any other university.

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## **ABBREVIATIONS AND ACRONYMS**

- i. ASAL: Arid and Semi-Arid Lands
- ii. AU: African Union
- iii. CBD: Convention on Biological Development
- iv. CBO: Community Based Organizations
- v. CEC: County Executive Committee;
- vi. CFCs: Chlorofluoro Carbons
- vii. CS: Cabinet Secretary
- viii. CSO: Civil Society Organizations
- ix. DAC: District Advisory Committee.
- x. EAC: East African Community
- xi. EIA: Environmental Impact Assessment
- xii. EMCA: Environmental Management and Co-ordination Act
- xiii. EPRA: Energy and Petroleum Regulatory Authority
- xiv. MAT: Mutually Agreed Terms
- xv. MNCs: Multi National Organizations
- xvi. NBSAP: National Biodiversity Action Plan
- xvii. NEMA: National Environmental Management Act
- xviii. SDG: Sustainable Development Goals;
- xix. SEA: Strategic Environmental Assessment
- xx. TK: Traditional Knowledge
- xxi. UNCCD: United Nations Convention to Combat Desertification.

**Table of Cases:**

- i. Gabčíkovo - Nanyang Project (Hungary vs. Slovakia) ICJ GL No 92, [1997] ICJ Rep 7, [1997] ICJ Rep 88, (1998) 37 ILM 162, ICGJ 66 (ICJ 1997), 25th September 1997, International Court of Justice [ICJ]
- ii. Balachandria Bhikaji vs. Union of India. WPC No.388/2009, Delhi High Court (2009.09.18)
- iii. Friends of Lake Turkana Trust vs. Attorney General & 2 others [2014] e KLR.
- iv. Abdalla Rhova Hirbae & 3 others vs. Attorney General & 3 others [2013] e KLR.
- v. Cortec Mining Kenya Limited, Cortec (PTY) Limited & Stirling Capital Limited vs. Republic of Kenya. ICSID Case No. ARB/15/29

## **Table of Statutes:**

### International Law Statutes:

- i. African Convention on the Conservation of Nature and Natural Resources.
- ii. Convention on Biodiversity, United Nations, 1992.
- iii. East Africa Community Treaty 1999.
- iv. The Convention on Wetlands of International Importance.
- v. Rio Declaration on Environment and Development, 1992.
- vi. The Nagoya Protocol on Access to Genetic Resources.
- vii. United Nations Convention to combat desertification.

### **National Legislation:**

- i. Access to Information Act No. 31 of 2016.
- ii. County Government Act No. 17 of 2012.
- iii. Energy Act No. 1 of 2019.
- iv. Environment Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources & Benefit Sharing) Regulations.
- v. Forest Management and Conservation (No. 34 of 2016)
- vi. Petroleum Act, (No. 2 of 2019)
- vii. Protection of Traditional Knowledge and Cultural Expressions Act (No. 33 of 2016)
- viii. The Environment Management and Co-ordination Act (No. 19 of 1999)
- ix. Wildlife (Conservation and Management) (No. 47 of 2013)

**Abstract:**

*The Petroleum industry is among the key drivers of economies in oil producing countries. With the discovery of commercially viable petroleum in Turkana County, Kenya is set to benefit majorly from exploitation of this natural resource. This ranges from social -economic growth to technical and infrastructural development.*

*Kenya is home to a wide range of biological diversity. Specifically, Turkana County is well known for being home to the world's largest dessert lake, Lake Turkana also known as Jade Lake. The county provides a hosts a wide variety of biodiversity.*

*Despite the major benefits that will come with the upstream petroleum operations in Turkana, the same poses great risk to loss of biodiversity in the country. This is attributed to pollution from the exploration and production process.*

*This paper seeks to evaluate the legal and regulatory framework that seeks to protect biodiversity from the impact of the upstream petroleum industry in Kenya.*

## Contents

DECLARATION.....	Error! Bookmark not defined.
ABBREVIATIONS AND ACRONYMS.....	1
Table of Cases: .....	4
Table of Statutes: .....	5
National Legislation:.....	5
Abstract:.....	6
CHAPTER 1: .....	10
1. INTRODUCTION .....	10
1.1 BACKGROUND:.....	10
1.1.1 Oil and Gas in Kenya:.....	10
1.1.2 Process of Oil and Gas Exploration and Production:.....	12
1.1.3 The Context of Biodiversity in Kenya: .....	15
1.1.3.1 Biodiversity in Turkana County: .....	16
1.1.3.2 Potential Impact of the Upstream Petroleum Industry on Biodiversity in Kenya:.....	18
1.2 STATEMENT OF THE PROBLEM: .....	19
1.3 HYPOTHESIS .....	20
KEY ISSUES: .....	20
1.4 RESEARCH QUESTIONS.....	21
1.5 THEORETICAL FRAMEWORK: .....	22
1.6 RESEARCH METHODOLOGY: .....	24
1.7 LITERATURE REVIEW:.....	24
CHAPTER BREAKDOWN: .....	33
2.1 Kenya’s Obligations for Conservation of Biodiversity under International Law:.....	34
Introduction: .....	34
2.1.1 In situ Conservation of Biodiversity:.....	35
2.1.2 Prior Assessment of Potential Impact: .....	37
a) The Rio Declaration on Environment and Development:.....	38
b) The CBD: .....	38

c) The Ramsar Convention on Protection of Wetlands of International Importance: .....	38
2.2 PUBLIC PARTICIPATION: .....	40
2.3 Access and Benefit Sharing:.....	42
Kenya’s Legal Framework for Biodiversity Conservation from the impact of the Upstream Petroleum Industry:.....	44
3.1. Introduction: .....	44
3.2. In Situ Conservation of Biodiversity: .....	44
3.3. Prior Assessment of Potential Impact: .....	46
The Constitution of Kenya.....	46
The EMCA.....	46
EIA Licence: .....	47
Strategic Environment Assessment (SEA):.....	47
3.4. Public Participation:.....	48
The Constitution of Kenya 2010.....	48
The County Government Act: .....	49
Environment Management and Co-ordination Act (EMCA): .....	49
Public Participation in EIA: .....	49
Environment (Impact Assessment and Audit) Regulations 2003: .....	50
3.5. Access and Benefit Sharing:.....	51
Constitution of Kenya 2010: .....	52
Protection of Traditional Knowledge and Cultural Expressions Act, 2016: .....	52
Petroleum Act 2019: .....	52
Conclusion: .....	53
CHAPTER 4: .....	54
4. Kenya’s Institutional and Regulatory Framework for Biodiversity Conservation from the Impact of the Upstream Petroleum Industry:.....	54
4.1 Institutional and Regulatory Framework:.....	54
4.1.1 In situ Conservation of Biodiversity:.....	54
Ministry of Environment and Forestry: .....	54
Kenya Forests Service (KFS).....	56
Kenya Wildlife Service (KWS):.....	57
National Environment Management Authority (NEMA).....	57
4.1.1. Prior Assessment of Potential Impact: .....	59



National Environment Management Authority (NEMA):.....	59
4.1.2. Public Participation:.....	61
Kenya Forest Services (KFS):.....	61
County Governments: .....	61
National Environment Management Authority NEMA. ....	62
Tullow Oil PLC:.....	64
4.1.2.1. Access and Benefit Sharing.....	65
National Environment Management Authority NEMA. ....	65
Kenya Copyrights Board (KECOBO) .....	65
Conclusion: .....	66
Conclusion & Recommendations: .....	67
5.1. Conclusion: .....	67
5.2. Recommendations:.....	68
5.2.1. Integration and Coordination:.....	68
5.2.2. Information, awareness, Inclusivity and Public Participation:.....	69
5.2.3 Political Influence:.....	69
5.2.4. Accountability: .....	70
5.2.5. Technology:.....	70
5.2.6. Administrative Reforms:.....	71
5.2.7. Policy making: .....	71
5.2.8. Institutional Reforms: .....	71
BIBLIOGRAPHY: .....	72

## CHAPTER 1:

### 1. INTRODUCTION

#### 1.1 BACKGROUND:

##### 1.1.1 Oil and Gas in Kenya:

Upstream petroleum operations have been underway in Kenya since the 1950s.<sup>1</sup> In 2012, commercially viable oil was discovered in Ngamia 1, Turkana within the Tertiary rift.<sup>2</sup> Before this milestone discovery, there was discovery of significant amount of petroleum in the offshore Lamu basin. During this exploratory phase, over Eighty-Six wells were drilled in Kenya with most being in the Tertiary Rift Basin. <sup>3</sup> Crude oil reserves with over 4 billion barrels have been encountered by Tullow PLC in the Lokichar sub-basin. According to Tullow, close to 750 million barrels may be recovered from these wells.<sup>4</sup> The 2012 discovery by Tullow marked the peak of exploration endeavors that have been underway since the 1950s.<sup>5</sup>

Before this major discovery, there have been exploration efforts that have taken place in various basins. For example, in the 1950s there was exploration drilling in the Lamu Basin that was done by British Petroleum (BP) and Shell.<sup>6</sup> Between 1960 and 1971 close to ten wells were drilled in this basin. Exploration was also conducted in the tertiary rift basin.<sup>7</sup>

During the early exploration phase the Tertiary Rift basin was considered subservient and hence little exploration activities were done there. In 1992, Eliye Springs-1 was drilled by Shell and was found to be dry. In 1993, the Loperot-1 was drilled and some oil was discovered. Both the Eliye Springs and the Loperot -1 are found within the Lokichar sub-basin. After the

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<sup>1</sup> Oil & Gas Exploration History in Kenya' ( nationaloil.co.ke 2021)<https://nationaloil.co.ke/upstream/>> accessed 2/6/2021

<sup>2</sup> Ministry of Petroleum and Mining, 'Oil & Gas Exploration' ( petroleumandmining.go.ke 2021) <<https://www.petroleumandmining.go.ke/#>> accessed 2/6/2021

<sup>3</sup> Ibid

<sup>4</sup> Oil & Gas Exploration History in Kenya' ( nationaloil.co.ke 2021)<https://nationaloil.co.ke/upstream/>> accessed 2/6/2021

<sup>5</sup> Ibid

<sup>6</sup> UNEP, ' Greasing the wheels of Kenya's nascent oil and gas sector' ( unep.org 2018) <<https://www.unep.org/>> accessed 1/6/2021

<sup>7</sup> Ibid

exploration in 1992 and 1993, in the Lokichar Sub basin, there was an exploration hiatus until 2006. This was when oil was discovered in the Albertine Graben in Uganda.<sup>8</sup>

In 1981, the Kenyan government formed the National Oil Corporation of Kenya (NOCK), in a bid to facilitate the exploration for oil fields, when the initial drilling turned up empty. Under NOCK, Tullow Oil, Africa Oil and Centric Energy entered into an agreement where Tullow acquired 50% interest in the oil exploration license.<sup>9</sup> Tullow Oil thereafter commenced exploration for oil reserves in the license blocks that covered counties such as Baringo, Marsabit and Turkana.<sup>10</sup>

Under this agreement Tullow Oil was able to discover the oil reserve in Turkana in 2012. The crude oil reserve became the Ngamia-1 well. Tullow's plans for the exploration of oil are estimated to run for years.<sup>11</sup>

The first consignment of crude oil departed for storage in Mombasa from Turkana in 2018. Even though drilling has come up with dry wells numerous times, the oil explorers are hopeful that the discovered reserves will hold elaborate fiscal benefits.<sup>12</sup>

Since commercially viable oil was discovered in Turkana, Tullow Oil PLC, the Kenyan government and other interested entities made plans to set up production activities around the area. The oil in Turkana is poised to produce more than three billion barrels.

The discovery of Kenya's oil reserve in Turkana placed the country as one of the new frontiers in East Africa in the search for oil. The flagship export of the crude oil in 2019 raised hope that the Turkana Oil reserves would continue to produce oil for a long time.<sup>13</sup>

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<sup>8</sup> Luke Patey, 'An African Oil Upstart in Transition' (Semantic Scholar 2014) < <https://www.semanticscholar.org/> > accessed 23/11/2019

<sup>9</sup> Eliza Johannes, Leo Zulu & Ezekiel Kalipeni, 'Oil discovery in Turkana County, Kenya: A source of conflict or development?' (2015) < <https://experts.illinois.edu/en/publications/oil-discovery-in-turkana-county-kenya-a-source-of-conflict-or-dev> > accessed 23/11/2019

<sup>10</sup> Oil & Gas Exploration History in Kenya' (nationaloil.co.ke 2021) <https://nationaloil.co.ke/upstream/> > accessed 2/11/2019

<sup>11</sup> Ibid

<sup>12</sup> Ibid

The Tullow Company estimated that the fields would produce at least 560 million barrels which differed from the initial 3 billion barrels estimated by earlier reports. However, further insight into the matter stated that Kenya would only be able to produce at least 100,000 barrels a day by 2022 prompting the advent of commercial oil mining in Turkana.<sup>14</sup>

Exploration and Production of oil promises high economic prospects for the country. It has promised a whole new flow of revenue, provision of employment opportunities and the chances for business opportunities for numerous entrepreneurs. With the discovery of the oil, the Kenyan government strategic plan of vision 2030 included in it an accelerated transport flow between Lamu, South Sudan and Ethiopia (LAPSET) which is expected to promote the transportation of the crude material.<sup>15</sup>

### **1.1.2 Process of Oil and Gas Exploration and Production:**

The upstream petroleum industry process entails four main stages. Licensing, exploration, post discovery and decommissioning and abandonment.<sup>16</sup>

#### ***1.1 Exploration Stage:***

Once an interested party gets a licence to commence exploration for oil and gas in Kenya, the contractor commences the exploration process. This stage involves Geological and Geophysical studies and exploration drilling.<sup>17</sup>

#### ***1.2 Geological and Geophysical Studies:***

These studies are carried out in the proposed sites and the surrounding areas. The main purpose of these studies is to assess the probability of hydrocarbons accumulation in the surface of the earth. This is through analyzing rock and water samples and researching on the history

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<sup>13</sup> Luke Patey, ' An African Oil Upstart in Transition' ( Semantic Scholar 2014) < <https://www.semanticscholar.org/>> accessed 23/11/2019

<sup>14</sup> Ibid

<sup>15</sup> Ibid

<sup>16</sup> Rift Energy, Oil and Gas Industry in Kenya. <https://www.riftenergycorp.com/>, Accessed on 3<sup>rd</sup> January 2021

<sup>17</sup> Ibid

of the geology of the area. Geophysical studies involve surveys on the sub-surface of the earth to identify areas with highest possibility of hydrocarbon generation and accumulation. Geological and Geophysical studies help in identifying prospects for purposes of identifying where exploration drilling will be located.<sup>18</sup>

### ***1.3 Exploration Drilling:***

Exploration drilling is to identify the presence of oil and gas in the earth's subsurface. Exploration drilling is uncertain and can have 3 possible outcomes: Where the well is not successful, some hydrocarbons are found or commercially viable oil and gas is found.<sup>19</sup>

- i) The well is not successful:

This is where no hydrocarbons are found in the earth's subsurface. When a well is not successful the contractor is expected to plug and abandon the well.

