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UNIVERSITY OF NAIROBI

SCHOOL OF LAW

ANALYSIS OF KENYA'S LEGAL AND INSTITUTIONAL FRAMEWORK ON ENVIRONMENTAL MANAGEMENT IN PRODUCTION OF FOSSIL FUELS.

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**THIS PROJECT PAPER IS SUBMITTED TO THE SCHOOL OF LAW IN PARTIAL
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DECLARATION

I **Loy Lisa Muthoni**, do hereby declare that this is my original work; it has neither been submitted nor is it currently being submitted for a degree in any other university.

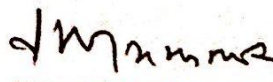
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DEDICATION

This work is dedicated to my amazing Husband Alex Muriuki as well as my Parents Peris Nyawira and Stephen Muraya for their amazing support throughout my study.

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I am grateful to the Almighty God for the favour and blessings. I am sincerely grateful to my supervisor Prof. Albert Mumma and my reader Dr Akunga Momanyi for their time, patience and guidance throughout my study.

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ABSTRACT.

Fossil fuels have for millions of years been used as sources of energy. Fossil fuels like coal, oil are the most commonly used forms of energy. The main problem is that they can easily be depleted. Fossil fuels like coal are cheap to use but produce the highest percentage of greenhouse gases. Fossil fuels extraction and production is a great source of revenue to a state but if not properly managed can cause major disaster to the environment. According to the Brundtland report a state is regarded to have sustainably developed if the state can meet the needs of current without compromising the ability of the future generations to meet its needs

Recently Kenya was blessed by the discovery of Oil and Coal which stirred a lot of excitement among its citizens. With the fact that the country is faced with a huge debt, the discovery brought a sigh of relief to its people. At the same time a form of uncertainty and worry has loomed in the country. Countries like Nigeria, Syria, Sudan, Afghanistan, Mexico contain fossil fuels but the country and its citizens continue to live with poverty. This means that production of fossil fuels does not benefit a state, instead how you manage the fossil fuel and the environment is how a country can sustainably grow.

Kenya has a detailed Constitution that recognises the need of proper environmental management and natural resources. Kenya has over the years developed its laws to harmonise with the new constitution as well as regional environmental instruments.

With its rich environmental legal framework, Kenya possesses a major threat, that is inability to efficiently and effectively implement and enforce its environmental laws and policies. Various factors have generated this problem. They include; insecurity, lack of proper public participation and EIA, complexity in implementing the laws, inability to balance between economic development and environment protection, impunity in government, lack of modern environmentally friendly technology and lastly lack of skilled human resource on matters of environment. This paper aims at addressing the matters and providing solutions to the problems.

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ABBREVIATIONS

CBD- Convention on Biological Diversity

DCI-Directorate of Criminal Investigation

EACC- Ethics and Anti- Corruption Commission

EIA- Environment Impact Assessment

EPRA – Environment and Petroleum Regulatory Authority

EU- European Union

IG- Inspector General of police

KLR- Kenya Law Reports.

KPC- Kenya Pipeline Company.

LAPSSET- Lamu Port-South Sudan-Ethiopia-Transport

NEMA -National Environment Management Authority

SA- South Africa

SEA.- Strategic Environmental Assessment.

SDG- Sustainable Development Growth

ODPP- Office of the Director of Public Prosecution

UN- United Nations.

UNEP- United Nations Environmental Program

USA.- United States of America

LIST OF LEGAL INSTRUMENTS

CONSTITUTION

1. The Constitution of Kenya, 2010

ACTS OF PARLIAMENT

1. Energy Act, 2019
2. Environmental Management and Co-ordination Act No.8 of 1999
3. Mining Act No. 12 of 2016
4. Petroleum Act No.2 of 2019
5. Penal Code of Kenya
6. The Anti-corruption and Economic Crimes Act, 2003.

REGULATION AND POLICY

1. National Energy Policy 2018
2. National Environment Policy, 2013
3. The Environmental (Impact Assessment and Audit) Regulations, 2003

INTERNATIONAL LAW

1. Brundtland report: Report of the World Commission on Environment and Development: Our Common Future 1987.
2. Convention on Biological Diversity, 1992.
3. East African Community protocol on environment and natural resources management, 2006
4. Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998.
5. United Nations Framework convention on Climate Change, 1992.
6. United Nations Conference on Environment and Development, 1992.

TABLE OF CASES

1. Endmor Steel Millers Limited v National Environmental Management Authority; Nazir Hussain Hakada & 5 others (Interested Parties), [2020] eKLR.
2. Ken Kasinga vs Daniel Kiplagat Kirui & 5 Others, Nakuru ELC Constitutional Petition No. 50 of 2013
3. KM & 9 others v Attorney General & 7 others [2020] eKLR
4. Mohamed Ali Baadi and others v Attorney General & 11 others [2018] eKLR
5. Mui Coal Basin Local Community & 15 others v Permanent Secretary Ministry of Energy & 17 others [2015] eKLR
6. Save Lamu & 5 others v National Environmental Management Authority (NEMA) & another [2019] eKLR

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CHAPTER ONE

INTRODUCTION AND STATEMENT OF THE PROBLEM

1.1 Introduction and Background

Fossil fuels are fuels formed on the earth's surface over many decades from decomposed plants and animals.¹ They include oil, coal, natural gas, etc. Fossil fuels are a good source of energy. One of the best discoveries ever made in the Republic of Kenya is the Discovery of Petroleum in the Turkana region, as well as the discovery of coal in the Lamu and Mui Basin (Mwingi and Kitui District). The Petroleum Act 2019, describes petroleum to mean all hydrocarbons and includes crude oil and natural gas, whether capable of being produced from conventional and unconventional reservoirs, including shale oil, oil shale, shale gas, coal bed methane gas, tar sands, and other sources of hydrocarbon reserves.² According to the Energy Act 2019, coal includes anthracite, bituminous coal, sub-bituminous coal, lignite, and peat.³

“Oil exploration began in Kenya in the 1950s but it was until 2012 that oil was discovered in Turkana County.”⁴ “An estimate of over 250 barrels of oil was discovered in the area by a British oil company called Tullow Oil.”⁵ The Discovery of fossil fuels has given people a sense of hope for a better tomorrow but also brings a sense of fear. Countries like Nigeria, the Congo region, and Syria have plenty of resources (fossil fuels) yet the countries languish in poverty, political instability, and environmental degradation.

Since 2012 Kenya has come up with numerous environmental laws and policies to put its citizens at ease. The laws are to give people hope that even though the discoveries will bring about economic development, the environment will also be protected for future generations to enjoy.

The discovery of fossil fuels in Turkana, Mui Basin, and Lamu is a sign of better days for the locals, but they are not aware of the troubles they are about to face in years to come if the

¹ Merriam webster, [website] <https://www.merriam-webster.com/dictionary/fossil%20fuel>(accessed on 10/10/2021).

² Petroleum Act, 2019 (KLR) s2.

³ Energy Act, 2019 (KLR) s2.

⁴ National oil, ‘Upstream’, [website]<https://nationaloil.co.ke/upstream/>(Accessed on 30/12/2019).

⁵ Dr. A. Bybee, ‘Oil in Turkana: Recipe for Disaster’, Africa Watch, Vol. 2, 2013.

environment conservation agenda is ignored. “Lake Turkana risks being polluted, yet it serves as a source of hope to the people of Turkana. The lakes supply drinking water, food (fish), and water for irrigation; it also serves as a source of various rivers in the rift valley.”⁶ On the other hand, due to the government's agenda to initiate the mining of coal in the Mui basin as well as in Lamu, the residents raised a public health concern. Coal is the most poisonous resource in the world even though it serves as a good source of energy. If poorly handled it affects the air quality, land, water, plants, animals, and humans.

Exploration and mining of fossil fuels always tend to interfere with the environment. One has to drill wells and for this to be done vegetation has to be cleared, and animals, as well as humans, have to relocate from their land. The process always ends up interfering with the soil composition as well as the air quality.

Even though fossil fuels are beneficial to a country's economy it tends to cause a lot of environmental pollution and degradation. In 2019 Kenya exported its first oil shipment at the port of Mombasa this brought a sense of satisfaction that the economy will be saved from debts. But that hasn't been the case for countries like Nigeria, Congo, and South Sudan whose lands are rich in minerals but the country's economy continues to weaken.

Kenya is not new to the environmental pollution caused by the exploration, extraction, and transportation of fossil fuels. “In 2015 pipes at Kibwezi leaked causing oil spills in Thange River and the adjacent land. The leak was caused by normal wear and tear and lack of proper maintenance of the pipes.”⁷ Petroleum pollution caused a lot of environmental damage and suffering among the people living along the river.

In 2019, KPC was given the mandate of setting up a new pipeline system meant to transport oil from Turkana to the coast. “The pipes leaked causing oil spillage in Kiboko River, Makueni County. KPC was held responsible for the oil spill. They set up new oil pipes without adhering to

⁶ S. Wengo, ‘Oil Exploration and Compliance with the Convention on Biological Diversity (CBD): A case study of the marine environment in Lake Turkana, Kenya’.