- ii) Some Hydrocarbons are found:

Where some hydrocarbons are found in the earth's sub surface, studies are conducted to establish their commercial viability. Where these hydrocarbons are not commercially viable, the well is plugged and abandoned.

- iii) Marketable Oil and Gas is found:

In the event marketable oil and gas is found, the contractor proceeds with extensive analysis to determine the marketability.

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<sup>18</sup> Rift Energy, Oil and Gas Industry in Kenya. <https://www.riftenergycorp.com/>, Accessed on 3<sup>rd</sup> January 2021

<sup>19</sup> Ibid

#### ***1.4 Post Discovery:***

The post discovery stage involves appraisal, field development and finally production.<sup>20</sup>

##### **i) Appraisal:**

This involves studies and surveys for certainty about the presence of the oil and gas field especially its size and properties. This process determines if the oil discovered is commercially viable, its quality and determines the production facilities required.

##### **ii) Field Development:**

At this stage, a field development plan is formulated and presented to the government for approval. The plan covers issues such as environmental management, infrastructure and production plan as well as target markets.

##### **iii) Production:**

Once all plans are in place, all necessary equipment and facilities have been set up, production begins. This is where hydrocarbon resources are extracted to the surface.

#### ***1.5 Decommissioning and Abandonment:***

The Petroleum Act 2019 has defined decommissioning as the process of destruction to abandonment of oil wells and any infrastructure put up for upstream petroleum operations.<sup>21</sup>

Once a field no longer contains economically viable quantities of oil and gas, it undergoes decommissioning and abandonment. This involves plugging the wells, demolishing all surface site facilities and equipment inter alia with the aim of restoring the area to the nearest it could be to its original condition and standards that promotes stable environmental conditions.<sup>22</sup>

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<sup>20</sup> Rift Energy, Oil and Gas Industry in Kenya. <https://www.riftenergycorp.com/>, Accessed on 3<sup>rd</sup> January 2021

<sup>21</sup> Petroleum Act 2019, Section 2

<sup>22</sup> Rift Energy, Oil and Gas Industry in Kenya. <https://www.riftenergycorp.com/>, Accessed on 3<sup>rd</sup> January 2021

### 1.1.3 The Context of Biodiversity in Kenya:

Biodiversity comes from the words "biological" and "diversity". It refers to the diverse life that is found on Earth. This includes communities of flora and fauna and their habitats.<sup>23</sup>Biodiversity is made up of different genetically distinct floral and faunal species that humans co-exist with on earth as well as the different ecosystems which they form part of.<sup>24</sup>

Kenya has wide biodiversity. This includes forests, wetlands, drylands, coastal and marine ecosystems inter alia.<sup>25</sup>These ecosystems play different roles in maintaining life in the country. For example, 8% of Kenya's surface area is covered by fresh and saline ecosystems. These ecosystems provide habitats for flora and fauna. They also act as migratory routes for different Palearctic birds. <sup>26</sup>

Forests also harbor habitats of different types of flora and fauna. Forests are a source of food, energy, medicine and water inter alia which benefits people directly. Indirectly, forests act as water catchment areas, play a role in watershed functions and help in the control of climate change. Kenya has a goal to achieve and maintain its national forest cover at 10% by 2022.<sup>27</sup>

Biodiversity in Kenya is fundamental for the country's economic prosperity. This is because biodiversity is the key source of food, shelter, food, fuel, tourism and employment among others. These benefits of biodiversity to human beings are generally known as Ecosystem Services. Development and industrialization mainly depend on these ecosystem services.<sup>28</sup>

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<sup>23</sup> Introduction to Biodiversity' ( PBL Netherlands Environmental Assessment Agency ) < <https://www.pbl.nl/en/en/topics/biodiversity/introduction-biodiversity>> accessed 1/6/2021

<sup>24</sup> P.K Mbote and P. Cullet, ' Biological diversity management in Africa: Legal and policy perspectives in the run-up to WSSD' [ 2002] Review of European Community and International Environmental Law (RECIEL) | Vol. 11(1) 2, 28

<sup>25</sup> ' Biodiversity Facts Status and trends of biodiversity, including benefits from biodiversity and ecosystem services' ( Convention on Biological Diversity ) < <https://www.cbd.int/countries/profile/?country=ke>> accessed 6th January 2021

<sup>26</sup> Ibid.

<sup>27</sup> Ministry of Environment and Forestry 'National Strategy for Achieving and Maintaining over 10% Tree Cover by 2022 [2019]

<sup>28</sup> K. Muigua, ' Conserving Biodiversity for a better future' [ 2021] KMCO 2, 3

Among the key ecosystem services include: the nurturing and protection of hydrologic cycles, preventing climate change; maintaining plant life; soil conservation; and controlling pollution.<sup>29</sup>

### **1.1.3.1 Biodiversity in Turkana County:**

Turkana County is an arid and semi-arid area characterized by a hot climate. Turkana is home to hundreds of fauna including bird species, fish, reptiles and mammals. The Lake Turkana area is listed as a UNESCO World Heritage Site.<sup>30</sup>

Lake Turkana is the largest dessert lake in the world as well as the most salty in the East African region. It is also known as the Jade Lake which is attributed to its color. Lake Turkana region consists of an arid, extraterrestrial landscape that is largely barren.<sup>31</sup>

The Lake Turkana region boasts of the Lake Turkana National Parks. These National Parks are all located in the Lake Turkana Basin include Sibiloi, the Southern and Central Island National Parks.<sup>32</sup>

The ecological conditions within this region are conducive for maintaining different flora and fauna. For example, the national parks are home to the Nile crocodile, hippopotamus and other reptile species. Lake Turkana offers a migratory route for Palearctic migrant birds.<sup>33</sup>

The region features diverse habitats that can be attributed to gradual ecological changes. Conservation measures have been put within the protected areas which include protection of threatened species. Some of these threatened species include giraffes, lions, zebras and other faunal species.<sup>34</sup>

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<sup>29</sup> Ibid

<sup>30</sup> UNESCO, ' Lake Turkana National Parks' ( UNESCO ) < <https://whc.unesco.org/en/list/801/>> accessed 6th January 2021

<sup>31</sup> Ibid

<sup>32</sup> Ibid

<sup>33</sup> UNESCO, ' Lake Turkana National Parks' ( UNESCO ) < <https://whc.unesco.org/en/list/801/>> accessed 6th January 2021

<sup>34</sup> Ibid



The area is also characterized by arid and semi-arid vegetation such as grassy plains with yellow spear grass, acacia trees, desert dates and sparse woodlands. Adjacent to the Lake Turkana region is the Mount Kulal Biosphere Reserve. The reserve is a water shed region and acts as a wildlife dispersal zone. It is important for conserving biodiversity by maintaining natural habitats. It is important in hosting water birds.<sup>35</sup>

Turkana region is home to the Eliye Springs. Eliye springs is also known as Lile Springs. It is located in the Western Side of Lake Turkana near River Turkwel. Eliye Springs is characterized by lush vegetation that contrasts the bare lake shores. Eliye springs is a source of fresh water in the area providing clean drinking water to the surrounding community.<sup>36</sup>

Suguta River is a seasonal river found South of Lake Turkana. The river flows through the Silali valley during the rainy season forming Lake Alablad. River Suguta passes through two volcanoes and is fed from both sides by hot springs. The Suguta River banks are lined with palm trees.<sup>37</sup>

The area is also home to sand dunes of the Suguta valley. Further, River Suguta and its tributaries are home to different species of fish. These include the cichlid as well as the Suguta tilapia. The river is also home to numerous crocodiles as well as large flocks of crocodiles that inhabit the edge of the river. <sup>38</sup>The Furguson Gulf provides a habitat to a number of birds including pelicans, flamingos as well as waterfowls. The region is said to be a bird watchers paradise.<sup>39</sup>

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<sup>35</sup> Ibid

<sup>36</sup> Ibid

<sup>37</sup> Ibid

<sup>38</sup> D.M Chege, ' Our Lakes, Our Future' [ 2009] ILEC 3,

<sup>39</sup> UNESCO, ' Lake Turkana National Parks' ( UNESCO ) < <https://whc.unesco.org/en/list/801/>> accessed 6th January 2021

### **1.1.3.2 Potential Impact of the Upstream Petroleum Industry on Biodiversity in Kenya:**

The upstream petroleum industry poses risks of pollution from waste disposal, air pollution from venting and flaring of gas, water pollution from mixing of effluents from the sites as well as noise pollution from the heavy machinery used in the exploration and production process.

All these types of pollution if not managed properly may lead to biodiversity loss. Specifically; upstream petroleum operations lead to increased emission of greenhouse gases. It is well known that excessive greenhouse gasses lead to global warming. This is associated with increased temperatures.<sup>40</sup>

Climate change is known to affect vegetation as well as animal life. Emissions from the exploration plants lead to increased acidity in the aerosphere. Areas within which upstream petroleum operations are underway are said to experience rainfall with increased levels of hydrogen. The operations also make the area prone to poor water standards and pollution of the ground water.<sup>41</sup> There is also water pollution from waste discharges from the plants effluents. This causes adverse impact on the human population as well as flora and fauna.<sup>42</sup>

Areas where upstream petroleum operations are underway are prone to Oil Spills. Oil spills, pipeline rupturing and other accidental discharges of oil lead to pollution. The consequences of oil spills are obvious. Oil interferes with the functioning of different organs in both plants and animals. Toxicity by the oil leads to outright mortality of both plants and animals.<sup>43</sup>

Air pollution during operations at production and refining of oil is a risk to biodiversity in the area. The most common gasses emitted during the refining and production process include

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<sup>40</sup> Rift Energy, Oil and Gas Industry in Kenya. <https://www.riftenergycorp.com/>, Accessed on 3<sup>rd</sup> January 2021

<sup>41</sup> P Torkashvand, S Karami, S Mozafari, M Mansour and A Ardabili , ' The Effects of Oil and Gas Wastes' Management on Environment's Sustainable Development' [ 2013] IRJABS e.g. 2, 2470-2472

<sup>42</sup> Ibid

<sup>43</sup> A Fidelis, ' The Enemy Within: Oil in the Niger Delta' [ 2012] WPJ 46, 51

fluorine, ammonia, sulphur and nitrogen oxides.<sup>44</sup> Increase in fluorine in water has been proved to cause browning of teeth and bone fragility in human beings.

Oil and Gas Exploration and production therefore subject the environment to pollution through waste disposal, air pollution, noise pollution as well as water pollution. When upstream petroleum activities begin in an area, various things change in the area. For example, Infrastructure in the area needs to be developed for purposes of transportation of oil. Development of infrastructure leads to an increase in the presence of human and machines in the area. There is also risk of noise pollution as due to the presence of heavy apparatus in the area.<sup>45</sup>

Impacts and ground-surface disturbances, clearance of the site area, development of infrastructure, and production facilities are expected. The impacts of these operations to the environment are high and may affect the habitats present in the area.<sup>46</sup> Other possible impacts include, displacement of locals in the area with compulsory acquisition of land. In Turkana, fencing off of grazing areas, disruption of pastoral movement and grazing routes and changes to water access points is expected.<sup>47</sup>

## **1.2 STATEMENT OF THE PROBLEM:**

It is evident that Kenya has a rich biodiversity. Despite the fact that the upstream petroleum industry is necessary for the economic growth of a country, the same possess great challenges to the conservation of biodiversity. Unsustainable use of natural resources is a key driver of loss of biodiversity. Currently there are in place laws seeking to protect biodiversity from the wide range of environmental impacts that come with the upstream petroleum industry.

This paper will therefore analyze the legal and regulatory framework for the conservation of biodiversity from the impacts of the upstream petroleum industry in Kenya.

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<sup>44</sup> Ibid

<sup>45</sup> C. Ugochukwu & J Ertel, ' Negative Impacts of Oil Exploration on Biodiversity Management in the Niger Delta Area of Nigeria' [ 2008] IAPA 26, 139-147

<sup>46</sup> Ibid

<sup>47</sup> Ibid

### 1.3 HYPOTHESIS

The Kenyan Parliament has implemented various laws for the protection of biodiversity from the negative impact of the upstream petroleum industry. Despite this, the upstream petroleum industry poses diverse negative impacts to biodiversity due to poor implementation, enforcement and monitoring of these laws.

Kenya has signed into law international law instruments that seek to protect biodiversity. Under these instruments, Kenya is obligated to take certain measures to ensure that biodiversity is conserved in the country. Despite this, Kenya has not comprehensively given effect to its international obligations for conservation of biodiversity in the context of the upstream petroleum industry.