⁷ ‘Residents suffer liver, stomach diseases after oil spill in Thange River,’ Daily Nation, 30th August 2016, Available from: <https://www.nation.co.ke/counties/makueni/Report-links-diseases-oil-spill-Thange-River> (accessed on 14/10/2019).

the required standard which includes the installation of leakage indicators. KPC in conjunction with the county government has swept the issue under the rug not caring for the residents”⁸ Bringing out the question, what is the essence of laws if we don’t adhere to them? Oil spills have caused a lot of problems for the residents of these areas. The villagers can no longer cultivate the land, and drink the water. Residents spend most of their time in the corridors of hospitals due to various respiratory diseases. It has been 5 years since the incident in Thange River and the villagers can no longer drink water from Thange River. “A report showed that the residents of Thange Area were suffering from liver and stomach problems caused by petroleum poisoning. In February 2016 out of 1071, 161 people contracted diseases caused by benzene and toluene poisoning. Benzene and toluene are a chemical found in petroleum”⁹

Throughout the years’ environmental restoration has proved to be a very costly and hard exercise. Restoring the environment to its natural state is almost impossible since it requires a lot of expertise, modern technology, and time. Kenya lacks adequate expertise and has to incur a lot of expenses to contract companies from other states to assist in environmental restoration exercises. In both cases, it will take years of hard work to clear oil spillage and restore the environment to its natural state. The residents will have to relocate or abstain from using the contaminated water till the water's natural state is restored.

Kenyan laws are aimed at environmental protection and conservation but the implementation of the laws seems to be quite a difficult task. Many factors lead to poor implementation of environmental and energy laws, they include corruption, inability to balance between economic development and environmental protection, disrespect of the rule of law and public participation, unavailability of adequate funds, complexity in implementation of laws, lack of modern technology, and qualified human resource.

⁸ ‘Oil spill threatens to pollute water sources in Makueni’, Daily nation, 30th April 2019, Available from: <https://www.nation.co.ke/counties/makueni/KPC-starts-oil-spill-clean-up-Kiboko-Makueni> (accessed on 14th/10/2019).

⁹ Ibid

This paper will discuss the Environmental laws and institutions that govern the mining of fossil fuels in Kenya. Will also see how we can effectively implement the laws to enjoy the economic benefits of having fossil fuels.

1.2 Statement of the problem

This paper analyses the legal and institutional framework governing the environment, and how it has failed in its effectiveness in the environmental management of fossil fuels. Kenya has prolific environmental laws that are ineffective and inefficient to implement due to corruption, complexity in implementation, insufficient and improperly done Environmental Impact Assessment, Lack of proper public participation, impunity in government, lack of modern technology, and human resource experts. Poor implementation and enforcement of environmental laws have led to environmental degradation in many parts of the country.

A recent study showed that fossil fuels emit the highest percentage of greenhouse gases. For a country to sustainably develop depends on how its laws are implemented and enforced. Proper coordination between government agencies is required, one government institution should not overthrow the other but instead come up with harmonised and better solutions. Undermining sensitive requirements like public participation and environmental impact assessment has led to the cancellation of major projects with major environmental impacts limiting sustainable development. Project owners should abide by laws, policies and regulations to avoid cancellation of licences, compensation and restoration orders etc.

Through proper implementation and enforcement of environmental laws, this danger of possible environmental pollution will be averted and Kenya would sustainably grow. Major Reforms are required in the environmental sector and strong enforcement mechanisms should be put in place to avoid the catastrophic outcomes experienced in countries like Nigeria, Syria etc. Without proper environmental management strategies, the environment will be inhabitable for all living things.

1.3 Hypothesis

Despite the fact that Kenya is rich in environmental laws and policies it has failed to effectively manage the environment. Nevertheless, Kenya has failed due to its weak implementation and

enforcement procedures. Weak implementation of environmental laws limits sustainable development in the sense that future generations will lack a clean and healthy environment. To properly implement its laws Kenya needs to, Streamline and strengthen the capacity of environmental institutions, and strengthen the enforcement mechanism in place.

1.4 Statement of Objective

The main objective of this research seeks to understand how Kenyan laws can/should be structured to effectively manage fossil fuels in Kenya and at the same time protect the environment. In the course of the discussion, will also analyse the already in place legal and institutional framework for the environmental management of fossil fuels. Will identify and go through the various international laws that aid in the environmental management of fossil fuels. Will identify gaps and weaknesses within the law that makes them less effective and difficult to implement. Will lastly look at the measures we need to put in place to curb hindrances to the implementation of fossil fuels. The research will propose to the government and general public the reforms to put in place.

1.5 Research Question

1. What legal and institutional frameworks regulate and aid in the protection and preservation of the environment in Kenya?
2. What International laws regulate the environment in Kenya?
3. What are the gaps and weaknesses when it comes to the implementation of environmental laws and policies?
4. What reforms are to be put in place to make environmental laws more efficient?

1.6 Theoretical and Conceptual Framework

This research will be based on the sustainable development theory, green economy concept, and sociological theory.

1.6.1 Sustainable development theory.

Sustainable development first emerged in the Brundtland Report submitted to the United Nations General assembly. The report was submitted by a commission led by Doctor Gro Harlem in

1987.¹⁰ According to the Brundtland Report (Report of the World Commission on Environment and Development: Our Common Future), defined sustainable development is “the process of development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”¹¹

Sustainable development theory came to disregard the previous development theory which led to major environmental degradation. Previously, a state would have been regarded as developed if it experienced economic development and Environment protection was a non-issue. Sustainable development theory has three interdependent and mutually reinforcing pillars, they are Economic development, Social development, and environmental protection.¹² There are various indicators of sustainable development. These indicators are disaggregated by income, sex, age, geographical location, ethnicity, population, disability, race, etc.¹³

Sustainable development is technical and is subject to one’s understanding. Most of the time, sustainable development majorly lies in economic development and less in environmental protection and preservation. When there is no growth economists believe that the state is unsustainable. With this in mind, sustainable development does not imply zero development since you want to protect the environment. One needs to strike a balance between economic development and environmental protection or preservation to achieve a greater sustainable development e.g. states swap from the use of coal and oil in generating electricity and instead use renewable sources of energy to produce electricity. Sustainable development advocates for the efficient use of natural resources or energy; this will promote economic growth and there will be less environmental degradation.¹⁴

¹⁰ ‘Do you know when sustainability first appeared?’, acciona, [website] <https://www.activesustainability.com/sustainable-development/do-you-know-when-sustainability-first-appeared/> (accessed 10th January 2022)

¹¹ World Commission on Environment and Development, ‘Our Common Future’, United Nations, 1987, [website] <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf> (accessed 8th June 2020).]

¹² P. Birnie, A. Boyle and C. Redgewell, ‘International law and the Environment’, Oxford, 3rd Ed., 2009, P. 54.

¹³ [website] <https://sustainabledevelopment.un.org/content/documents/11803Official-List-of-Proposed-SDG-Indicators.pdf> (accessed 8th June 2020).

¹⁴ P. Birnie, A. Boyle and C. Redgewell, ‘International law and the Environment’, Oxford, 3rd Ed., 2009, P. 55.

Sometimes development overrides environmental concerns E.g. Kenya has had to cut down trees to be able to build roads, and the development of roads overrides the environmental concerns because the environment can be rehabilitated after the construction is complete. Sustainable development depends on how you analyse it. For there to be sustainable development one should balance environmental protection and economic growth.

Decades after the United Nations published the Brundtland report many states have failed to compromise and strike a balance between Economic growth and Environmental protection. States are expected to integrate their laws, policies, and projects to be under sustainable development principles. Policy and laws that completely disregard environmental protection and advocate for only social, and economic growth don't meet the criteria of sustainable development.

1.6.2 Green Economy theory

The green economy concept was reinvigorated by UNEP and regained momentum in 2008. According to the UNEP green economy initiative, “ Green economy results in improved human well-being and social equity while significantly reducing environmental risks and ecological scarcity.”¹⁵ A green economy generally refers to a low carbon emission, resource efficient and socially inclusive economy.

Economic growth is derived from economic activities, assets and infrastructure that allow low carbon emission and pollution, prevention of loss of biodiversity, and enhanced energy and resource efficiency.¹⁶ The concept is a bit similar to sustainable development but focuses more on better living conditions for the future generation.

According to Karl Burkart, the green economy is based on the following indicators: renewable energy, sustainable transport, water and waste management.¹⁷ With the recent problems

¹⁵ P. Brick and D. Fazio, ‘Green economy: what do we mean by green economy?’, United Nations Environment Programme, 2012.

¹⁶ ‘Green Economy’, United Nations Environment Programme.

¹⁷ V. Kaushik, ‘What is green economy?’, analytical steps, 2021, [website] <https://www.analyticssteps.com/blogs/what-green-economy> (accessed 20th November 2022).

experienced due to climate change(drought, floods, hurricanes, cyclones etc) the world has turned away from industrialization and is slowly embracing the concept of a green economy.