#### **KEY ISSUES:**

The concept of biodiversity is a broad one. To effectively address biodiversity conservation from the impact of the upstream petroleum industry in Kenya, this paper will be limited to four main issues. These are; In situ conservation of biodiversity, Prior Impact Assessment, Public Participation and Access and Benefit sharing.

In situ conservation of biodiversity entails the conservation of biodiversity in its natural surroundings. Conservation of biodiversity on site calls for the development of guidelines for the creation of protected areas. This includes regulation of the consumption of biodiversity resources, protection of ecosystems and natural habitats, ensuring that feasible number of species are maintained in their original habitats, promoting sustainable development in adjacent areas and ensuring repair of degraded ecosystems and protection of endangered species. Discussing the concept of in situ conservation during upstream petroleum operations is important to ensure that no biological resources are moved from their habitats for the above-mentioned benefits.

Economic benefits of a project as big as production of oil and gas can easily blind the authorities from considering biodiversity conservation and sustainability. Discussing the concept of prior

impact assessment is important to ensure that before upstream petroleum operations commence, prior impact assessment is conducted to prevent loss of biodiversity.

Engagement of the civil society is key in achieving sustainable development and environmental goals. Public participation is important for the engagement of the local community. It increases trust and legitimacy in the decision making process and helps the local community participate using their valuable local and traditional knowledge. Lack of public participation leads to conflicts between the local communities and the contractors undertaking upstream petroleum operation. Discussing the concept of public participation is therefore important.

Access and Benefit sharing addresses the just and impartial sharing of gains that come from the use of genetic resources and traditional knowledge. The question of who owns a resource is a major cause of conflict between the state and locals. It is the Local communities' right to benefit from the use of natural resources found in their area. In order to protect this right, it is important to address the issue of access and benefit sharing.

#### **1.4 RESEARCH QUESTIONS**

- What are Kenya's international obligations in conservation of biodiversity?
- To what extent has Kenya given effect to its international obligations for conservation of biodiversity in the context of upstream petroleum industry?
- What is the current legal and regulatory framework for conservation of biodiversity from the impact of the upstream petroleum industry in Kenya?
- How effective is the legal and regulatory framework regulating the impact of the upstream petroleum industry on biodiversity in Kenya?
- What is the conclusion and recommendations?

## 1.5 THEORETICAL FRAMEWORK:

### *Sustainable Development Theory:*

Sustainable development is development that satisfies the needs of the current generation while at the same time protecting the ability of the future generations to satisfy their own needs.<sup>48</sup>The principle of sustainability is two pronged. The principle addresses the wants of the current generation and the restrictions necessary to ensure that the environment is able to meet both the present and future needs. Sustainability theory requires that in exploring and utilizing its resources, a state should consider the needs of the current generation while at the same time protecting those of future generations.<sup>49</sup>

This concept has been captured in various court and tribunal decisions. For example; in the *Gabcikovo-Nagymaros Project case (Hungary v Slovakia)*, the ICJ recognized that both development and environmental protection must co-exist for sustainable development. Neither should be put at stake for the other.<sup>50</sup>

In the case of *Balachandra Bhikaji v Union of India* the New Delhi High Court recognized the doctrine of Sustainable Development.<sup>51</sup> The court recognized that the sustainable development has been accepted as the solution to the equilibrium between development that seeks to ensure better living, socio-economic conditions for human beings as well as ensuring that the this development does not deplete the ecosystem and the need to protect the environment.<sup>52</sup>

The court adopted the definition of sustainable development under the Rio Declaration as being the developments that can be maintained by nature whether with mitigating actions or not. The

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<sup>48</sup>M.E Jarvie, ' Brundtland Report publication by World Commission on Environment and Development' [e.g. 2005] WCED 2.

<sup>49</sup> Ibid

<sup>50</sup> *Hungary v. Slovakia* [ 1997] 7. ( ICJ)

<sup>51</sup> *Balachandra Bhikaji Nalwade vs Union of India* [2009] 388/2009. WPC 33 ( NDHC)

<sup>52</sup> *Balachandra Bhikaji Nalwade vs Union of India* [2009] 388/2009. WPC 33 ( NDHC)

court appreciated that the doctrine recognized the need to industrialize and develop as well as the necessity to protect the environment and ecosystems.<sup>53</sup>

According to the court, the doctrine of sustainable development has been defended by intra-generational equity or responsibility and public trust. Public Trust recognizes that natural resources are owned by the people and the state only holds these resources in trust for the use and benefit of the public. This concept requires that the use of natural resources should be in consideration of the nature of the trust and public interest.<sup>54</sup>

The oil and gas industry generates considerable wealth. Despite this; the sector is a great threat to the environmental conservation. Due to the negative impact of the upstream petroleum industry, there is a need for adoption of laws, regulations, ideas and modes of operation that regulate the exploitation of these natural resources for the advantage of both the current generation and the future generation.

As seen above, the theory of Sustainability recognizes the need to develop and at the same time protect the environment and the ecosystem to sustain the needs of the current generation as well as those of the future generations. The upstream petroleum industry in Kenya are important for the development of the country. It attracts infrastructural development, employment, social and economic growth in the country. As much as this is being embraced the state should ensure that the upstream petroleum industry in the country is sustainable. This will be achieved through having legal and regulatory frameworks that regulate exploration and production of oil to ensure sustainability and conserve biodiversity.

This paper therefore seeks to analyze the current legal and regulatory framework on conservation of biodiversity from the negative impact of the upstream petroleum industry in the Country.

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<sup>53</sup> Ibid

<sup>54</sup> Ibid

## 1.6 RESEARCH METHODOLOGY:

This study is by the doctrinal research method. It will entail desktop research, which involves review of different material including both published and unpublished literature, books and journals.

## 1.7 LITERATURE REVIEW:

**F. Allen in his work *The Enemy Within: Oil in The Niger Delta*** discusses the negative impact that the upstream petroleum industry has on the environment the Niger delta. He describes the Niger Delta as the hub of upstream petroleum operations in Nigeria. Oil in the Delta region is the main resource that the Nigerian government depends on to run the state. Despite this, most people within the region live below the poverty line.<sup>55</sup>

He states that the delta region has been characterized with food shortage and diseases as an impact of upstream petroleum operations in the area. One of the greatest pollutants in the area is oil spills from Delta. There are various environmental laws in respect to the upstream petroleum industry in Nigeria. Despite this, none of the laws is fully implemented by major oil companies.<sup>56</sup>

He states that the EIA Act of 1992 was enacted specifically to prevent oil spills and gas flaring. However, oil companies do not comply with the requirements of this law to conduct EIA. In other instances, these oil companies adopt sub-standard mechanisms to clean up in case of oil spillage. For example, in the 2008 oil spillage in Bodo City and Goi in Ogoniland. Noncompliance with these environmental laws is mainly through impunity between the oil companies and state officials. The people in the Niger delta have protesting against the negative impacts to the environment and the government has continued to successfully oppose them.<sup>57</sup>

According to Fidelis, some of the reasons why these laws are not effective is because, the government relies on the oil in the region to run the state. The oil pays the bills and therefore

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<sup>55</sup> A Fidelis, ' *The Enemy Within: Oil in the Niger Delta*' [ 2012] WPJ 46, 51

<sup>56</sup> Ibid

<sup>57</sup> Ibid



any person who is against the exploration and production is seen as an enemy to the progress of the state.<sup>58</sup>

Secondly, the state has engaged major oil companies through joint ventures hence have a stake in the upstream petroleum operations. The government is contractually tied hence cannot come up with laws to conserve the environment and at the expense of the upstream petroleum industry.

The other reason is lack of public participation by the people living in the Delta region. In Nigeria, three communities run the government.<sup>59</sup>The minorities therefore have no say in the laws concerning the upstream petroleum industry, the exploration process itself or the use of the money from the oil. Therefore, few people benefit at the stake of the majority. The last reason highlighted in this work is that impunity has had an impact on the implementation of the legal framework in place in Nigeria. All these reasons therefore have rendered Environmental laws in Nigeria ineffective hence propelling the negative impacts of the upstream petroleum industry on the environment.<sup>60</sup>

**C. Ugochukwu and J. Ertel in their paper Negative Impacts of Oil Exploration on Biodiversity Management in the Niger Delta area of Nigeria** write about the position of biodiversity in the Delta Region in Nigeria and how the efforts put by the government and other stake holders to mitigate these challenges. They analyze the environmental laws in Nigeria and their role in cubing the negative impact of the oil industry on biodiversity as follows;

The paper recognizes that environmental pollution arising from upstream petroleum operations in the Delta region in Nigeria has had adverse impact on biodiversity in the area. The main

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<sup>58</sup> A Fidelis, ' The Enemy Within: Oil in the Niger Delta' [ 2012] WPJ 46, 51

<sup>59</sup> Ibid

<sup>60</sup> Ibid

pollutants affecting the biodiversity are from oil spillages, gas flaring and chemical emissions during the mining process. This has had adverse effects on flora and fauna in the area.<sup>61</sup>

Nigeria is the largest oil producing country in Africa and the 6th in the Organization of Petroleum Exporting Countries (OPEC). The Petroleum Industry in Nigeria has greatly impacted the country's economic status in the past two decades. Nigeria has huge oil reserves. Despite this, the World Bank in 1995 ranked Nigeria among the world's poorest countries.<sup>62</sup>

Some of the negative impacts on oil production in Nigeria include; Impact on food production; Formerly, Nigeria was a food producer producing enough food for its people as well as for import. At the moment, the Nigerian economy is mainly dependent on oil production. The country relies on food imports to feed its population. Other negative impacts include, Civil Instability, Corruption as well as Environmental degradation.<sup>63</sup>

Oil production activities in Nigeria are conducted on the Delta region. The region has two distinct ecological zones; tropical rainforests as well as Coastal Mangrove Vegetation. The coast is divided into a salt water riverine and fresh water riverine area. The region also consists of freshwater swamps, forests and mangroves inter alia.<sup>64</sup>

On Biodiversity, the delta region has both renewable and non-renewable natural resources. These include water systems, food including vegetables and nuts, palm wine and other palm products, tannins, bamboo and grass inter alia. There are forests and water bodies that provide habitats to diverse flora and fauna.<sup>65</sup>

Upstream petroleum operations in the delta region has had a myriad of negative impacts on biodiversity in the region. For example massive dynamiting for geological excavations specifically in wetlands is known to lead to poisoning and death of fish and other faunal

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<sup>61</sup> C. Ugochukwu & J Ertel, 'Negative Impacts of Oil Exploration on Biodiversity Management in the Niger Delta Area of Nigeria' [ 2008] IAPA 26, 139-147

<sup>62</sup> C. Ugochukwu & J Ertel, 'Negative Impacts of Oil Exploration on Biodiversity Management in the Niger Delta Area of Nigeria' [ 2008] IAPA 26, 139-147

<sup>63</sup> Ibid

<sup>64</sup> Ibid

<sup>65</sup> Ibid

organisms.<sup>66</sup> Dynamiting may also increase turbidity and reduce plant photosynthesis due to reduction of habitat area. Oil spills, pipeline rupturing and other accidental discharges lead to pollution. The consequences of oil spills are obvious. Most oil spills are considered minor and hence go unreported. Oil interferes with the plants and animals functioning and this toxicity in oil leads to mortality of both plants and animals.<sup>67</sup>

The Nigerian government has taken efforts to conserve biodiversity. There is in place a legal framework for regulating the upstream petroleum industry in Nigeria. These laws provide guidelines for pollution control. They include; the Endangered Species Decree CAP 108 LFN 1990, Federal Environment Protection Agency Act, CAP 131 LFN 1990, Harmful Waste CAP 165, LFN 1990, Petroleum (Drilling and Production) Regulations, 1969 and the Mineral Oil (Safety) Regulations (1963).<sup>68</sup>

Further to the existing legal regime, NGOs and MNCs have contributed to the measures taken to curb the loss of biodiversity in the region. For example, Shell Oil Company established the Niger Delta Environmental Survey for purposes of conserving the environment in the delta region.<sup>69</sup>

The writers come to a conclusion that indeed upstream petroleum operations in the delta region has led to contamination, degradation of the mangrove forests and water bodies in the region and therefore interfering with biodiversity.<sup>70</sup>

The authors find it unfortunate that despite existence of a legal system and laws seeking to curb negative impact of the upstream petroleum industry on biodiversity, bodies tasked with the

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<sup>66</sup> C. Ugochukwu & J Ertel, ' Negative Impacts of Oil Exploration on Biodiversity Management in the Niger Delta Area of Nigeria' [ 2008] IAPA 26, 139-147

<sup>67</sup> Ibid

<sup>68</sup> Ibid

<sup>69</sup> Ibid

<sup>70</sup> C. Ugochukwu & J Ertel, ' Negative Impacts of Oil Exploration on Biodiversity Management in the Niger Delta Area of Nigeria' [ 2008] IAPA 26, 139-147

implementation of these laws lack financial resources, human resource, information, analytical capability and other prerequisites for effective implementation of these laws.<sup>71</sup>

The authors also recognize that there is an overlap in mandates and jurisdiction and recommend that the government should specify the functions of various agencies in implementation of environmental laws for them to be more efficient.<sup>72</sup>

**L. Patey in his paper Kenya; An African Oil Upstart in Transition** writes about Kenya's nascent oil industry. The paper comprehensively reviews the history of the upstream petroleum industry in Kenya and provides an overview of the main players in the industry. The paper further reviews possibilities for cooperation with neighboring countries for the development of infrastructure.<sup>73</sup>

The paper considers the potential political risk that are associated with upstream petroleum operations.<sup>74</sup> The paper does not address questions concerning the 'resource curse' phenomena that has affected other oil producing countries in Africa. The paper fails to discuss how the upstream petroleum industry will impact Kenya's economy, politics and environment inter alia. The paper however examines the prospected impact of the country's politics, economy, security and environment on the industry.<sup>75</sup>

**K. Muigua in his paper Multinational Corporations, Investments and Natural Resource Management in Kenya** discusses the role of Multinational Corporations hereinafter referred to as MNCs in the use of Natural resources in developing countries and more specifically in Kenya.