1.6.3 Sociological approach.

Sociological theorists believed that law originates from the norms of society. Roscoe pound, a sociological philosopher believed that the law in action is different from the laws in the books. The law is complex and most of the time implementation is effective on a case-to-case basis. Pound believes that in the lawmaking process analysing the law is not enough; you are supposed to put it into action to see if it works. The legislature should also make laws that can effectively be enforced.

1.7 Research Methodology

The research will seek to analyse the legal and institutional framework guiding environmental laws in Kenya and will use a qualitative methodology to review and analyse data from Kenya, Nigeria, China and the USA. Will also use the Doctrinal Research methodology to analyse Kenya's current legal and institutional framework for the environmental management of Fossil Fuels. The research will also include the international legal framework and experiences of states like China, the USA and Nigeria to identify lessons we can learn as a country. The Primary sources will be Kenyan-decided cases, Statutes and regulations. Secondary sources will be textbooks, articles and Journals.

1.8 Literature Review

Environment degradation caused by the mining of fossil fuels is among the biggest problems facing the world. Fossil fuels tend to release the highest percentage of greenhouse gases. According to a United State study, oil production has over the years been associated with various health and safety concerns for the community around. Oil extraction is common near where people live, work and play causing public health issues. The studies show extreme exposure to oil production activities affects the water, soil and air quality. The study showed that

communities around oil drilling sites caused various health complications e.g. cancer, liver problems, neurological issues etc to both animals and humans.¹⁸

According to Kinyua, mining activities have exposed the environment to radio-active materials. Carbon-based energy sources have a long-term impact on the environment due to higher emissions of greenhouse gases. He sees the need for proper environmental management. He believes corruption and cronyism weaken the enforcement of environmental laws. A lot has to be done in the implementation and enforcement of the laws and policies.¹⁹

According to Isaiah K. Okuthe, “he believes that discovery of oil is like a double-edged sword. It has both social-economic benefits as well as environmental impacts. A state should try and set a balance between the two to develop.”²⁰ According to Kariuki Muigai and Paul Musyimi, “ they believe that a clean and healthy environment can be achieved through environmental democracy(increase recognition of environmental issues to be addressed by all majorly by those affected most) and public participation in environmental governance.”²¹

According to Martha Keating, “law should be a vessel to protect the environment and the communities where mining of coal is taking place. The state is to strike a balance between protection of the environment and the need for coal as an essential source of energy.”²² The research fails to address how the state should strike a balance between economic development and environmental protection.

According to Decoalonnise, “ Clean coal is a myth, the process of carbon capture segregation does not work. It’s a pseudonym for no coal.”²³ The paper has done a complete analysis of coal as a source of energy in Kenya, the effects of coal mining(environmental, social, and economic),

¹⁸ J. Johnstone, E. Lim and H. Roh, ‘Impact of upstream oil extraction and environmental public health: a review of the evidence,’ National library of medicine, December 4, 2018, [website] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6344296/> (accessed on 17th December 2022).

¹⁹ R. Kinyua, ‘Status of Kenya’s Environmental Management and Protection,’ Nova science Publishers, 2012, P. 120.

²⁰ Ministry of Energy, ‘Environmental and Social challenges of oil and gas exploration in Kenya’, International Journal of Innovation and Scientific Research, Vol. 17, No. 1, 2015.

²¹ K. Muigai and P. Musyimi, ‘Enhancing Environmental democracy in Kenya’,

²² M. Keating, ‘Cradle to the grave: the environmental impacts from coal,’ Clean Air Task Force, 2001, P. 3.

²³ ‘Kenya Coal Report: Review of coal power production and coal mining in Kenya’, Decoalonnise, 2021.

legal and institutional framework guiding coal mining in Kenya. The paper doesn't deal with petroleum as a source of energy.

A study done in China showed that during coal exploration, transportation, utilisation and disposal harmful substances are released into the environment affecting the quality of air, soil, water and even groundwater. These substances are introduced through leaching and ash. Pollution due to the use of coal has led to many adverse health consequences of the use of coal, e.g lung cancer, and even adverse effects on child development, have been occurring in China.²⁴

Isaiah believes that the discovery of oil and gas poses major environmental challenges from the time of exploration (seismic acquisition), drilling, production, transportation, and storage.²⁵ The paper looks at the environmental impacts of oil and gas discovery, the environmental risk as well as social-economic problems plus benefits. The research fails to look at the need for proper legal procedures and policies to help in environmental preservation.

According to Nanok & Onyango, "They believe that discovery of oil and gas may destabilise a state and also cause environmental impacts."²⁶ The research fails to address the environmental impacts in detail, instead, it looks at the general social-economic and environmental impacts of the exploration of oil and gas in Turkana County. According to Tenge, "For there to be positive sustainable development, mining of coal has to conform to the environmental protection agenda."²⁷

²⁴ J. Chen, G. Liu, Y. Kang, et.al, 'Coal utilisation in China: environmental impacts and human health', 2013, [website] https://www.researchgate.net/publication/259588325_Coal_utilization_in_China_Environmental_impacts_and_human_health#pf11 (accessed on 23rd January 2022).

²⁵ *Ibid.*

²⁶ J. Nanok and C. Onyango, 'A Socio-Economic and Environmental Analysis of the Effects of Oil Exploration on the Local Community in Lokichar, Turkana County, Kenya', *International Journal of Management, Economics and Social Sciences*, Vol. 6(3), 2017, pp.144 – 156

²⁷ J. Tenge, 'An Assessment of Coal from Mui Basin as An Alternative Energy Resource for Kenya,' University of Nairobi Library, 2009, P. 20.

According to Mugendi, “There are laws that govern oil and gas but those laws lack proper regulations to aid in its implementation of the laws.”²⁸ The research looks at the possible climatic and environmental effects to be encountered in Turkana due to the exploration and production of oil and gas. The research fails to address the need for effective procedural laws and policies to aid in the implementation of national and international laws that govern the environment.

Kariuki Mugendi further states, places like the niger delta failed in sustainable environment management due to corruption, weak laws, and policy as well as poor implementations of the laws. He believes that Kenya will enhance environmental sustainability if it effectively implements its rich laws and policy.

All the authors believe that the exploration, mining, and exportation of coal and petroleum increases the revenue of a state. The state will experience significant economic growth as well as environmental degradation if the two are not balanced. They agree that exploration and production cause air, noise, terrestrial, and water pollution. Environmental pollution and degradation tend to affect the lives of the people around the region as well as the neighbouring states. There is limited literature on Kenya’s fossil fuels’ effects on the environment because the production of fossil fuels is still new in Kenya. Most literature is on Nigeria, South Africa, India, China etc.

1.9 Scope and Limitations

The area of study has not been widely looked at because it’s still new in Kenya. The research is limited to secondary data from other countries e.g. Nigeria, China, the USA and South Africa etc.

²⁸ K. D. Mugendi, ‘Assessment of Oil Exploration and Production Impact on Climate and Environment in Northern Kenya. Case Study: Turkana,’ Kenyatta University Department of Environmental Studies.

The scope of the research is to create awareness of the gaps and weaknesses within the environmental sector. The research aims at bringing out the need to strengthen the enforcement of environmental laws and harmonisation due to the multifaceted nature of the environment.

1.10 Chapter Breakdown

This project will comprise four chapters. Chapter one is the introduction and a general overview of the thesis. It will introduce the thesis by laying down the background information regarding the thesis. The Background is followed by the statement of the problem, hypothesis, objective, methodology, theoretical framework, literature review, and scope and limitation. The chapter will provide a road map of the Thesis.

Chapter Two contains the Legal framework and institutional framework. This chapter will look at the current national legal framework and institutional framework that aid in the protection and preservation of the environment. Will critically analyse the laws governing environment management in the production of fossil fuels.

Chapter three contains the international legal framework. This chapter will introduce a few international instruments governing the environment during the production of fossil fuels. I Will look at each law and its role in environmental management and protection.

Chapter four contains the gaps and weaknesses in the implementation of environmental laws. This chapter will broadly look at factors that affect the implementation of environmental laws, giving examples of scenarios.

Chapter five contains the conclusion and recommendations. Will analyse the findings and give recommendations on how Kenya can learn from other states and protect its environment.

CHAPTER 2

OVERVIEW OF LEGAL, POLICY AND INSTITUTIONAL FRAMEWORKS RELEVANT TO ENVIRONMENTAL MANAGEMENT OF FOSSIL FUEL PRODUCTION IN KENYA.

2.1 Introduction.

Law has an important role in the environmental management of fossil fuels in Kenya. It brings a balance between the utilisation of natural resources and environmental conservation. The law will aid in the protection, preservation and rehabilitation of the environment. According to K. Muigua, D. Wamukoya and F. Kariuki, the law has a role of distributing, conserving and prohibiting when it comes to management of natural resources.²⁹

Kenya has over the years tried to develop and implement laws that protect and preserve the environment. On 10th June 2008 Kenya launched a vision 2030 goal plan that would see the country develop the energy sector as well as preserve and protect the environment. Through the vision 2030 development plan launched by the late President Mwai Kibaki, Kenya developed its own Constitution in 2010. The **Constitution of Kenya 2010** is unique in the fact that it dedicates a chapter (chapter 5 part 2) to environmental protection and management of natural resources. The old constitution did not recognise the need for sustainable use of resources and environmental management.

The Constitution of Kenya 2010 became a stepping stone that would assist in developing various Legal, Policy and Institutional Frameworks relevant to the Environmental Management of Fossil Fuels . The 2010 constitution kept us on the map of the fight against climate change. There are various laws, policies and institutions that aid in the environmental management of fossil fuels. They include;

2.2 Constitution of Kenya 2010

The Constitution of Kenya, 2010 is the supreme law, it overrides every other law in Kenya. Compared to the old constitution the new constitution made the right to a clean and healthy

²⁹ K. Muigua, D. Wamukoya and F. Kariuki, ‘ Natural Resource and Environmental Justice in Kenya, 2015, P. 6

environment a fundamental right for every citizen living in Kenya. The Constitution of Kenya 2010 includes sustainable development as a national value.³⁰ This will assist in the proper utilisation of fossil fuels and the management of the environment. It is the responsibility of every citizen and state organ to protect and conserve the environment by ensuring ecologically sustainable development and the use of natural resources.³¹

The government of Kenya is to ensure sustainable exploitation, utilisation, management and conservation of the environment and natural resources.³² It is also to ensure equitable sharing of the accruing benefits from the exploitation of those resources. Communities around the mines should have a share of the benefits fossil fuels bring. The fact that they will be the ones who will have first-hand experience of the environmental impacts of producing fossil fuels, they are to be given tokens in the form of building dams to assist the locals with water for farming and their cattle. In 2022 Turkana which boasts of having oil experienced the worst drought, the locals together with their animals died of starvation and dehydration.

The state is to encourage public participation in the management, protection and conservation of the environment.³³ Public participation has been identified as a national value in article 10 of the constitution of Kenya, 2010. Public participation allows the local access to information by giving the locals a clear understanding of the projects and the environmental impacts to be experienced upon initiation of the projects.

Kenya is to protect genetic resources and biological diversity which can be affected largely during the exploration, production and utilisation of fossil fuels.³⁴ The government should also eliminate processes and activities that are likely to endanger the environment.³⁵ This includes improper initiation of mining activities without properly adhering to the environmental laws in place and eliminating the production and usage of coal which is the oldest, cheapest method of producing energy. We are to learn from what has been experienced in China and the USA, the

³⁰ , Constitution of Kenya, 2010 (eKLR) A. 10 [2(D)].

³¹ Constitution of Kenya, 2010 (eKLR) A. 70(2).

³² Constitution of Kenya, 2010 (eKLR) A.69(1a).

³³ Constitution of Kenya, 2010 (eKLR) A.69(1d).

³⁴ Constitution of Kenya,2010 (eKLR) A.69(1e).

³⁵ Constitution of Kenya, 2010 (eKLR) A.69(1g).

states are inhabitable due to air pollution and the majority of their population has major health complications.

Kenya has quickly developed since the enactment of the 2010 constitution with new legal, policy and institutional frameworks being developed to be in line with the 2010 constitution.

2.3 Environmental Management and Coordination Act, 1999

The Environmental Management and Coordination Act, of 1999 is the main law that guides the environment sector by establishing an appropriate legal and institutional framework for the management of the environment in Kenya. The act came into force on 14th January 2000 but has been amended severally to try to accommodate the Constitution of Kenya, 2010.

The Act upholds that every citizen has a right to a clean and healthy environment and everyone has a responsibility to safeguard and enhance the environment.³⁶

No one is allowed to discharge or dispose of any wastes, whether generated within or outside Kenya, in a manner as to cause pollution to the environment or lead to health complications for any person.³⁷In addition, the guilty party may be forced to pay for the cost of removal of any poison, toxic, noxious, or obstructing matter, radioactive waste, or other pollutants. They may also be forced to meet the costs of restoration of the damaged environment, or as determined by a court of law.³⁸ When one pollutes or damages the environment in the process of production and utilisation of fossil fuels a restoration order may be issued. When one is served with a restoration order one should take such action that will prevent the commencement or continuation or cause of pollution. They are to restore land, including the replacement of soil, the replanting of trees and other flora, restore outstanding geological, archaeological, or historical features of the land or the area contiguous to the land or sea as may be specified in the particular order; cease to take any action which is causing or may contribute to causing pollution or an environmental hazard. They also need to remove any waste or refuse deposited on the land or sea specified in the order and dispose of the same following the provisions of the order and pay any compensation specified in the order.³⁹The polluter pays principle was brought out in the case of Owino Uhuru

³⁶ Environment Management and Coordination Act, 1999 (eKLR) s3a.

³⁷ Environment Management and Coordination Act, 1999. (eKLR) s87(1).

³⁸ Ibid.

³⁹ Ibid.

where NEMA, Ministry of Health, County of Mombasa and EPZ were forced to rehabilitate the Owino Uhuru area and the Mombasa county dumping site due to lead poisoning that had taken place over the years.

The following are institutions established by the Environmental Management and Co-ordination Act 1999:

2.3.1 National Environment Management Authority

The National Environment Management Authority is a body established in section 7 of the Environmental Management and Coordination Act 1999. NEMA's main objective is to exercise general supervision and coordination of all matters relating to the environment. NEMA is to be the principal instrument of Government in the implementation of all policies relating to the environment.⁴⁰ This means NEMA is the boss when it comes to matters of the environment in Kenya

NEMA has so many duties, some include: co-ordinate the various environmental management activities being undertaken by the lead agencies by promoting the integration of environmental considerations into development policies, plans, programs, and projects; this will ensure the proper management and rational utilisation of environmental resources on a sustainable basis.

⁴¹Nema is to take stock of the natural resources in Kenya, their utilisation and conservation.⁴²

They are to have an up-to-date list of natural resources eg tree cover how it is utilised if its sustainable or not. They are to examine land use patterns to determine their impact on the quality and quantity of natural resources.⁴³ NEMA in consultation with other lead agencies has a responsibility to promote the use of Renewable sources of energy.⁴⁴ EPRA which you will see below shares this responsibility with NEMA.

NEMA also ensures the conservation of Biological Diversity in Kenya.⁴⁵ NEMA carries out an Environment audit on all activities that are likely to have a significant effect on the environment.

⁴⁰ Environmental Management and Coordination, 1999 (eKLR) s9.

⁴¹ Environmental Management and Coordination, 1999 (eKLR) s9(2a).

⁴² Environmental Management and Coordination, 1999 (eKLR) s9(2b).

⁴³ Environmental Management and Coordination, 1999 (eKLR) s9(2d).

⁴⁴ Environmental Management and Coordination, 1999 (eKLR) s49.

⁴⁵ Environmental Management and Coordination, 1999 (eKLR) s50.

It should monitor all environmental occurrences to assess any possible changes in the environment and their possible impacts. NEMA also monitors the operation of any industry, project, or activity to determine its immediate and long-term effects on the environment.⁴⁶ They are to monitor and assess activities, including activities being carried out by relevant lead agencies e.g. EPRA is to ensure that the environment is not degraded by such activities, environmental management objectives are adhered to and adequate early warning on impending environmental emergencies is given.⁴⁷

NEMA is to undertake, in cooperation with relevant lead agencies, programmes intended to enhance environmental education and public awareness about the need for sound environmental management as well as for enlisting public support and encouraging the effort made by other entities in that regard. They should also recommend methods for building national awareness through environmental education on the importance of sustainable use of the environment and natural resources for national development.⁴⁸ Nema should carry out public participation and assist the public to assess information on matters of the environment. In very rare circumstances have I seen NEMA carrying out Public education on environmental issues. If this would have been properly done citizens like those in Owino Uhuru will not be suffering in silence for more than 5 years. It took the media to air the issue that's when NEMA got concerned.

Any person with a project should carry out and submit an environmental impact assessment report to NEMA before pursuing any financing and commencing any project. The environmental impact assessment should be financed by the project owner. The environmental impact assessment report should include information on the project intended and the significant impact it has on the environment. But this has not been the case, you find that NEMA officials provide interim licence even though the project owner has not carried out proper environment impact assessment audits. Companies posing significant Environmental pollution are up in running without even safeguarding the environment and health of the people living around.

⁴⁶ Environmental Management and Coordination, 1999 (eKLR) s69.

⁴⁷ Environmental Management and Coordination, 1999 (eKLR) s9 (2l)

⁴⁸ Environmental Management and Coordination, 1999 (eKLR) s9(2m).