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<sup>71</sup> Ibid

<sup>72</sup> Ibid

<sup>73</sup> Luke Patey, ' An African Oil Upstart in Transition' ( Semantic Scholar 2014) < <https://www.semanticscholar.org/> > accessed 23/11/2019

<sup>74</sup> Ibid

<sup>75</sup> Luke Patey, ' An African Oil Upstart in Transition' ( Semantic Scholar 2014) < <https://www.semanticscholar.org/> > accessed 23/11/2019

Muigua recognizes that MNCs have over the years ventured into the control of natural resource exploitation activities in developing countries. This is because MNCs have financial resources, human and technical expertise as well as an influence in the global market.<sup>76</sup>

The paper recognizes that MNCs control over 50% of the upstream petroleum industry in the world. These MNCs can be said to have control of the manufacture and consumption of ozone degrading gases from these upstream petroleum operations. They are believed to contribute to over 50% of greenhouse gases emitted in the world and hence greatly contributing to global warming.<sup>77</sup>

Exploitation of resources in Africa is mainly done by MNCs. These MNCs however are not concerned about the impact their actions have in Africa. The paper recognizes that indeed there are advantages in engaging MNCs in the extractive industry due to their financial and technical resources as well as influence in the market, despite this, actions by MNCs in the exploitation of natural resources usually leaves behind environmental and social disasters.

Activities by MNCs have led to widespread degradation of the environment, livelihoods, pollution and in some instances led to war. <sup>78</sup>This is attributed to the desire by MNCs to control natural resources in Africa for their economic benefits. This has led to conflicts in Africa and specifically in DRC Congo. MNCs thrive in conflicts as they take advantage of these conflicts to continue exploiting these resources.

MNCs enter into contracts with host states for the exploitation of natural resources. When entering into these contracts, MNCs aim at ensuring maximum profits for themselves at the detriment of host states. Some of these formal engagements with MNCs are often entered into a questionable way mostly influenced by high level corruption. This is because MNCs have

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<sup>76</sup> K. Muigua, ' Multinational Corporations, Investments and Natural Resource Management in Kenya. ' [ 2018] KMCO 2, 3

<sup>77</sup> Ibid

<sup>78</sup> Ibid

political influence on poor countries' governments in natural resource exploitation and investments.<sup>79</sup>

MNCs have been called out for exploiting the weak legal and regulatory frameworks in place in developing countries. MNCs use these weak regimes to violate laws in place in these countries. They also use their financial capabilities to interfere with legal proceedings against them and work with corrupt state officials to make sure that they are not held accountable for their wrong doing.

In order to ensure that MNCs activities are sustainable, it is important for MNCs to respect the rights of the people in their areas of operation. Host states also have the responsibility to ensure that MNCs are held accountable for any violations of these rights. States must have regulations to ensure that these corporations respect rights of individuals as well as protect the environment.<sup>80</sup>

Due to incapacity in terms of finances and infrastructure, Kenya can only work with MNCs in its upstream petroleum industry. Kenya has engaged Tullow Oil among other corporations to carry out oil and gas exploitation and exploration in Turkana.

The discovery of oil in Turkana is hoped to bring economic liberation to Kenya and its people. Despite this, Kenya should be wary of the resource curse phenomenon that other oil producing countries in Africa have suffered from. This is where exploitation of natural resources has instead led to severe environmental pollution and violence and resulted to poverty and devastation among locals.

This paper has acknowledged that issues such as absence of strong policies for environmental conservation are the main reasons for pollution of the environment by MNCs. MNCs that conduct their operations in Kenya are bound by the legal structure that has been established including international legal structure. It is also important to involve other stakeholders in the

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<sup>79</sup> K. Muigua, ' Multinational Corporations, Investments and Natural Resource Management in Kenya. ' [ 2018] KMCO 2, 3

<sup>80</sup> Ibid

civil society in maintaining accountability by MNCs. Pressure from these entities has been seen to yield positive results as MNCs have from this pressure adopted sustainable practices.<sup>81</sup>

**K. Muigua** in his paper **Conserving Biodiversity for a Better Future** discusses the importance of biodiversity conservation for purposes of achieving the sustainable development goals. This paper recognizes that conservation of biodiversity must be treated with urgency and calls upon all stakeholders and corporation from all countries to join hands in the conservation.

Biodiversity is negatively impacted by human activities. This paper recognizes importance of biodiversity in the provision of ecosystem services which are essential to human beings. These ecosystem services include being a source of food, water as well as regulating the climate.<sup>82</sup>

The paper recognizes the sustainable development concept in the use of natural resources. The sustainable development concept calls for the use of ecosystem services while recognizing the need for the environment to replenish itself for future generations.<sup>83</sup>

This paper analyzes various international and national regulatory frameworks for biodiversity conservation. These include, the Convention on Biodiversity (CBD), International Convention on Protection of New Plant Varieties, Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), World Trade Organization Trade Related Aspects of Intellectual Property Rights (WTO-TRIPS) Agreement as well as the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) inter alia. At the national level, the paper analyzes the provisions of The Constitution of Kenya 2010, Kenya's vision 2030, Environment (Management and Coordination) Act 1999, Wildlife Conservation and Management Act 2016, Water Act 2016, Biosafety Act 2016 as well as the Climate Change Act inter alia.<sup>84</sup>

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<sup>81</sup> K. Muigua, ' Multinational Corporations, Investments and Natural Resource Management in Kenya. ' [ 2018] KMCO 2, 3

<sup>82</sup> K. Muigua, ' Conserving Biodiversity for a better future' [ 2021] KMCO 2, 3

<sup>83</sup> Ibid

<sup>84</sup> K. Muigua, ' Conserving Biodiversity for a better future' [ 2021] KMCO 2, 3

The paper there after discusses the challenges in the effective conservation of Biodiversity in Kenya. It recognizes that conservation of Biodiversity in developing countries is affected by various challenges including; slow economic development, poverty, unequal land distribution, high population increase and commercial interests in natural resource extraction.<sup>85</sup>

NEMA has highlighted the key drivers to biodiversity loss as being direct or indirect. The direct drivers include, land use change and habitat destruction inter alia. The indirect drivers include weak economy and policies in the country, unsustainable use of resources, weak management systems and lack of information and lack of public awareness.<sup>86</sup>

The paper thereafter discusses measures to ensure conservation of biodiversity in the country and hence achieving sustainable development agenda. These include:

- Adoption of sustainable methods for the exploitation natural resources;
- Enhancing environmental education in school curricula;
- Adopting rights-based approaches to biodiversity conservation; and
- Use of effective pest control measures.

The paper concludes by recognizing that effective conservation of biodiversity important to secure the future of human beings and all living organisms.<sup>87</sup> All efforts towards securing sustainable development must include conservation of Biodiversity. Conservation of Biodiversity is therefore urgent.

The articles discussed above are important to this thesis as they address the key issues that are subject for discussion in this paper. Fidel's work as well as that of C Ugochukwu et al highlights the inefficiency of Nigerian Laws in cubing environmental pollution by the upstream petroleum operations in the Niger Delta in Nigeria.

The works of L. Patey and K. Muigua seek to address key issues surrounding the upstream petroleum industry in Kenya. The papers have together addressed the importance of

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<sup>85</sup> Ibid

<sup>86</sup> Ibid

<sup>87</sup> Ibid



biodiversity, the risks that biodiversity faces in the upstream petroleum operations, the current legal framework as well as the challenges in implementation of the current legal and regulatory framework.

This paper relying on the works of its predecessors will seek to address the risks that biodiversity in the country faces as a result of upstream petroleum operations that are currently underway in the country. The paper will analyze the current legal and regulatory framework as well as their effectiveness in biodiversity conservation in the country. The paper will thereafter make relevant recommendations.

#### **CHAPTER BREAKDOWN:**

This research shall be broken down as follows:

##### **Chapter 1: Introduction**

##### **Chapter 2: International Legal Framework for Biodiversity Conservation**

This chapter will seek to highlight Kenya's obligations for Biodiversity conservation under International Law.

##### **Chapter 3: Kenya's Legal Framework for Biodiversity Conservation from the Impact of the upstream petroleum industry:**

This chapter will analyze the current legal framework for conservation of biodiversity from the impact of the upstream petroleum industry.

##### **Chapter 4: Kenya's Institutional and Regulatory Framework for Biodiversity Conservation from the Impact of the Upstream Petroleum Industry:**

This chapter will analyze the current institutional and regulatory framework for conservation of biodiversity from the impact of the upstream petroleum industry and their effectiveness.

##### **Chapter 5: Conclusion & Recommendations.**

This chapter will provide the conclusion of the study and provide relevant recommendations to ensure that legal and regulatory framework is effective.

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## Chapter 2:

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### 2.1 Kenya's Obligations for Conservation of Biodiversity under International Law:

#### Introduction:

International legal instruments form part of Kenyan law through the provisions the Constitution. Article 2 (5) of the Constitution of Kenya 2010 provides:

*'General rules of international law shall form part of the law of Kenya.'*<sup>88</sup>

Article 2 (6) provides,

*'Any treaty or convention ratified by Kenya shall form part of the law of Kenya under the constitution.'*<sup>89</sup>

This chapter seeks to highlight Kenya's obligations for conservation of biodiversity under international law. This will be limited to obligations in respect to in situ conservation, Prior Impact Assessment, Public Participation and Access and Benefit Sharing.

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<sup>88</sup> Constitution of Kenya 2010 Article 2(5)

<sup>89</sup> Ibid, Art. 2(6)

### 2.1.1 In situ Conservation of Biodiversity:

In situ conservation of biodiversity is conservation in place or on site. It is biodiversity conservation in nature. It involves the sustenance of adequate species of flora and fauna in their natural habitats.<sup>90</sup>

**The Convention on Biological Diversity** hereinafter referred to as the CBD provides obligations to its members to promote in situ conservation of biodiversity. The CBD is an international legal instrument that seeks to protect biodiversity, advocate for sustainable exploitation of natural resources and for just and impartial sharing of all gains from the use of these natural resources.

The CBD has been ratified by 196 nations in the world. Kenya signed it in June 1992, ratified it July 1994 and became a party on 24th October 1994.<sup>91</sup> The CBD was established due to the recognition that there was significant reduction of biodiversity that was caused by human activities.<sup>92</sup> This was due to the rapid growth in industrialization, technology as well as human population. There was little information on biodiversity hence the need to develop capacities to provide information, plan and implement plans for biodiversity conservation.

The CBD recognizes that protection and sustainable exploitation of Biodiversity is key in achieving ecosystem services for the growing world's population. The CBD therefore seeks to promote prudent exploitation Biological Diversity resources for sustainability.<sup>93</sup>

Article 8 of the CBD obligates the member states to fulfill the following mandates in order to conserve biodiversity in situ:

- a) Identify Protected Areas:

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<sup>90</sup> Convention on Biodiversity, 1992 Article 2, Use of Terms, Secretariat of the Convention on Biological Diversity, Montreal Canada. [online] available at <https://www.cbd.int/> last accessed on 2<sup>nd</sup> August 2021.

<sup>91</sup> The Convention on Biological Diversity, 1992. [Online] available at <https://www.cbd.int/> accessed on 2<sup>nd</sup> August 2021.

<sup>92</sup> Ibid, Preamble.

<sup>93</sup> The Convention on Biological Diversity, United Nations, 1992. [online] available at <https://www.cbd.int/> accessed on 2<sup>nd</sup> August 2021.

The CBD mandates each member state to identify special areas where special measures will be put in place for conservation of biodiversity. These are known as 'protected areas'. Members are further required to come up with measures for the identification, creation and control of these protected areas.<sup>94</sup>

b) Regulation and Management of Biological Resources:

Parties to the CBD are mandated to take steps to control biological resources that are important for biodiversity conservation. This applies to biological resources found within and out of protected areas. This is to ensure there is protection and sustainable exploitation of these resources.<sup>95</sup>

c) Regulation and Control of Activities:

Member states are obligated to promote sustainable development activities that seek to conserve the environment in areas close to protected areas to ensure maximum protections of these areas.<sup>96</sup>

d) Rehabilitation and Restoration:

Member states are obligated to develop and maintain plans and other management strategies for the mending and restoration of degraded ecosystem and conserve threatened species.<sup>97</sup> This would be applicable in instances where there is an occurrence that has led to loss of biodiversity.

e) Traditional Knowledge and Practices:

Member states are expected to; recognize the creations and practices of native communities entailing their traditional ways of life that are necessary for the protection and sustainable exploitation of biodiversity. Members should encourage the exploitation of such knowledge in

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<sup>94</sup> Ibid, Art. 8

<sup>95</sup> Ibid

<sup>96</sup> Ibid

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co-operation with these communities.<sup>98</sup>They are also obligated to encourage the just and impartial sharing of gains that come from the use of their knowledge in the process of biodiversity conservation.

### **2.1.2 Prior Assessment of Potential Impact:**

Prior Assessment of Potential Impact involves, Environmental Impact Assessment and Strategic Environmental Assessment. Environmental Impact Assessment (EIA) is the prior examination of the possible impacts that a proposed project has on the environment. This could be positive or negative impacts on the people, their property as well as on the environment. EIA concludes by identifying measures that can be taken to minimize the negative effects, while majoring on the positive effects.<sup>99</sup>

Strategic Environmental Assessment (SEA) on the other hand is the formal and exhaustive process of examining impacts that a policy, plan or programme would have on the environment. SEA is important as its findings are used in making publicly accountable decisions.

SEAs provide a process for analyzing impacts of programmes, plans and policies while at the same time identifying alternative methods for the sustainable use of resources.<sup>100</sup>

Impact assessment as an issue has been addressed in all biodiversity related conventions. These require contracting parties to promote impact assessment for biodiversity conservation as discussed below:

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<sup>98</sup> The Convention on Biological Diversity, United Nations, 1992. [online] available at <https://www.cbd.int/> accessed on 2<sup>nd</sup> August 2021.