An environmental impact assessment is to be carried out by authorised (by NEMA) firms or experts per the environmental impact assessment regulations, guidelines, and procedures.⁴⁹ NEMA then publishes the Environment Impact Assessment in the Kenya Gazette and newspaper for two weeks.⁵⁰ When NEMA is satisfied with the adequacy of the Environmental impact assessment study, evaluation, or review report it will issue an environmental impact licence on such conditions as may be appropriate and necessary to facilitate sustainable development.⁵¹

Before issuing any emission licence NEMA is to consider the possible effects of the emissions on the quality of ambient air; give due regard to the requirements for the residents, human settlements, and other industrial and commercial activities; solicit the comments of relevant Local Authorities and concerned organisations; where it appears necessary to conduct an environmental impact study, require the applicant to conduct an environmental impact assessment study in respect of the undertaking in question; where the information accompanying the application appears inadequate, require the applicant to furnish further information relating to the undertaking in question, its location, materials, technology design or other appropriate matters.⁵² NEMA may in writing cancel any emission licence if the holder of the licence contravenes any provisions of the Act or any regulations made under it; if the holder fails to comply with any condition specified in the licence; or if it is considered in the interest of the environment or in the public interest to do so.⁵³ This was brought out in the case of *Edmor Steel Millers vs. NEMA*, *Edmor went to seek redress from the court after NEMA gave them a closure notice for causing air and noise pollution. Nema denied them an emission licence upon carrying out an annual environment audit of the facility. Edmor claimed that they met all the standards. NEMA responded that the people of Syokimau have been complaining of noise and air pollution but upon entry into the factory, they found the residents were right and had to shut down the factory. The court held that Edmor had to comply with the requirements set out by NEMA failure to which the factory would remain closed. When they meet the requirements NEMA has a duty of providing Edmor with the required licence.*⁵⁴

⁴⁹ Environment Management and Coordination Act, 1999 (eKLR) s58.

⁵⁰ Environment Management and Coordination Act, 1999 (eKLR) s59.

⁵¹ Environment Management and Coordination Act, 1999 (eKLR) s63.

⁵² Environment Management and Coordination Act, 1999 (eKLR) s81.

⁵³ Environment Management and Coordination Act, 1999 (eKLR) s84.

⁵⁴ *Endmor Steel Millers Limited v National Environmental Management Authority; Nazir Hussain Hakada & 5 others (Interested Parties)*, Kenya Law Reports, 2020.

Restoration orders can be made by either NEMA or the court. An environment restoration order made by NEMA requires the person whom it is served to restore the environment (as near as it may be), to the state in which it was before the taking of the action which is the subject of the order. The order prevents the person on whom it is served from taking any action which would or is reasonably likely to cause harm to the environment. The order awards compensation to be paid by the person on whom it is served to other persons whose environment or livelihood has been harmed by the action which is the subject of the order.⁵⁵

2.3.2 The National Environment Complaints Committee

The **National Environment Complaints Committee** is established in section 31 of the Environment Management and Coordination Act, of 1999. NECC was formerly known as the Public Complaints Committee (PCC) but its name changed following the EMCA (Amendment) No. 5 of 2015). The committee is expected to investigate any allegations or complaints against any person or NEMA regarding the condition of the environment in Kenya. The committee also investigates, on its own recommendation, any suspected case of environmental degradation, and makes a report of its findings. The committee periodically reports on its activities, the report forms part of the annual report on the state of the environment.⁵⁶ The committee plays a major role in the formulation and development of the environment policy. The complaints committee has the power to instruct a person to assist the complaints committee with its investigation. The committee may also instruct a person to appear before it on matters under investigation.⁵⁷ Failure to which the person will have committed an offence.

2.3.3 Standards and enforcement review committee

The Standards and Enforcement Review Committee is established in section 70 of the Environment Management and Coordination Act, of 1999. The Committee recommends to NEMA criteria and guidelines for air pollution control for both mobile and stationary sources; requests NEMA to carry out investigations of actual or suspected air pollution including pollution produced by aircraft and other self-propelled vehicles, by factories and power generating stations; request the Authority to order any industry or other source of air pollution to

⁵⁵ Environment Management and Coordination Act, 1999 (eKLR) s108.

⁵⁶ Environmental Management and Coordination, 1999 (eKLR) s 32.

⁵⁷ Environmental Management and Coordination, 1999 (eKLR) s33.

file such returns and provide such information as it may require; recommend to the Authority guidelines to minimise emissions of greenhouse gases and identify suitable technologies to minimise air pollution. The Committee also advises NEMA on how to establish procedures for the measurement of air quality and recommends ambient air quality standards, emission standards, and occupational air quality standards.⁵⁸

The standards and enforcement review committee are to advise NEMA on measures necessary to reduce existing sources of air pollution by requiring the redesign of plants or the installation of new technology. The standards and enforcement review committee also recommended to NEMA the best practicable technology available for controlling pollutants during the emission process.⁵⁹

The Standards and Enforcement Review Committee in consultation with the relevant lead agencies, recommends to NEMA measures necessary to identify materials and processes that are dangerous to human health and the environment; issue guidelines and prescribe measures for the management of the materials and processes identified; prescribe standards for waste, their classification, and analysis, formulate and advice on standards of disposal methods; or issue regulations for the handling, storage, transportation, segregation and destruction of any waste.⁶⁰ They just advise NEMA to set standards on emissions and provide solutions to emission problems.

2.3.4 National Environmental Action Plan Committee

The **National Environmental Action Plan Committee** is established in section 37 of the Environment Management and Coordination Act, of 1999. The committee expected to contain an analysis of the natural resources of Kenya with an indication as to any pattern of change in their distribution and quantity over time. They should have an analytical profile of the various uses and value of the natural resources incorporating considerations of intragenerational equity. They recommend appropriate legal and fiscal incentives that may be used to encourage the business community to incorporate environmental requirements into their planning and operational processes.

⁵⁸ Ibid.

⁵⁹ Environmental Management and Coordination Act, 1999 (eKLR) s78.

⁶⁰ Environmental Management and Coordination Act, 1999 (eKLR) s86.

They recommend methods for building national awareness through environmental education on the importance of sustainable use of the environment and natural resources for national development. Set out operational guidelines for the planning and management of the environment and natural resources. Identify actual or likely problems that may affect the natural resources and the broader environmental context in which they exist.

They also propose guidelines for the integration of standards of environmental protection into development planning and management. Lastly, identify and recommend policy and legislative approaches for preventing, controlling, or mitigating specific as well as general adverse impacts on the environment.⁶¹

2.3.5 National Environment Tribunal

The **National Environment Tribunal** is established in section 125 of the Environment Management and Coordination Act 1999. The Tribunal hears matters relating to the environment and complaints presented to it. The Tribunal makes decisions, gives directions, awards compensation to aggrieved persons, and orders for restoration of the environment. etc.⁶²

When one is aggrieved by a decision or order of the Tribunal, one may within thirty days of such decision or order, appeal against such decision or order to the High Court.⁶³ The tribunal assists when one suffers a form of environmental injustice.

2.3 Environment Impact Assessment and Audit Regulation, 2003.

According to the **second schedule** of the Environment Management and Coordination Act, of 1999, exploration and production of fossil fuels (coal and petroleum) should undergo environmental impact assessment before any mining activities begin. According to the 2010 Constitution of Kenya, “ The government is to establish systems of environmental impact assessment, environmental audit and monitoring of the environment.”⁶⁴ Environmental impact assessment is a systematic examination conducted to determine whether or not a program,

⁶¹ Environment Management and Coordination, 1999 (eKLR) s38.

⁶² Environment Management and Coordination Act, 1999 (eKLR) s125.

⁶³ Environment Management and Coordination Act, 1999 (eKLR) s130(1).

⁶⁴ Constitution of Kenya, 2010 (eKLR) A.69(1f).

activity or project will have any adverse impacts on the environment. ⁶⁵Environmental impact assessment is guided by the Environment Impact Assessment and Audit Regulation, 2003.

Before carrying out any environmental impact assessment one is to submit a project report to NEMA. The project report should include activities and design of the project, the potential environmental impacts of the project and the mitigation measures to be taken during and after implementation of the project, the materials used and waste produced in the project, an action plan for the prevention and management of possible accidents during the project, plans to protect the health and safety of the workers and communities around, impact of the project to the community(economic and Sociocultural), etc.⁶⁶

If a project is likely to harm the environment an environmental audit and monitoring study is done. It is done on already ongoing projects commenced before the coming into force of the regulations or on new projects undertaken after the completion of an environmental impact assessment study report. ⁶⁷ when carrying out an environmental impact assessment you should consider; ecological considerations e.g. biodiversity, social aspect and economic impacts, land uses, the landscape, and water sources. ⁶⁸ The E.I.A report is normally published in two newspapers for the people to get to know what the projects entail. The Environmental impact assessment will help the people and government assess whether it's a good idea for the project to be initiated in the area.

2.5 The Energy Act, 2019

The Energy Act of 2019 is an act of parliament that consolidates all the laws relating to energy, establishes powers and functions of entities in the energy sector, provides regulations of midstream and downstream petroleum and coal activities, and also promotes the use of renewable sources of energy. The Energy Act, of 2019 requires a person engaged in the production of energy utilising coal to comply with the applicable environmental, health, and safety laws.⁶⁹

⁶⁵ Environment Management and coordination Act, 1999 (eKLR) s2.

⁶⁶The Environment (Impact Assessment and Audit) Regulation, 2003 (eKLR) s7.

⁶⁷ The Environment (Impact Assessment and Audit) Regulation, 2003 (eKLR) s31.

⁶⁸ The Environment (Impact Assessment and Audit) Regulation, 2003 (eKLR) second schedule.

⁶⁹ Energy Act, 2019 (eKLR) s114.

The following is the institution established in the Energy Act 2019:

2.5.1 Energy and Petroleum Regulatory Authority.

The **Energy and Petroleum Regulatory Authority** is established in section 9 of the Energy Act, 2019. EPRA regulates, monitors and supervises upstream petroleum operations in Kenya, they also work together with the relevant statutory authorities to formulate, enforce and review environmental, health, safety, and quality standards for the upstream petroleum sector.⁷⁰ This means that EPRA has to work hand in hand with institutions such as NEMA to safeguard the environment.

EPRA is to ensure that contractors uphold the relevant laws, regulations, and petroleum agreement terms, and investigate all complaints or disputes arising from petroleum operations. They also coordinate the development and implementation of national energy efficiency and conservation action plan, in consultation with relevant statutory authorities and other stakeholders. EPRA is to take such action as is necessary to enforce the requirements in a petroleum agreement or any regulations and to protect the environment, the health and safety of workers, and the public.⁷¹

EPRA has powers to formulate, set, enforce and review environmental, health, safety, and quality standards for the energy sector in coordination with other statutory authorities.⁷² Before issuing any licence to conduct downstream coal activities, EPRA has an obligation of confirming that the company complies with the environmental, health, safety, planning, maritime, and any other relevant legislation or guidelines.⁷³ In case of a petroleum accident, EPRA may direct an investigation to be carried out into any accident or incident and take such action as it deems necessary.⁷⁴ Accidents include oil spills, explosions etc that tend to greatly affect the environment.

⁷⁰ Energy Act, 2019 (eKLR) s10.

⁷¹ Ibid.

⁷² Energy Act, 2019 (eKLR) s11(g).

⁷³ Energy Act, 2019 (eKLR) s96.

⁷⁴ Petroleum Act, 2019 (eKLR) s63 (2).

EPRA has a responsibility of carrying out public participation in a place where upstream petroleum operations are to be permitted, the community is given adequate opportunity to participate in the process of reviewing and awarding permits under the Petroleum Act.⁷⁵ One is liable if one fails to carry out public participation.⁷⁶ When it comes to energy-related matters EPRA has the mandate to carry out public participation as well as NEMA.

Above we recognize that EPRA has a responsibility of regulating activities involving coal and petroleum operations and they are to work together with other statutory authorities when it comes to environmental, health, safety and maritime matters.

2.6 Petroleum Act, 2019.

The Petroleum Act, 2019 provides a framework for the contracting, exploration, development and production of petroleum, cessation of upstream petroleum operations, to give effect to relevant articles of the Constitution in so far as they apply to upstream petroleum operations, regulation of midstream and downstream petroleum operations.⁷⁷

A person engaged in the petroleum business is to comply with the applicable environmental, health, and safety laws.⁷⁸ When one is contracted with carrying out upstream petroleum operations they should adopt measures necessary for the conservation of petroleum and other resources as well as protect the environment.⁷⁹

In the petroleum sector before issuance of any licences or permits, EPRA takes into consideration: the impact of the undertaking on the social, cultural, or recreational life of the community; the need to protect the environment and to conserve the natural resources per the environmental laws, maritime laws and international maritime treaties ratified by Kenya; land use or the location of the undertaking; the ability of the applicant to operate in a manner designed to protect the health and safety of users of the service.⁸⁰ This is due to the environmental impacts

⁷⁵ Petroleum Act, 2019 (eKLR) s24 (8).

⁷⁶ Petroleum Act, 2019 (eKLR) s24(10).

⁷⁷ Petroleum Act, 2019 (eKLR).

⁷⁸ Petroleum Act, 2019 (eKLR) s97.

⁷⁹ Petroleum Act, 2019 (eKLR) s19(1f).

⁸⁰ Petroleum Act, 2019 (eKLR) s75.

oil exploration production and usage has on the environment. Every petroleum agreement requires a contractor to be able to adopt measures necessary to conserve petroleum as well as protect the environment.⁸¹ When applying for a petroleum production permit one should make an application to EPRA and include an environmental impact assessment study report of the upstream petroleum operations and all relevant environmental licences and reports as may be required by law.⁸²Precautions are to be taken to protect the environment and natural resources, including taking precautions to prevent pollution.⁸³

The Act encourages the use of best petroleum industry practices. The best petroleum industry practices are practices, methods, standards, and procedures generally accepted and followed internationally by prudent, diligent, skilled, and experienced operators. The practice intends to protect the environment by minimising the impact of upstream petroleum operations in Kenya.⁸⁴ The management, production, transportation, storage, treatment, and disposal of waste arising out of upstream petroleum operations is to be carried out following all the applicable environmental, health, safety, and maritime laws and best petroleum industry practices.⁸⁵If pollution takes place the polluter is liable for damage from pollution without regard to fault from whichever source is related to the upstream petroleum operations of the contractor.⁸⁶ This is in line with the polluter pays principle.

Petroleum licence holders should deploy the best available technology to assure quality, environment, health, and safety requirements are met; prevent the escape in the contract area of any mixture of water or drilling fluid and petroleum or any other matter; prevent the pollution of any soil, air, biodiversity, brine, water well, spring, stream, river, lake, reservoir, sea, forest, wildlife and marine, estuary or harbour by the escape of petroleum, saltwater, drilling fluid, chemical additive, gas (not being petroleum) or any other waste product; where pollution occurs, treat or disperse it in an environmentally acceptable manner.⁸⁷

⁸¹ Petroleum Act, 2019 (eKLR) s19.

⁸² Petroleum Act, 2019 (eKLR) s32.

⁸³ Petroleum Act, 2019 (eKLR) s66.

⁸⁴ Petroleum Act, 2019 (eKLR) s2.

⁸⁵ Petroleum Act, 2019 (eKLR) s60.

⁸⁶ Petroleum Act, 2019 (eKLR) s72.

⁸⁷ Petroleum Act, 2019 (eKLR) s59.

2.7 National Energy Policy, 2018.

The **National Energy Policy, 2018** objective is to ensure a competitive, reliable, sustainable, and cost-effective supply of energy to achieve national development while protecting and conserving the environment. The policy encourages the use of fossil fuels and renewable sources of energy keeping in mind the environmental impact caused by the use of coal and oil. The government is to promote the efficient utilisation of coal while minimising its environmental impact. The policy backs the introduction of clean coal technologies in coal plants to reduce emissions by extracting Sulphur and carbon from the atmosphere making coal environmentally friendly as a source of energy.

2.8 National Environment Policy, 2013

The environmental policy objective is to provide a framework for an integrated approach to planning and sustainable management of Kenya's environment and natural resources.

The policy aims at protecting coastal and marine ecosystems which are under threat from oil and gas exploration, pollution from land-based activities, and destruction of marine living resources e.g. mangrove and climate change.

According to the policy, it is important to recognise the existing institutional mechanisms and consider ways and means by which coordination and cooperation can be enhanced between the many institutions whose mandates relate to the environment. For this reason, the government was to streamline and strengthen the capacity of environmental institutions at the national and county levels to make them more effective and participatory.⁸⁸

According to the National environment policy 2013, “ the government is to:

- (a) Develop and promote an integrated national strategy for the generation and sustainable utilisation of renewable energy.
- (b) Promote adaptation of the cleaner production concept in all energy production and consumption activities.

⁸⁸ National Environment Policy, 2013, p.46.

(c) Develop comprehensive nuclear, petroleum and coal energy policies guided by research and the precautionary principle.”⁸⁹

We have a well-detailed environmental policy nevertheless, the state is quick to initiate projects (coal and nuclear energy) without adhering to its policies. A good example; A sensitive project like coal mining in Lamu that has been initiated without proper planning, public participation and Environmental Impact Assessment.

2.9 Mining Act no 12 of 2016.

The **Mining Act no 12 of 2016** advocates for environmental protection and rehabilitation of the environment damaged during mining. For one to acquire any licence, mineral right, mining permit, or any grant under the mining act one must comply with the environmental laws.⁹⁰

A mining licence is not granted unless one has obtained an approved environmental impact assessment licence, a social heritage assessment, and an environmental management plan.⁹¹ No mining activity can be initiated without carrying out an environmental impact assessment.

Note: The Mining Act does not apply to the mining of petroleum, and coal.