<sup>99</sup> Environment Management and Coordination Act 2019 s 2

<sup>100</sup> Ramsar Convention and Impact Assessment; "People and Wetlands: The Vital Link" 7th Meeting of the Conference of the Contracting Parties to the Convention on Wetlands (Ramsar, Iran, 1971), San José, Costa Rica, 10-18 May 1999 [online] available at <https://www.ramsar.org/> Accessed on 2<sup>nd</sup> August 2021.

**a) The Rio Declaration on Environment and Development:**

The Rio Declaration calls for EIA to be conducted for all proposed projects that have potential negative effects on the environment. Principle 17 requires EIA to be done for all proposed activities that may have considerable negative effects on the environment.<sup>101</sup>

**b) The CBD:**

The CBD under Article 14 calls upon contracting parties to put in place EIA procedures. These are to make sure that programmes and policies with potential negative effects on the environment are taken into account.<sup>102</sup>

The CBD identifies impact assessment as an important tool for protection of biodiversity and sustainable use which are the key goals of the convention. The COP at The Hague in 2002 passed the draft guidelines for the integration biodiversity related matters in the legal framework for environmental impact assessment and process as well as in SEAs.<sup>103</sup> The CBD requires its parties to conduct EIA and SEA where necessary to conserve biodiversity.<sup>104</sup>

**c) The Ramsar Convention on Protection of Wetlands of International Importance:**

The regulation and protection of particular habitats and species has been the hallmark of international legal and regulatory framework of natural resources.<sup>105</sup> The regulation on the use and protection of wetlands is one such sectoral and key ecosystem and a vital natural resources law.

The Ramsar Convention seeks to protect wetlands, which harbor a variety of species for purposes of habitat conservation and use. The Ramsar Convention focuses mainly on the

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<sup>101</sup> United Nations Conference on Environment and Development, Rio Declaration on Environment and Development, 31, ILM 874 (1992)

<sup>102</sup> The Convention on Biological Diversity, United Nations, 1992. [online] available at <https://www.cbd.int/> accessed on 2<sup>nd</sup> August 2021.

<sup>103</sup> Ibid

<sup>104</sup> The Convention on Biological Diversity, United Nations, 1992. [online] available at <https://www.cbd.int/> accessed on 2<sup>nd</sup> August 2021.

<sup>105</sup> See, Glenn-Marie Lange, 'Cross-Sectoral Policy Linkages and Environmental Accounting in Forestry' (2017) 23 *Journal of Sustainable Forestry* 47-66.

importance of wetland conservation and the sustainable exploitation of these wetlands with a view to maintain the natural properties of the ecosystem in question.<sup>106</sup>

Kenya ratified the Convention on 30 October 1990 and is bound by the obligations placed upon it in the Convention.

The core obligation is in Article 3 (1) of the Ramsar Convention which states: -

*“The Contracting Parties shall formulate and implement their planning so as to promote the conservation of the Wetlands included in the List, and as far as possible the wise use of wetlands in their territory.”<sup>107</sup>*

The COP of the Ramsar Convention recommended that parties ensure that EIA is conducted for proposed projects that have potential negative effects on wetlands. Impact Assessment is a key tool in assisting parties meet the goals of the convention.

Objective 2.5 calls for parties to; conduct EIA on proposed developments that have potential effect to the ecological nature of wetlands due to development, pollution and any other influences.<sup>108</sup>

Impact assessment is in line with the wise use principle under the Ramsar Convention. Under Article 3.1 of the convention, parties agree to plan to promote protection of wetlands and wise exploitation of wetlands. The wise use concept under the convention applies to all wetlands and water resources in the contracting parties and not only to those of international importance.<sup>109</sup>

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<sup>106</sup> Ramsar Convention and Impact Assessment; “People and Wetlands: The Vital Link” 7th Meeting of the Conference of the Contracting Parties to the Convention on Wetlands (Ramsar, Iran, 1971), San José, Costa Rica, 10-18 May 1999 [online] available at <https://www.ramsar.org/> Accessed on 2<sup>nd</sup> August 2021.

<sup>107</sup> *ibid*

<sup>108</sup> Ramsar Convention and Impact Assessment; “People and Wetlands: The Vital Link” 7th Meeting of the Conference of the Contracting Parties to the Convention on Wetlands (Ramsar, Iran, 1971), San José, Costa Rica, 10-18 May 1999 [online] available at <https://www.ramsar.org/> Accessed on 2<sup>nd</sup> August 2021.

<sup>109</sup> The Ramsar Concept of Wise Use, Ramsar Information Paper No. 7, Ramsar Convention on Wetlands (Ramsar, Iran, 1971.) [online] available at [https://www.ramsar.org](https://www.ramsar.org/) Accessed on 4<sup>th</sup> August 2021.

Impact assessment in biodiversity conservation is based on the following principles:

- a) **No net Loss:** This seeks to ensure that there is no loss of irreplaceable biodiversity. Loss of such irreplaceable biodiversity must be at all times avoided. This principle further advocates for compensation for loss of any other biodiversity.<sup>110</sup>
- b) **Precautionary Principle:** Under this principle, proponents are required to provide evidence that no significant harm to biodiversity will occur because of the proposed project or policy. The Precautionary principle encourages planning based on well-defined goals for purposes of biodiversity conservation to avoid action of future outcomes that have led to loss of biodiversity.<sup>111</sup> This promotes wise and sustainable exploitation of natural resources.
- c) **Local, traditional and indigenous knowledge:** Views and practices of the indigenous community are put in use together with those of other stakeholders and experts in impact assessment.<sup>112</sup>
- d) **Participation:** different groups have interest in the maintenance and use of biodiversity. It is therefore important to involve all stakeholders in the valuation of biodiversity and ecosystem services. All relevant stakeholders should therefore be involved in the impact assessment process.<sup>113</sup>

## 2.2 PUBLIC PARTICIPATION:

Public participation involves informing, consulting and involving the public that is may be affected by a decision and facilitating them to input into that decision.<sup>114</sup> Public participation is key in the conservation of Biodiversity as it ensures; decisions protect public interests, there is

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<sup>110</sup> Ibid

<sup>111</sup> B. Delogu, ' Risk Assessment and the Precautionary Principle' [ 2013] SEHN

<sup>112</sup> The Ramsar Concept of Wise Use, Ramsar Information Paper No. 7, Ramsar Convention on Wetlands (Ramsar, Iran, 1971.)[online] available at <https://www.ramsar.org> Accessed on 4<sup>th</sup> August 2021.

<sup>113</sup> Ibid

<sup>114</sup> E. Tamale, ' Public Participation in Biosafety and Environmental Decision Making, Key Concepts, Good Practices and Lessons Learnt' CBD Secretariat.



enhanced co-operation and sustainability, there is improved democracy, public empowerment, conflict is avoided and trust is built among the stakeholders.<sup>115</sup>

In the conservation of biodiversity, the basic principles of public participation ought to be incorporated. These include:

- a) early notification of the public on matters that require their input;
- b) ensuring that all information in respect the issue at hand is easily accessible by the public;
- c) giving the public reasonable time to give their view on the issue,
- d) sharing knowledge;
- e) being sensitive towards community values; and
- f) Being transparent in addressing concerns raised by the public and considering these concerns in decision-making.

**The CBD** calls upon its members to embrace public participation and access to information in their efforts to conserve biodiversity.

The Preamble of the convention recognizes the important duty that women play in the conservation and sustainable use of biodiversity. It emphasizes the need to embrace the full engagement of women at all levels of policymaking and implementation.<sup>116</sup>

Article 8(i) of the convention calls upon parties to use traditional knowledge and involve local communities in conservation of biodiversity. The parties are expected to recognize traditional knowledge and practices of these communities and promote the use of this knowledge, innovation and practices with their full knowledge and consent. Article 10 obligates parties to support local communities in rehabilitating degraded areas where biodiversity has been reduced.<sup>117</sup>

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<sup>115</sup> Ibid

<sup>116</sup> The Convention on Biological Diversity, United Nations, 1992. [online] available at <https://www.cbd.int/> accessed on 2<sup>nd</sup> August 2021.

<sup>117</sup> Ibid, Art. 8 (1)

Article 13 obligates the parties to educate the public in understanding the importance of conservation of biodiversity and the measures required for conservation. The convention further expects parties to involve the public in EIA procedures.<sup>118</sup>

Public Participation requirements under the CBD are subject to national legislation. It is therefore important for parties to come up with legislation on public participation in conservation of biodiversity for compliance with their obligations under the convention.

**The Rio Declaration** calls upon member states to involve citizens in decision making concerning environmental matters.<sup>119</sup> Principle 11 states that it is important for environmental issues to be handled with the involvement of all concerned parties. States should promote access to information at national level and specifically information concerning hazardous material and actions that may affect the community. Access to information is key in public participation.<sup>120</sup>

States are expected to promote public awareness and participation. This can be achieved by having necessary information readily accessible. Access to information, proceedings both judicial and administrative as well as providing for remedies should be provided for.<sup>121</sup>

### **2.3 Access and Benefit Sharing:**

Access and benefit sharing is among the key objectives of the CBD. This involves the just and impartial sharing of benefits that come from the utilization of genetic resources and associated traditional knowledge.<sup>122</sup>

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<sup>118</sup> Ibid, Art. 13

<sup>119</sup> United Nations Conference on Environment and Development, Rio Declaration on Environment and Development, 31, ILM 874 (1992)

<sup>120</sup> United Nations Conference on Environment and Development, Rio Declaration on Environment and Development, 31, ILM 874 (1992)

<sup>121</sup> Ibid

<sup>122</sup> The Convention on Biological Diversity, United Nations, 1992. [online] available at <https://www.cbd.int/> accessed on 2<sup>nd</sup> August 2021.

Traditional Knowledge is the expertise, practices and innovative means used by native communities. <sup>123</sup>This knowledge is a culmination of collective experiences that are accumulated over the years and gradually incorporated to the topographical and cultural needs of the society. Traditional knowledge is important for conservation of biodiversity.<sup>124</sup>

**The CBD** in its Preamble of acknowledges the possibility of protection and sustainable exploitation of biodiversity through traditional knowledge. <sup>125</sup>Article 8(j) of the CBD obligates contracting parties, recognize traditional knowledge that is essential for the conservation of biodiversity as well as involve such communities in the use of their traditional knowledge in their national laws. It further obligates the parties to encourage fair and impartial sharing of benefits that come from the use of such traditional knowledge.<sup>126</sup>

**The Rio Declaration on Environment and Development** 1992 under Principle 22 recognizes the vital role that native communities have in environmental protection and conservation. Under this Principle, states are called upon to recognize and promote the indigenous communities' culture and interests and assist in their effective participation in the quest for sustainable development. <sup>127</sup>

Considering the importance of traditional knowledge in biodiversity conservation, it is important that the value of TK be used for the advantage of native communities. It is important that the rights of indigenous communities are considered during conversations on access and exploitation of genetic resources.

Under the CBD, parties are mandated to make sure that access to genetic resources and TK is promoted and the gains obtained from their use is fairly and justly shared. These benefits could

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<sup>123</sup> CBD, 'Traditional Knowledge and the Convention on Biological Diversity.' [online] available at <https://www.cbd.int/traditional/intro.shtml> Accessed on 4th August 2021.

<sup>124</sup> Ibid

<sup>125</sup> The Convention on Biological Diversity, United Nations, 1992. [online] available at <https://www.cbd.int/> accessed on 2<sup>nd</sup> August 2021.

<sup>126</sup> Ibid, Art. 8

<sup>127</sup> United Nations Conference on Environment and Development, Rio Declaration on Environment and Development, 31, ILM 874 (1992)

be either monetary or non-monetary. The relevant parties must mutually agree upon the terms of benefit sharing.<sup>128</sup>

### **Conclusion:**

In conclusion, Kenya is a party to international law instruments for conservation of biodiversity as seen above. These instruments obligate their party states to take certain steps to ensure effective conservation of biodiversity. This chapter has been able to show that these obligations include; in situ conservation, Prior assessment of potential impact, public participation and access and benefit sharing. Subsequent chapters will seek to discuss and analyze if Kenya has been able to effectively meet its obligations under these international law instruments.

## **Chapter 3:**

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### **Kenya's Legal Framework for Biodiversity Conservation from the impact of the Upstream Petroleum Industry:**

#### **3.1. Introduction:**

This chapter looks into the Legal framework in place for biodiversity conservation from the impact of the upstream petroleum industry in Kenya. This chapter will analyze the current legal framework in effecting Kenya's obligations for conservation of biodiversity under International Law as discussed in Chapter 2 above.

#### **3.2. In Situ Conservation of Biodiversity:**

The Constitution of Kenya 2010 defines natural resources to include forests, **biodiversity** and genetic resources as well as rocks, minerals, fossil fuels and other sources of energy.<sup>129</sup>Biodiversity is therefore a natural resource and the measures put in place for the exploitation

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<sup>128</sup> The Convention on Biological Diversity, United Nations, 1992. [online] available at <https://www.cbd.int/> accessed on 2<sup>nd</sup> August 2021.

<sup>129</sup> Constitution of Kenya 2010, Art. 260,

and conservation of natural resources under the Constitution apply to issues conservation of Biodiversity.

The constitution obligates the state to take certain steps to conserve the environment and natural resources. Among these measures is the obligation to promote sustainable exploitation, and protection of the environment and natural resources.<sup>130</sup>

**Section 51 of the Environmental Management and Coordination Act (EMCA)** provides for measures to conserve biodiversity in situ. Conservation in situ as earlier discussed entails the conservation of biodiversity in their natural surroundings. Under this section, the CS, Ministry of Environment and Forestry is obligated to promote conservation of Biodiversity in situ.<sup>131</sup>

In doing this, the CS is expected to inter alia give guidelines for use of land in a manner that is in line with conservation of Biodiversity and curtail the introduction of alien species into the natural habitats. The CS is also obligated to integrate the use of TK in the conservation of Biodiversity together with other mainstream scientific knowledge.<sup>132</sup>

In order to protect biodiversity in the country therefore, the CS, Ministry of Environment and Forestry is expected to provide guidelines for the exploration and exploitation of oil and gas in a way that is compatible with conservation of biodiversity. The CS is also expected to give guidelines to ensure that no alien species are introduced into natural habitats in the area during the process of exploitation and exploration of oil and gas in the country. No such measures are in place.<sup>133</sup>

Under the set international law standards national legislation should be able to provide for measures to identify protected areas, regulate and manage biological resources, regulate and manage activities that have potential impact on biodiversity, rehabilitation and restoration of lost biodiversity and incorporate the application of traditional knowledge and practices.

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<sup>130</sup> Ibid, Art. 69

<sup>131</sup> Environment Management and Coordination Act 1999 s 51

<sup>132</sup> Ibid

<sup>133</sup> Ibid

It is evident that Kenyan law has to a large extent been able to capture these requirements. There is however need for the legislation to capture the obligation of rehabilitation and restoration of lost biodiversity by the responsible parties conducting upstream petroleum activities in a given area. It is also important for the law to provide specifically that for in situ conservation of biodiversity during the upstream petroleum industry operations; No living organisms should be removed from the area which these operations are being conducted; that the operations are conducted in a way that essential ecosystem services are maintained and genetic diversity is preserved.

### **3.3. Prior Assessment of Potential Impact:**

**The Constitution of Kenya** recognizes prior assessment of Potential Impact in environmental conservation. Article 67(5) of the Constitution obligates the state to come up with measures to formulate a system for environmental impact assessment, environmental audit and monitoring of the environment.<sup>134</sup>

**The EMCA** defines Environmental Impact Assessment as the assessment done on a project to establish if it will have any adverse effects on the environment.<sup>135</sup> Anybody who intends to conduct upstream petroleum operations in Kenya is required to do a full environmental impact assessment study and present the report to National Environment Management Authority (NEMA) before the authority issues them with any other licence. <sup>136</sup>

Environmental Impact Assessment (EIA) studies conducted in accordance with the provisions of EMCA must be conducted and prepared by experts that are duly authorized by the authority. <sup>137</sup>All EIA studies and reports are to be done in accordance with the provisions of the EIA regulations, guidelines and procedures under the act.

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<sup>134</sup> Constitution of Kenya, 2010 Art. 67(5)

<sup>135</sup> Environmental Management and Coordination Act 1999 S 2

<sup>136</sup> *Ibid*, S 42(1)

<sup>137</sup> *Ibid*

Regulation 4 of the EIA Regulations prohibits any proponent of a project in Kenya that is likely to have adverse impact on the environment or which an EIA is required under the EMCA from implementing such a project unless an EIA has been conducted and approved in accordance with the regulations. <sup>138</sup>Regulation 4 (2) prohibits any licensing authority from issuing a licence for any project that an EIA is required unless such an applicant produces an EIA licence issued by NEMA. <sup>139</sup>

### **EIA Licence:**

NEMA will issue an EIA licence once NEMA is satisfied on the EIA that has been conducted. The authority may attach any terms and conditions as it may think fit and necessary to the licence it issues for purposes of facilitating sustainable development and sound environmental conservation. <sup>140</sup>

In case of change in the project or operations of the project that the authority considers to be substantial change, the authority may require the holder of an EIA licence to present a fresh EIA study or review at its own cost after issuance of the licence. <sup>141</sup>

An environmental inspector may inspect ongoing projects to ascertain that the activities are conducted in accordance with the EIA study report issued. Kenya's legislation has been able to adequately capture the requirement for prior impact assessment as provided for by international law.

Regulation 12 provides that each sector shall develop its own EIA guidelines by its lead agency in consultation with NEMA. Currently, there are no EIA guidelines developed by EPRA for the Petroleum Industry. <sup>142</sup>

### **Strategic Environment Assessment (SEA):**

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<sup>138</sup> Environmental (Impact Assessment & Audit) Regulations 2003 Regulation 4

<sup>139</sup> Environmental (Impact Assessment & Audit) Regulations 2003 Regulation 4

<sup>140</sup> Environmental Management and Coordination Act 1999 S 63

<sup>141</sup> Ibid, S 64

<sup>142</sup> Environmental (Impact Assessment & Audit) Regulations 2003 Regulation 12

Regulation 42 of the EIA Regulations provides that SEA is to be done by key agencies in consultation with NEMA. These agencies are to give all proposals for environmental implementation to a strategic environmental assessment to determine which ones are the most environmentally friendly and cost effective when implemented.<sup>143</sup>

Kenya has been able to meet its obligations under international law to provide for prior impact assessment for purposes of biodiversity conservation. This is by have laws that make it mandatory for EIA to be conducted for every project that has potential negative effect on the environment as well as making provisions for SEA.

The laws have been able to define EIA and SEA, give clear procedures for conducting EIA, the issuance of EIA licences as well as revocation of such licences.

### **3.4. Public Participation:**

#### **The Constitution of Kenya 2010.**

All citizens in Kenya have the right to participate on decision making processes for issues that impact them. Public participation is important for the implementation of the Kenyan Constitution as it promotes democracy. Public participation gives a change to the public to take part in decision making processes by the government.

Article 1(2) of the Constitution of Kenya 2010 recognizes that all sovereign power belongs to the people of Kenya. Article 10 of the constitution provides for national values. Among the national values under Article 10(2) is participation of the people and inclusiveness. Article 27 guarantees equality and non-discrimination.<sup>144</sup> This can be achieved by allowing inclusiveness and public participation in decision making. Article 35 guarantees all citizens the right to access information.<sup>145</sup>

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<sup>143</sup> Ibid, Regulation 42

<sup>144</sup> Constitution of Kenya, 2010, Art 1(2), Art. 10, Art. 10(2)

<sup>145</sup> Ibid, Art. 35



The Constitution mandates the state to promote public participation in the management, protection and conservation of the environment.<sup>146</sup> Article 69 (2) of the Constitution of Kenya obligates every person to work with the state or any other person in the protection and conservation of the environment as well as in ensuring ecologically sustainable development and the exploitation of natural resources. Every person undertaking upstream petroleum activities in Kenya must work with the state as well as other actors in the sector for sustainable development and conservation of biodiversity in the country.<sup>147</sup>

#### **The County Government Act:**

Local communities are granted the right to manage their affairs and development under Article 174(d) of the Constitution. This has been implemented by devolution. The County Government Act makes public participation compulsory in county planning.

Under the Act, the right to public participation includes the right to timely access information.<sup>148</sup> The Act obligates County Governments to promote the formulation of modalities and platforms for public participation.<sup>149</sup> County Governments are also obligated under the Act to establish a mechanism to facilitate public participation and access to information using the media.<sup>150</sup>

#### **Environment Management and Co-ordination Act (EMCA):**

##### **Public Participation in EIA:**

EMCA obligates NEMA to ensure there is public participation during EIA. Once an EIA study report has been presented to NEMA, the authority is required to have the study report published in the Kenya gazette, at least 2 newspapers circulating in the area of the proposed project as well as over radio. The publication shall inter alia provide a summary of the project,

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<sup>146</sup> Ibid, Art. 69(1)(d)

<sup>147</sup> Constitution of Kenya, Art. 69(2)

<sup>148</sup> The County Governments Act S 87

<sup>149</sup> Ibid, S 91

<sup>150</sup> Ibid, S 94, S 95 & S 96

state the location of the project and the area where the EIA study was conducted.<sup>151</sup>The publication shall give a period of not exceeding 60 days where any person is given an opportunity to submit oral or written comments on the EIA.<sup>152</sup>

The authority may request for the views by any lead agency in respect to an EIA study.<sup>153</sup> The Authority may formulate a technical advisory committee to advise it on the environmental impact assessment related reports.<sup>154</sup>

### **Environment (Impact Assessment and Audit) Regulations 2003:**

The regulations provide for public participation under Regulation 17. Public participation is to be conducted by both the proponent of a project and NEMA. During the EIA process, any person proposing a project is required to seek the views of people likely to be affected by the project in consultation with NEMA.<sup>155</sup>

NEMA on the other hand is obligated to have public participation as per the provisions of the EMCA above. Further, NEMA is obligate to where necessary hold a public hearing. During the hearing, it will take both written and oral comments by the people.

Neither the EMCA nor the EIA regulations provide a procedure for incorporating the people's views at the decision-making stage. It is left to the discretion of NEMA to decide which concerns ought to be addressed and those not to be considered. This is discouraging to the public to air the views and have them not considered in the final decision making.

The laws also do not provide for the need to get back to the people once a decision has been made and let the people know the criteria used in the decision making, the need for continuous public participation throughout the project period to ensure that the proponents or holders of EIA licences keep to the terms of the licence, channels for giving views and concerns incase the

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<sup>151</sup> Environmental Management and Coordination Act 1999 s 59

<sup>152</sup> Ibid, S 59

<sup>153</sup> Ibid, S 60

<sup>154</sup> Ibid, S 61

<sup>155</sup> Environmental ( Impact Assessment & Audit) Regulations 2003 Regulation 17

contractors go against the terms of the EIA licence or there are adverse impacts that were not expected under the EIA.

Effective public participation can be achieved by promoting timely access to information, giving reasonable time to share concerns and having a proper structure to address concerns raised. Our laws to a large extent been able to capture the aspect of public participation in conservation of biodiversity from the impact of the upstream petroleum industry.

This is through having public participation and access to information as constitutional rights to bringing it closer to the people through devolution. The county governments have been given a role to ensure that people are able to access information in a timely manner, are given ample time to air their concerns and these concerns are taken into consideration during decision making. Despite this, there are shortcomings to the laws as discussed above. It is therefore important for the laws to address these shortcomings for effective EIA.

### **3.5. Access and Benefit Sharing:**

Traditional Knowledge is a key tool for conservation of biodiversity in the Country. The Protection of Traditional Knowledge and Cultural Expressions Act, 2016 defines Traditional Knowledge as any knowledge "... Contained in the codified knowledge systems passed on from one generation to another including agricultural, environmental or medical knowledge associated with genetic resources or other components of biological diversity ...."<sup>156</sup>

Indigenous communities contain diverse knowledge on conservation of biodiversity. This knowledge ought to be tapped into for purposes of conservation of biodiversity from the impact of the upstream petroleum industry in the country. Any gains coming from the use of such traditional knowledge ought to be shared with these local communities.

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<sup>156</sup> Protection of Traditional Knowledge and Cultural Expressions Act 2016 S 2.

### **Constitution of Kenya 2010:**

The Constitution of Kenya recognizes indigenous communities and seeks to protect their rights. Article 11(2)(b) obligates the state to recognize the role of indigenous technologies in national development.<sup>157</sup> Sub article 3 obligates the parliament to enact legislation that will ensure that communities receive compensation for the use of their culture and cultural heritage.<sup>158</sup> Article 69(h) of the Constitution obligates the state to take measures to exploit the environment and natural resources for the advantage of the people of Kenya. <sup>159</sup>

### **Protection of Traditional Knowledge and Cultural Expressions Act, 2016:**

This Act seeks to help communities be in charge of the exploitation of traditional knowledge and expressions that are culturally significant and economically valuable. The Act creates a new form of Intellectual Property Right that is held by the community. This act is in implementation of Article 11(3)(a) of the Constitution. The IPR, Traditional Knowledge is administered by the Kenya Copyrights Board (KECOBO).<sup>160</sup>

Section 4 of the Act obligates County Governments to;

- a) Collect and compile information relating to Traditional Knowledge in the county;
- b) Preserve and conserve the TK and cultural expressions;
- c) Protect and promote TK;
- d) Facilitate sharing and availability of information and data concerning TK and cultural expressions. <sup>161</sup>

### **Petroleum Act 2019:**

The act recognizes the division of revenues from oil development. Under Section 58(1) of the Act the national government's share of profits from the upstream petroleum operations shall be

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<sup>157</sup> Constitution of Kenya 2010 Art 11 (2)(b)

<sup>158</sup> Ibid Art. 11 (3)

<sup>159</sup> Ibid Art 69

<sup>160</sup> Protection of Traditional Knowledge and Cultural Expressions Act 2016 S 2.

<sup>161</sup> Protection of Traditional Knowledge and Cultural Expressions Act 2016 S 4

apportioned among the national government, the county government and local community. The county government shall get 20% of the national government's share<sup>162</sup> while the local community will get 5% of the national government's share. <sup>163</sup>

It is presumed that the county and native communities get a share of the revenue due to the fact that these communities believe that these oil resources belong to them as well as the fact that their lives are disrupted by the oil development process including relocation as well as bearing the impacts of the oil development in the area.

It is not specified if this share is also to compensate these communities for exploitation of their traditional knowledge.

It is important for the act to specify the reasons why these communities are getting a dividend of the gains from the upstream petroleum operations. This will prevent a scenario where the communities may claim for compensation for use of their TK in conservation of the environment and it will be that they receive a share of the profits hence can't be compensated further.

Kenya is among the few countries that have been able to come up with legislation for access and benefit sharing especially in the exploitation of Traditional Knowledge. Kenya has therefore been able to comply with its obligations under international law in including ABS and TK in its national legislation.

### **Conclusion:**

In conclusion, this chapter has been able to show the current legal framework for conservation of biodiversity in Kenya from the impact of the upstream industry in line with the country's international law obligations. It is clear that to a large extent Kenya has been able to domesticate its international law obligations through national legislation. There are also some shortcomings to these laws that ought to be addressed for effective conservation of biodiversity.