2.10 Ministry of Mining, Blue economy and Petroleum

The **Cabinet Secretary Mining** has a duty not to grant a prospecting licence, a retention licence, or a mining licence to an applicant unless the applicant has submitted site mitigation and rehabilitation or mine-closure plans for approval.⁹² The Cabinet Secretary for mining or a public officer may apply to the Environment and Land Court for orders compelling a person to immediately stop activities and operations for, or connected with, the search for, prospecting, or mining of a mineral or mineral deposit in Kenya where he reasonably believes that such operations are being carried out in contravention of the provisions of the Mining Act.⁹³

2.11 Ministry of Environment and Forestry.

The **Cabinet Minister of Environment** lays down every annual report on the state of the environment prepared by NEMA before the National Assembly as soon as reasonably practicable

⁸⁹ National Environment Policy, 2013, p.32.

⁹⁰ Mining Act, 2016. (eKLR) s176.

⁹¹ Mining Act, 2016 (eKLR) s176 (2b).

⁹² Mining Act, 2016 (eKLR) s180.

⁹³ Mining Act, 2016 (eKLR) s200.

after its publication where the National Assembly is in session, or where not in session, within twenty-one days of the day the National Assembly next sits after such publication.⁹⁴

2.12 Conclusion

As you can see above Kenya is rich in laws and policies when it comes to the environmental management of fossil fuels. NEMA and EPRA are seen to be the main key players in the environmental management of fossil fuels. The institutions should work together to ease the implementation and enforcement of the laws. The laws advocate for proper Environmental Impact assessment, public participation, use of environmentally friendly technology etc. We seem to be on the right path when it comes to the management of the environment but putting into action what is written seems to be the problem. Institutional laws should be harmonised and properly clarified to create order within the sectors.

⁹⁴ Environment Management and Coordination Act, 1999 (eKLR) s9(3).

CHAPTER 3

OVERVIEW OF THE INTERNATIONAL LAW REGULATING THE ENVIRONMENT.

3.1 Introduction

Kenya has ratified various international laws and conventions that aim at protecting the environment. Since Kenya is a monist state, international treaties and Conventions form part of Kenyan law. Referring to the Constitution of Kenya 2010, “any Treaty and conventions ratified by Kenya form part of Kenya law.”⁹⁵ This gives courts a wider scope to choose from when deciding cases. Various international treaties and conventions have influenced the environment and energy laws in Kenya. They include:

3.2 United Nations Framework convention on Climate Change.

The main objective of the convention is to stabilise greenhouse gas concentrations in the atmosphere to a level that would prevent dangerous anthropogenic interference with the climate system.⁹⁶ Kenya is to protect the environment for the benefit of current and future generations of humankind based on equity and per their common but differentiated responsibilities. Kenya is to take precautionary measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects.⁹⁷

Kenya is to take climate change considerations into account by employing appropriate methods. A good example is environmental impact assessment meant to minimise adverse effects on the economy, public health, and quality of the environment and provide measures to be undertaken to mitigate the effects.⁹⁸ The state is to promote and cooperate in the development of technologies and practices that would control, prevent and reduce greenhouse emissions not controlled by the Montreal convention.⁹⁹ We are to carry out proper public participation and provide public education to our citizens to make them more aware of climate change matters.

⁹⁵ Constitution of Kenya , 2010 (eKLR) a2(6).

⁹⁶ United Nations Framework convention on Climate Change, 1992 a2.

⁹⁷ United Nations Framework convention on Climate Change, 1992 a3

⁹⁸ United Nations Framework convention on Climate Change, 1992 a4(f)

⁹⁹ United Nations Framework convention on Climate Change, 1992 a4(c)

Citizens should have public access to information on matters affecting climate change e.g. implementation of projects that will greatly affect the environment.¹⁰⁰

3.3 Kyoto Protocol to the United Nations Framework Convention on Climate Change 1998.

The Kyoto protocol is a United Nations Framework Convention on Climate Change, adopted on 11th December 1997 but came into force in 2005. The main aim of the protocol is to quantify, limit and reduce greenhouse emissions and promote sustainable development. For the state to promote sustainable development, they are expected to implement elaborate measures and policies to protect and enhance sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements. Kenya is to research and promote, develop and increase the use of new and renewable forms of energy and advance innovation of environmentally sound technologies.¹⁰¹ The state is to ensure its carbon emissions don't exceed the required amount.¹⁰² Under the convention, Kenya should have a clean development mechanism. A clean development mechanism will assist the country to achieve sustainable development and reduce carbon emissions. The clean development mechanism is subject to the authority and guidance of the conference of parties.¹⁰³

3.4 Convention on Biodiversity 1992.

Convention on Biodiversity 1992, was aimed at conserving the Biodiversity of different plant and animal species. Kenya has all the right to exploit its resources according to their environmental policies and has a responsibility to ensure that those activities don't cause damage to the environment of other states or jurisdictions.¹⁰⁴ Kenya is to introduce policies and procedures requiring environmental impact assessment on projects that are likely to cause significant effects on biodiversity. They should also allow public participation in its programs and policies. We should promote the exchange of information and consultations on activities

¹⁰⁰ United Nations Framework convention on Climate Change, 1992 a6(a).

¹⁰¹ Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998 a2.

¹⁰² Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998 a3.

¹⁰³ Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1998 a12.

¹⁰⁴ Convention on Biodiversity, 1992 a3.

within its Jurisdiction that can significantly affect the biological diversity of other states.¹⁰⁵ A good example is China should inform its neighbours of the possibility of smoke coming from the burning of coal affecting the air quality of its neighbours.

We are to adopt measures relating to the use of biological resources e.g. biotechnology to avoid or minimise adverse impacts on biological diversity.¹⁰⁶ Public education/ public awareness on the importance of biological diversity should be encouraged. The programs will assist in the conservation and sustainable use of biological diversity.¹⁰⁷

3.5 United Nations Conference on Environment and Development.

The United Nations Conference on Environment and Development met in Rio de Janeiro in June 1992 and came up with the Rio Declaration of 1992. States have a responsibility as per the Charter of the United Nations and the principles of international law, to exploit their natural resources. This is done according to their own environmental and developmental policies. They should ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or areas beyond the limits of national jurisdiction.¹⁰⁸ For one to achieve sustainable development environmental protection should form an integral part of the development process.¹⁰⁹ The Rio Declaration requires states should develop in a way that they equitably meet the developmental and environmental needs of current and future generations.¹¹⁰

Environmental issues are best handled by all citizens at all levels. Citizens should be able to access information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities. Citizens should be allowed to participate in decision-making processes.¹¹¹ Peace, development, and environmental protection are interdependent and indivisible.¹¹² Those three qualities walk hand in hand.

¹⁰⁵Convention on Biodiversity, 1992 a14.

¹⁰⁶ Convention on Biodiversity, 1992 a10.

¹⁰⁷ Convention on Biodiversity, 1992 a13.

¹⁰⁸ United Nations Conference on Environment and Development, 1992 p2.

¹⁰⁹ United Nations Conference on Environment and Development, 1992 p4.

¹¹⁰ United Nations Conference on Environment and Development, 1992 p3.

¹¹¹ United Nations Conference on Environment and Development, 1992 p10.

¹¹² United Nations Conference on Environment and Development, 1992 p25.

Kenya is to undertake an Environmental impact assessment on proposed activities that may cause significant adverse effects to the environment.¹¹³ They are to cooperate in the spirit of global partnership to conserve and restore the health and integrity of the earth's ecosystem. This means states are to work together and conserve the environment. In doing so states have common and differentiated responsibilities when it comes to environmental protection and restoration.¹¹⁴ We are to sustainably develop by improving scientific understanding through the exchange of scientific and technological knowledge, innovation and adaptation of new technologies.¹¹⁵

3.6 Conclusion

In **conclusion**, international laws tend to respect state sovereignty by allowing states to exploit their resources following their policies as long as they don't cause damages beyond their jurisdiction. International laws encourage an exchange of scientific innovations and technologies aimed at assisting in environmental protection. International law values can be reinforced through International cooperation. International law fails to provide a strong enforcement mechanism to assist states to implement the laws in their jurisdictions. Institutions in place don't have the power to enforce the international laws in place. Since it is very difficult to enforce international laws, countries impose trade sanctions to encourage states to comply.¹¹⁶ According to the Judicature Act, when it comes to hierarchy of laws international /customary laws are the third in the hierarchy after the 2010 constitution followed by the legal statutes.¹¹⁷ We agree that international laws form part of Kenya's law as per the constitution but at the same time, they don't override domestic laws.

¹¹³ United Nations Conference on Environment and Development, 1992 p17.

¹¹⁴ United Nations Conference on Environment and Development, 1992 p7.

¹¹⁵ United Nations Conference on Environment and Development, 1992 p9.

¹¹⁶ P. A. Rees, 'The Laws protecting animals and the ecosystem', 2018, p.23.

¹¹⁷ Judicature Act, CAP 8 (eKLR) s3.

CHAPTER 4

GAPS AND WEAKNESSES IN THE IMPLEMENTATION OF ENVIRONMENTAL LAWS DURING THE PRODUCTION OF FOSSIL FUELS.