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<sup>162</sup> Petroleum Act, 2019, S 58(2)

<sup>163</sup> Ibid, S 58(3)

The main question therefore is on the implementation of these laws. How well has Kenya been able to implement these laws for conservation of biodiversity from the impact of the upstream petroleum industry? The Subsequent chapter will be able to address this.

## **CHAPTER 4:**

### **4. Kenya's Institutional and Regulatory Framework for Biodiversity Conservation from the Impact of the Upstream Petroleum Industry:**

#### **4.1 Institutional and Regulatory Framework:**

##### **4.1.1 In situ Conservation of Biodiversity:**

#### **Ministry of Environment and Forestry:**

Section 50 of the EMCA obligates the Cabinet Secretary, Ministry of Environment and Forestry to on the recommendation of NEMA: Maintain an inventory of Biodiversity in the country, determine all endangered biodiversity, identify potential risks to the biodiversity come up with measures to curb and remove these effects.<sup>164</sup>

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<sup>164</sup> EMCA (Amendment) Act, 2015 S 50

The Ministry is also obligated to give guidelines for the use of land in a manner that is in line with protection of biodiversity, to come up with ways to protect vulnerable ecosystems, and prohibit the introduction of alien species into natural habitats. <sup>165</sup>

To control pollution from the upstream petroleum operations in the Country, the Ministry is obligated to have a criteria and procedure for the determining water and air quality;<sup>166</sup> analyze discharge of effluents and recommend measures for the treatment of effluent;<sup>167</sup> issue recommendations to reduce emission of greenhouse gases and technologies fit to minimize air pollution<sup>168</sup> and identify materials that are dangerous to the environment and issue guidelines for the elimination of such materials.

Therefore, in conservation of biodiversity in situ from the impact of the upstream petroleum industry in Kenya and specifically in Turkana where upstream petroleum operations are underway, the CS is expected to have an inventory of all biodiversity in the area, determine which components of biodiversity in the area is rare, endangered or threatened, identify potential risks or threats to biodiversity that come with the upstream petroleum operations and come up with measures to remove these threats. <sup>169</sup>

The CS is also expected to issue guidelines for; proper extraction of oil resources that are conversant with biodiversity conservation, have special arrangements vulnerable biodiversity in the area as well as control and prohibit the introduction of alien species into natural habitats in the area. <sup>170</sup>

The CS has not performed any of its obligations in in situ conservation of biodiversity from the upstream petroleum industry in the Country and specifically in Turkana. This could be attributed to the fact that the act provides that the CS will perform its obligations on the advice

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<sup>165</sup> Ibid, S. 51.

<sup>166</sup> Ibid, S.71 &78.

<sup>167</sup> EMCA (Amendment) Act, 2015 S.86.

<sup>168</sup> Ibid, S.78.

<sup>169</sup> Ibid

<sup>170</sup> Ibid

of NEMA. In this case therefore it is possible that NEMA is yet to advise the CS to perform its obligations for in situ conservation. This is detrimental to conservation of biodiversity.

### **Kenya Forests Service (KFS)**

Kenya Forests Service is established under the Forest Act.<sup>171</sup> Its mandate is to protect, develop and sustainably manage forest resources in the country.<sup>172</sup> Forests harbor a wide range of biodiversity. KFS therefore manages protected areas that are key for conservation of biodiversity in their natural habitat. It is supported by Kenya Forest Research Institute (KEFRI) in in situ conservation. KEFRI conducts research that facilitates conservation of biodiversity in their natural habitat.

Kenya has gazette a number of forests. In Turkana County specifically, there are three gazette forests. These are Lodwar Town Forest, Kakuma Forest and Loima Hill Forest. KFS is therefore obligated with the conservation of these forests.

In the management and protection of forest resources, KFS faces the following challenges:

- i. Inadequate Co-ordination among various agencies tasked with the conservation of the environment and forests. These include NEMA which is tasked with the overall conservation of the environment as well as KWS tasked with managing wildlife which are found in forests. Lack of coordination among these agencies has led to duplication of roles leading to inefficient management of forest resources hence loss of biodiversity.<sup>173</sup>
- ii. Understaffing at KFS: Internationally the recommended ratio of ranger to hectares of forest is 1 ranger to 400 hectares of forest in a vehicle. At KFS the ratio is 1 ranger per 972 hectares of forest on foot. KFS is overburdened with the enforcement of forest conservation measures while at the same time tackling forest crimes.<sup>174</sup>
- iii. Large tracts of indigenous forest remain unmanned; KFS focuses on forest plantations and abandons indigenous forest cover. Large tracts of forests are left unmanned hence

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<sup>171</sup> Forest Conservation and Management Act 2016 S 7

<sup>172</sup> Ibid S 8

<sup>173</sup> The Taskforce Report on Forest Resource Management and Logging activities in Kenya by the Ministry of Environment and Forestry, 2018

<sup>174</sup> Ibid



open for misuse.<sup>175</sup> This is the case in Turkana where forest spaces are deep jungles with no humans accessing. There is no KFS office in Turkana. These forests are therefore at risk.

- iv. Lack and inadequate equipment; KFS has only one aircraft to handle forest fires and no pilot to fight these fires.<sup>176</sup> This is a risk factor in Turkana area considering that the region is an ASAL. With exploration and production of petroleum activities underway in the area, forest fires are more likely to occur. It is therefore important for KFS to have adequate equipment to fight such fires.

#### **Kenya Wildlife Service (KWS):**

KWS is established by the Wildlife (Conservation and Management) Act.<sup>177</sup> It is obligated to protect and manage wildlife in Kenya. KWS is solely in charge national parks in the country. <sup>178</sup> It issues licenses and supervises all wildlife conservation and management. It is also concerned with activities outside protected areas that may have an impact on wildlife.

KWS is therefore in charge of in situ conservation of biodiversity within national parks. Kenya has a number of national parks. Turkana County is home to the Lake Turkana National Reserves. These include, Sibiloi, Central and Nothern Island Reserves.<sup>179</sup>

In conservation of Biodiversity in Turkana, KWS has to work with other agencies including NEMA, KFS, KEFRI as well as local communities. As discussed above there is lack of co-ordination among these lead agencies leading to duplication of roles inter alia hence making conservation of biodiversity in these reserves inadequate.

#### **National Environment Management Authority (NEMA)**

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<sup>175</sup> Ibid

<sup>176</sup> ibid

<sup>177</sup> Wildlife Conservation and Management Act 2013 S 6

<sup>178</sup> Ibid S 7

<sup>179</sup><https://whc.unesco.org/en/list/801>

The National Environment Management Authority (NEMA) is established under Section 7 of the EMCA. NEMA is in charge of all environmental matters in the country. It is the main government agency in the implementation of all environmental policies.<sup>180</sup> NEMA therefore coordinates the various activities undertaken by other lead agencies. In the in-situ conservation of biodiversity, NEMA is obligated to work with other lead agencies and promote the development of policies plans and programmes for in situ conservation. As discussed above, NEMA is obligated to advise the Ministry of Environment and Forestry to perform the ministry's obligations under EMCA. It is also obligated to advise the government on steps to be taken to ensure sustainable use and management of biodiversity.<sup>181</sup>

NEMA is obligated to work with all lead agencies for purposes of conservation of the environment and biodiversity specifically. These Lead agencies as seen above include the Ministry of Environment and Forestry, KFS and KWS. Due to this, there is risk of overlapping and conflicting mandates and this may result to loss of biodiversity. For example in in situ conservation of biodiversity in Turkana, KFS has a mandate to control the use of forest resources, at the same time the national game reserves in Turkana are under both KFS and KWS due to the presence of animals in these reserves. The county government also has a mandate to implement national polices under Article 189 of the Constitution. NEMA has the overall mandate to control these Agencies for conservation purposes. This overlapping and conflict of mandates is in the detriment of biodiversity conservation.

Kenya has great laws on conservation of biodiversity in its natural surrounding as seen in chapter 3. Despite the presence of these laws, implementation has proven to be a challenge. As discussed above, a number of agencies are tasked with the implementation of laws on in situ conservation of biodiversity. These agencies are faced with various challenges that make implementation of these laws inadequate. These challenges have been seen to include lack of co-ordination among lead agencies leading to overlapping and conflicting mandates; understaffing and lack of resources.

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<sup>180</sup> K. Muigua, D.Wamukoya and F. Kariuki, *Natural Resources and Environmental Justice in Kenya*. (1st, Gleenwood publishers , Nairobi 2015) e.g. 15

<sup>181</sup> K. Muigua, D.Wamukoya and F. Kariuki, *Natural Resources and Environmental Justice in Kenya*. (1st, Gleenwood publishers , Nairobi 2015) p. 167

It is important for these shortcomings to be addressed for effective implementation of the law and to prevent loss of biodiversity.

#### **4.1.1. Prior Assessment of Potential Impact:**

##### **National Environment Management Authority (NEMA):**

NEMA is in charge of EIA in the country. It is obligated to;

- a) Receive EIA reports from persons intending to conduct upstream petroleum operations in the country;<sup>182</sup>
- b) Issue EIA Licences;
- c) Give conditions attached to EIA Licences where necessary to promote sustainable development and sound management of the environment; and

Currently Tullow oil is undertaking early oil pilot scheme in Turkana. Since its commencement of activities in Turkana, Tullow has conducted up to 14 Environmental Impact Assessment Studies. In 2018, Tullow submitted an EIA project report for the early oil pilot schemes in Turkana. NEMA has also issued EIA Licences for the upstream petroleum operations by Tullow in Turkana.<sup>183</sup>

All EIA study reports conducted for purposes of getting an EIA Licence by NEMA can only be accessed by the general public at the NEMA headquarters in Nairobi or at the County NEMA offices. This is inefficient for the access of information by the general public. It would be efficient for NEMA to publish these reports on their website for ease of access.

Once an EIA study report has been presented to NEMA, the authority does not conduct field studies of its own to assess or confirm the reports submitted. Instead NEMA relies mainly on public participation and submissions by other agencies and experts to issue EIA licences. This is detrimental to conservation as information presented may be misleading hence leading to loss of biodiversity.

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<sup>182</sup> Environmental Management and Coordination Act 1999 s 59

<sup>183</sup> Tullow Oil 'Focus on Sustainability' 2020 [online] available at <https://www.tulloil.com> Accessed on 2<sup>nd</sup> July 2021.

### **Tullow Oil PLC:**

Tullow Oil PLC is the MNC conducting upstream petroleum operations in Turkana. For effective conservation of the environment and biodiversity, Tullow has gone beyond the EIA requirements under statute to define its internal site specific assessment (SSA) procedures.<sup>184</sup> These are its internal risk management and assessment process that supplements the statutory ESIA requirements.

The SSA by Tullow involves the participation of internal departments and external stakeholders including the local community representatives and KWS inter alia. The SSA seeks to verify the existence of homesteads, grazing areas, archeological remains and other cultural heritage, vegetative cover, river channels etc. The SSA determines the environmental and social effects that developing a site would have.<sup>185</sup>

The SSA includes:

1. An inventory of all people affected by the project;
2. Assessment of biodiversity in the proposed site and the importance of such biodiversity;
3. Identification of key breeding seasons for wildlife and the locations of such breeding;  
and
4. Mapping of homesteads both permanent and temporary, assets, agriculture, land use and bird breeding locations in the designated sites.

This initiative by Tullow is important for the conservation of biodiversity in Turkana. It is able to capture possible environmental and social impact that could not have been captured in the statutory EIA. This move is commendable as it creates confidence on the people that the MNC is mindful of the Environment and Society in the project area and not just the benefits from the production of oil as it is believed.

The government therefore, should provide measures to encourage self-regulation.

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<sup>184</sup> Ibid

<sup>185</sup> Tullow Oil 'Focus on Sustainability' 2020 [online] available at <https://www.tulloil.com> Accessed on 2<sup>nd</sup> July 2021

#### **4.1.2. Public Participation:**

##### **Kenya Forest Services (KFS):**

As stated above, KFS is in charge of management of forest resources in Kenya. KFS works with local communities to enable it achieve its mandates.<sup>186</sup> Communities adjacent to forests have formed and registered groups to participate in forest management. They have joined hands with KFS to make sure there is sustainable exploitation and management of forest resources.

As stated above, Turkana is home to three gazetted forests, Lodwar Town, Kakuma and Loima Hill Forests. To manage these forests, KFS is mandated to work with and involve the local communities in the management process. It is well known that Turkana is inhabited by a Pastoralist community. This therefore poses a challenge to KFS to adequately involve the locals in the management process. Also, KFS does not have an office in Turkana County. KFS officers are therefore not present in the county and this poses a challenge in public participation. The General Public do not have a proper channel to air their concerns or suggestions for purposes of conservation of these forests.

##### **County Governments:**

The concept of public participation in counties is captured under section 87 of the County Government Act. Section 113 of the County Government Act makes it mandatory for the public to be involved in the county planning process. Section 91 mandates the county governments to come up with modalities and means of participation by citizens.<sup>187</sup>

According to sections 94, 95 and 96 of the Act, Counties should formulate ways to promote communication with the public and access to information using the media.<sup>188</sup>

Articles 174 and 175 of the Constitution of Kenya task County Governments with the roles of awareness creation, Capacity Building and Communication when it comes to public participation. In Turkana for example; the County Government ought to come up with

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<sup>186</sup> Forest Conservation and Management Act 2016 S 7

<sup>187</sup> County Governments Act S 87, S 91 & S 113.

<sup>188</sup> Ibid, S 94, S 95 and S 96.

measures to make sure that the people are informed of the upstream petroleum operations underway in the area, their benefits as well as the negative impact it poses to their biodiversity.<sup>189</sup>It is for the county government to let the people know that they have a right to access all information relating to the project as well as air their views and concerns for consideration by the relevant agencies. The County Government is also tasked with the role of capacity building as well as facilitate communication and access to information by the local communities.

Despite this, there are challenges in Turkana due to lack of access to information, lack of clear communication channels as well as inability to comprehend the technicalities of the upstream petroleum operations and their impacts.<sup>190</sup> The County Government therefore needs to come up with procedures to make sure that the local communities are well knowledgeable and understand their rights for adequate public participation.

#### **National Environment Management Authority NEMA.**

For purposes of public participation, The EMCA under Section 58(9) obligates NEMA to:

- a) Publish EIA reports in the Gazette, 2 local newspapers and the local radio for purposes of public participation;<sup>191</sup>
- b) Receive comments from the public in respect to the EIA; <sup>192</sup>
- c) Request for comments from any response in respect to an EIA conducted and where necessary setting up a technical advisory committee to advise it where necessary before issuing or denying an EIA Licence;<sup>193</sup>

Further, The Environment (Impact Assessment and Audit) Regulations 2003 obligates NEMA to;

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<sup>189</sup> Constitution of Kenya 2010 Art. 174 & 175

<sup>190</sup> E. Moranga, ' Participation in Oil and Gas Projects in Turkana' ( KCSPOG 2021) < <https://kcsfog.org/public-participation-in-oil-and-gas-projects-turkana-workshop-blog-post/>> accessed 1st June 2021

<sup>191</sup> Environment Management and Co-ordination Act 1999 S 58(9)

<sup>192</sup> Ibid

<sup>193</sup> Ibid

- a) Call upon members of the public to give their views both orally and in writing in 14 days after receiving an EIA Study Report.<sup>194</sup>
- b) Once it receives these comments, the authority has the option to hold a public hearing. The public hearing is to be held at a place that is most convenient and easily accessible by the affected people.<sup>195</sup> The law does not make it mandatory for a public hearing to be held, neither does it specify the circumstances that may lead to these public hearings may being held. This therefore leaves it at the discretion of NEMA to decide which circumstances require a public hearing and those that don't. Leaving this at the discretion of NEMA is detrimental to public participation as the people may have a contrary opinion to circumstances that call for public hearings.

Despite these provisions, there have been concerns among the locals in Turkana on not being involved. The issue of public participation forums being held in urban centers is a major concern. According to locals in Turkana, there forums are conducted in urban centers that are inaccessible to communities living in remote areas. For example, in March 2021, a public hearing is reported to have been held in Turkana in respect to the Lamu, Lokichar Crude Oil Pipeline (LLCOP) Project. During this hearing, only the people living near the Lokichar Export Terminal were present.<sup>196</sup>

Lack of access to information is also a major concern among the people in Turkana. Local communities are unable to understand the basic and technical aspects as well as procedures for the oil and gas projects as well as their impact. The law requires NEMA to publicize the EIA study reports. Despite these projects being translated into local languages, their bulkiness and complexity are not easy to comprehend by the local communities.<sup>197</sup>

There are also concerns by the local community that their concerns are not incorporated at the implementation stage.

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<sup>194</sup> Environment (Impact Assessment and Audit) Regulations, 2003 Regulation 21

<sup>195</sup> Ibid, Regulation 22

<sup>196</sup> E. Moranga, 'Participation in Oil and Gas Projects in Turkana' (KCSPOG 2021) <<https://kcsfog.org/public-participation-in-oil-and-gas-projects-turkana-workshop-blog-post/>> accessed 1st June 2021

<sup>197</sup> Ibid

## **Tullow Oil PLC:**

Regulation 17 of the Environmental (Impact Assessment and Audit) Regulations, 2013 as discussed above requires the project proponent to seek the views of the people affected consulting NEMA. <sup>198</sup> Tullow Oil PLC therefore, being the MNC currently undertaking petroleum operations in Turkana County is expected under the regulations to:

1. Make known to the public, the project and probable impacts and benefits. This is to ensure that the affected persons are well aware of the project.<sup>199</sup>
2. Publishing a notice on the proposed project in a newspaper of nationwide circulation for two weeks. <sup>200</sup>
3. Making an announcement of the notice in both official and local languages in a radio with a nationwide coverage of at least once a week for two consecutive weeks.<sup>201</sup>
4. Hold at least three public meetings with the affected parties and communities to explain the project and its effects and to receive their written comments. <sup>202</sup>
5. Ensure that appropriate notices are sent a week prior to the meeting and confirm that the venue and date set is convenient for the affected communities.

Tullow Oil has been able to engage with local communities in its areas of operation as required by the law. This has however not come without challenges. These include: Politicizing of Public Participation: When Tullow first started its operations in Turkana, it formed an association with 11 representatives from the local community, national government and Tullow to manage social relationships with the communities in Block 10BB, The Lokichar Basin Development Committee.<sup>203</sup>

This committee was replaced with the District Advisory Committee (DAC) that was chaired by the District Commissioner. In 2013, DAC was disbanded and replaced with a new Committee this time chaired by the area MP. The MP was put in charge of chairing discussions as well as

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<sup>198</sup> Environment (Impact Assessment and Audit) Regulations, 2003, Regulation 17 (1)

<sup>199</sup> **Environment (Impact Assessment and Audit) Regulations, 2003** Regulation 17 (2)(a)

<sup>200</sup> Ibid

<sup>201</sup> **Ibid**

<sup>202</sup> Environment (Impact Assessment and Audit) Regulations, 2003, Regulation 17 (2)(b)

<sup>203</sup> Cordaid, 'Oil Exploration in Kenya: Success Requires Consultation. Assessment of Community Perception of Oil Exploration in Turkana County, Kenya' ( Cordaid 2015) < <https://www.cordaid.org>> accessed 2nd February 2021



appointing members. This committee was viewed by the people as politically oriented and was accused of non-transparency as well as fueling nepotism and corruption.<sup>204</sup>

This has created a negative mentality among the people in Turkana towards Tullow in terms of public participation. The people do not feel like their views or grievances are properly received and addressed. This has also made the people not get involved in the attempts to involve the public by Tullow Oil PLC.

There are good laws in place for public participation. Despite this, the implementation is faced by many shortcomings. As discussed above, there include, lack of inclusion of all interested groups by holding public participation forums in urban centers at the detriment of people living in remote areas of Turkana, dealing with a pastoralist community that is constantly moving, lack of information, lack of comprehension of the upstream petroleum operations and their impacts, politicizing of public participation, corruption and nepotism. These shortcomings therefore make implementation of laws in public participation inadequate.

#### **4.1.2.1. Access and Benefit Sharing**

##### **National Environment Management Authority NEMA.**

The Environment Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations is implemented by NEMA. The regulations however do not provide for regulation of Traditional Knowledge held by native communities.<sup>205</sup>

##### **Kenya Copyrights Board (KECOBO)**

The Protection of Traditional Knowledge and Cultural Expressions Act 2016 give provision for a new form of Intellectual Property Right (IPR) known as Traditional Knowledge. Communities are able to register their Traditional Knowledge and have a right over the access and use of the same.<sup>206</sup>

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<sup>204</sup> Ibid

<sup>205</sup> Environment Management and Coordination (Conservation of Biological Diversity and Resources, Access to Genetic Resources and Benefit Sharing) Regulations 2006 Regulation 4

<sup>206</sup> The Protection of Traditional Knowledge and Cultural Expressions Act 2016 S4

Access and benefit sharing is a key object of the CBD as it calls for just and impartial sharing of gains coming from the exploitation of traditional knowledge inter alia. The constitution of Kenya recognizes the need to protect marginalized communities as well as share gains arising with the exploitation of natural resources. Despite the provisions of the law for benefit sharing, there is a weak institutional framework for its implementation. There is no clear provision on a body or agency to assist recognize the exploitation of TK in conservation of biodiversity in Turkana; assist in registration of the TK and follow up on compensation. The law on Access and Benefit sharing is therefore not implemented in Turkana and this is at the detriment of the local communities and will lead to loss of biodiversity.

**Conclusion:**

This chapter has been able to highlight the key institutions tasked with implementing the national laws on conservation of biodiversity from the impact of the upstream petroleum industry in Kenya. It is clear that there are a lot of shortcomings in the implementation of these laws in the country and specifically in the project area, Turkana. These shortcomings are very detrimental to the conservation of biodiversity in the area. There is very high risk of loss of biodiversity from the impact of upstream petroleum industry due to lack of proper implementation of laws. There is therefore need for some changes to be adopted for effective conservation of biodiversity. These will be discussed in the subsequent chapter.

## Chapter 5:

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### **Conclusion & Recommendations:**

#### **5.1. Conclusion:**

This paper has been able to show that Kenya and specifically Turkana County is rich in biodiversity that has great social and economic benefits. Exploration for oil and gas having been underway in the country since the 1950s, the discovery of commercially viable oil and gas in Turkana in 2012 offers a major milestone to the country due to the economic benefits it is set to bring. Despite the benefits of the oil in the country, the process of exploration and production clearly poses great threat to biodiversity in the country.

The paper has been able to show that there is a need to have legal and regulatory frameworks that ensure that upstream petroleum operations in the country are sustainable. The paper has shown Kenya's obligations for conservation of biodiversity under international law, analyzed how Kenya has been able to incorporate these obligations in its national legislation and

analyzed the country's institutional and regulatory framework for the implementation of these laws.

The paper has come to a conclusion that indeed Kenya has obligations under international law to conserve biodiversity from the impact of the upstream petroleum industry. Kenya's parliament has done a good job in the incorporation of these obligations in its national legislation. There are also institutions that have been tasked with the implementation of these laws. Despite there being these legal and regulatory frameworks there are some impediments to their proper implementation. Implementation of these laws therefore inadequate and inefficient.

This paper will therefore provide recommendations in addressing these issues to ensure proper and effective implementation of the law.

## **5.2. Recommendations:**

### **5.2.1. Integration and Coordination:**

As discussed above, the major challenge facing the implementation of the current legal and regulatory framework is the fact that biodiversity is cross sectoral. There are a number of agencies as well as stakeholders tasked with biodiversity protection from the impact of the upstream petroleum industry in Turkana. Lack of integration and coordination on how these players conduct their mandates under the law has rendered the legal and regulatory framework ineffective.

There is therefore an urgent need to have improved coordination among the various players as well as harmonize and integrate their activities. This can be achieved by:

1. **Reduction of information asymmetries by developing common databases:** This will require the relevant stake holders with common duties to have a common database accessible by the relevant bodies. This will ensure that data is integrated and all stakeholders are working from the same page.

2. **Sharing of technical resources:** This will lower the costs of implementing the stakeholders mandate under the law. This is because each body involved need not procure its own technical resources therefore cutting on costs.
3. **Integrated Resource Inventories.**
4. **Data Synthesis:** This involves pooling of data from various stakeholders to come up with integrated information. From this data, the stakeholders may thereafter come up with common goals and an integrated framework on handling their mandates. This will reduce duplicating of duties.

#### **5.2.2. Information, awareness, Inclusivity and Public Participation:**

As discussed above, key challenge to public participation is lack of access to information, awareness and challenges in comprehension. Adequate Public participation is difficult to achieve if the community is not aware of this right as well as the need to give their opinion. It is important to sensitize the communities where upstream petroleum activities are to be undertaken to be pro conservation by increasing their awareness and create empowerment. By doing this, the community will be involved in the decision making process to ensure that their interests are protected.

There is need to come up with civic education that reaches all affected persons to educate them of their rights and the need to be involved in the decision making process where necessary.

There is need to bring onboard all relevant stakeholders including the marginalized groups. Lack of inclusion of these marginalized communities widens the discrimination rendering the community disadvantaged.

#### **5.2.3 Political Influence:**

There is inadequate support for the implementation of biodiversity conservation laws in Kenya by the political class. This is because the political class in the country focuses on the profits associated with the exploitation and exploration of natural resources by MNCs as opposed to the negative Impacts these processes have on the environment.

Political influence affects implementation of current laws as well as formulation of reforms to remedy shortcomings of these laws. The lack of political will and commitment in implementation and formulation of policies is a major setback. Political class will not support laws and reforms as they suffer setback with well working and accountable institutions. They benefit from frail bodies. Due to political influence, most government bodies are led by puppets who dance to the tune of external forces.

It is therefore important to advocate for positive political influence in the conservation of biodiversity.

#### **5.2.4. Accountability:**

As discussed above, corruption is among the major challenges affecting implementation of the legal and regulatory framework. The main reason being the weak systems that have loop holes hence no accountability.

There is need to have policies that promote efficient accountability and transparency in relevant bodies. There is need for reforms that address the complex political influence in lack of accountability and transparency.

#### **5.2.5. Technology:**

Advancement and adoption of new technology including automation of systems is important for the smooth implementation of the legal and regulatory frameworks that are in place. This will streamline the dissemination of services, cooperation and integration as well as reduce graft.

For example, in licensing where an investor will need the approval of different bodies before getting a licence to undertake upstream petroleum operations. There is need for an integrated framework where the investor does not need to move from one body to another in order to get the approvals necessary. Use of technology can have a single portal for the application of these licences where all relevant bodies are able to access and issue the relevant approvals hence saving on time and resources.

There is also need for automated payment systems in collection of revenue such as payments for certain services as well as fines. This will reduce graft.

Automation of systems has been seen in various sectors in Kenya, for example, the Judiciary with its e-filing system and the Ministry of lands with Ardhi Sasa.

#### **5.2.6. Administrative Reforms:**

Administration of the relevant bodies regulating the upstream petroleum sector and conservation of biodiversity in the country is poor and inefficient. There is need for organizational restructuring. This will focus on strengthening linkages between all relevant government agencies. This will also involve improving quality human resources through training and addressing management challenges.

#### **5.2.7. Policy making:**

There is need for development of rational and effective policies specifically addressing the code of conduct in relevant government bodies addressing accountability, information sharing and public participation. There is also need to standardize and streamline the decision-making process in these bodies. This will align the movement of information from the public to relevant bodies as well as taking of action based on the information provided. This will promote public participation.

#### **5.2.8. Institutional Reforms:**

There is need to improve various bodies codes of conduct in order to promote openness and accountability. This involves promoting accountability in public procurement processes as well as licensing processes.

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