4.1 Introduction.

The discovery of Oil and Coal has been a blessing in the energy sector but the thought of the effects it causes on the environment sends chills down our spine. Energy efficiency is very important for a country's economy. At the same time, finding the best available clean energy that protects the environment is difficult and expensive to come by. In the previous chapters we have discussed various national and international laws as well as institutions meant to protect the environment. Kenya is very rich in laws and policies that accommodate sustainable development but the laws are hard to implement due to the following factors:

4.2 Insecurity

Insecurity is the state of being open to threats or danger. According to Collins English Dictionary it is a lack of confidence or assurance.¹¹⁸ Macmillan adds that it is a fact of not being safe or secure. Many believe that insecurity is caused by different factors e.g. high cost of living, poor governance, greed etc.

Insecurity most of the time is associated with the resource curse narrative . “Resource curse is failure of a resource rich country to benefit from its natural resources.”¹¹⁹ Many believe that the richer the country in natural resources the poorer it becomes. In Africa Nigeria, a country rich in oil has suffered from the resource curse due to corruption, Sudan has always languished in political instability ,South Africa rich in coal has been struggling with xenophobia etc. Outside Africa Saudi Arabia, Syria and Iran, Oil rich countries in the middle east have struggled with insecurity with wars, terrorism and political instability being the melody in those regions.

In Kenya we are grateful that even though we have been blessed with natural resources we are yet to suffer the extreme consequences of resource curse. But that doesn't mean it has not started manifesting due to the increase in corruption within the country. According to the Black's Law

¹¹⁸ Collins English Dictionary, ‘ Insecurity’, <https://www.collinsdictionary.com/dictionary/english/insecurity> (accessed on 19th July 2021).

¹¹⁹ M. Humphreys, J. Sachs and J. E. Stiglitz, ‘Escaping the Resource Curse’,2008.

dictionary Corruption, “is acting with an intent to give some advantage inconsistent with one’s official duty and the rights of others. It is also the official use of an office to procure some benefit either personally or for someone else.”¹²⁰ According to the Anti-corruption and Economic crimes act, “corruption means bribery, fraud, abuse of office(Any person who uses his office to improperly confer a benefit to himself or others), misappropriation of public funds, breach of trust, the offence of dishonesty.”¹²¹

In Nigeria insecurity caused by corruption has led to an increase in armed rebel groups in Northern Nigeria. Northern Nigeria is rich in oil and gas, there is a heavy presence of armed militia groups who are mostly politically instigated. Rich politicians use the rebel groups to instil fear, harm and steal oil and sell it in black market. Fear chases away investors to reduce competition.

Corruption has in recent years become a menace in Kenya. With corruption scandals arising daily within the County governments and National government. This makes the development and implementation of laws a very difficult task. A public officer is believed to be corrupt if the officer has a direct/ indirect private interest in a decision and if the officer participates in voting or proceeding and has failed to disclose information of his/ her private interest.¹²² Corruption by a public officer is a felony. According to section 41 of the Anti-corruption and economic crimes act, “ An agent is corrupt if he/she commits an offence by providing false or misleading information to the principal.”¹²³ The Constitution of Kenya requires all public officers in a government institution to serve the people, create public confidence, respect the people and bring honour to the nation and dignity to the office.¹²⁴ Upon assumption of office, many public officers forget their constitutional duty.

Corruption is like a deadly virus. It affects all government organs(legislature, executive, and judiciary) , lowers its immune system then kills the economy of the state. It completely cripples

¹²⁰ Black’s Law dictionary, ‘ Corruption ’, 2nd Ed, <https://thelawdictionary.org/corruption/> (accessed on 19th July 2021).

¹²¹ Anti-corruption and Economic Crimes Act, 2003 (eKLR) s2.

¹²² Anti-corruption and Economic Crimes Act, 2003 (eKLR) s42.

¹²³ Anti-corruption and Economic Crimes Act, 2003 (eKLR) s41.

¹²⁴ Constitution of Kenya, 2010 (eKLR) a73.

institutions in the government implementing laws becomes impossible as witnessed in Nigeria, South Sudan and DRC. Quoting the former president's (Uhuru Kenyatta) sentiments Kenya loses 2 billion daily due to corruption. The ethics and anti-corruption estimate, Kenya loses 6 billion daily to corruption. Corruption leads to poor development no matter how rich a country is in natural resources.¹²⁵

Corruption has affected government organs to an extent many Kenyans no longer believe in environmental justice. Many look for shortcuts when applying for licences, permits, certificates, jobs, etc. According to *KM & 9 others v Attorney General & 7 others*, "*In this case, the residents of Owino Uhuru in Changamwe, Mombasa county suffered from lead poisoning. The court held that the respondents had failed to observe the petitioner's rights to a clean and healthy environment. NEMA issued a licence to Metal refinery ltd (EPZ) without carrying out any public participation and taking into consideration the community living within the area. Instead of holding EPZ accountable NEMA went ahead and issued them with an Environmental impact assessment licence before confirming that the company complied with their order (NEMA issued permission for trial runs before EIA was carried out).*"¹²⁶

In a lot of instances, the High Court of Kenya has had to cancel licences because environmental impact assessments were acquired illegally or poorly done. A lot of companies have been ordered to rehabilitate the environment and compensate the victims affected by their acts and omissions. You find that those companies had paid off national, county, and NEMA officials during inspections or if complaints are raised. After being paid off nothing gets done leaving citizens with no option but to go to court to seek justice.

According to the Environment Management Act, Landowners have a responsibility of opening up their premises to allow an environment inspector to carry out environmental monitoring. The inspector is to monitor the effects of the activities carried out on the environment.¹²⁷ Environment inspectors determine how far the activities carried out on that land or premises

¹²⁵A. Williams and P. Billon, "Corruption, Natural Resource and Development from resource curse to political ecology, 2017.

¹²⁶ *KM & 9 others v Attorney General & 7 others*, Kenya Law Reports, 2020.

¹²⁷ Environment Management and Coordination Act, 1999 (eKLR) s69(2).

conform with the statements made in the environmental impact assessment study report issued for the land or premises.¹²⁸ Environment inspections are an important tool in the implementation of environmental law, but because of corruption environment inspections don't provide much help. Environment inspectors are paid off to falsify documents.

Failure of NEMA which is the national environmental regulatory agency, to meet its objective the environmental laws cannot be properly implemented. This has been seen in various instances where NEMA officials have been accused of negligence leading to environmental pollution and degradation.

Corruption has led to the illegal awarding of tenders. The unprocedural tendering process was seen in the case of procurement of a company to carry out coal mining operations in Mui Basin. A Chinese company called Shanxi Fenxi Mining Group was awarded the tender. A question on the existence of such a company was raised. A government delegation was then tasked with going to China and confirming the existence of the company. It was found out that it doesn't exist. And a company called Fenxi mining group doesn't operate any mines.¹²⁹ Bringing out the question, how can the government illegally award tenders of a project with massive environmental impact? Will the government be interested in the environment or they are just interested in the economic benefits of Coal?

Communities and human rights groups have to petition to the court for their right to a clean and healthy environment to be upheld as it was seen in the case of Owino Uhuru in Changamwe, Mombasa and Mui Basin. The communities find themselves holding various demonstrations so that the government will hear their cry.

Members of the judiciary and the government institutions are crucial partners in promoting compliance, implementation, and enforcement of national and international environmental laws. If they are corrupt or incompetent implementation and enforcement of environmental laws is impossible. The Independent Ethics and Anti-Corruption Commission, the Directorate of

¹²⁸ Environment Management and Coordination Act, 1999 (eKLR) s68(2).

¹²⁹ Ibid.

criminal investigation, and the office of the Director of public prosecution have a duty to carry out investigations and prosecute public/ state officers carrying out abuse of office and corruption. Due to mistrust within the offices, impunity and lack of adequate funds required for investigation many corruption cases go unprosecuted and the guilty go scot-free.

4.3 Lack of proper public participation and Environment Impact Assessment.

Environmental Impact assessment is a systematic examination conducted to determine whether or not a programme, activity or project will have any adverse impacts on the environment.¹³⁰ Public participation on the other hand is the participation of every citizen in the activities of any organisation or project. If the project tends to negatively or positively affect the community or public they are to be consulted. Democracy and participation of the people are national values binding all state organs, public officers, state officers, and all persons in Kenya.¹³¹ Every Kenyan has the right to access information held by the state and information held by another person.¹³² The government is to publish any information affecting the nation that includes the environmental impact assessment in the production of fossil fuels.

The state is to encourage public participation in the management, conservation, and protection of the environment.¹³³ This means that in any project involving the environment the public is to be consulted. The public should be aware of upcoming projects within their community, and should be informed of the advantages and disadvantages of the project to the environment.

In the case of Mohamed Ali Badi and others v Attorney General & 11 others [2018] eKLR “This Petition concerns the design and implementation of the Lamu Port-South Sudan-Ethiopia-Transport Corridor project (“the LAPSSET Project). Petitioners (Mohammed Ali and others) are opposed to how the LAPSSET Project was designed without putting in place adequate measures to mitigate the adverse effects of a project on the environment (marine ecosystem) and people. The Court held that the respondents are to strictly adhere to the Constitution of Kenya and Environmental law (EMCA). The projects SEA and EIA were procedurally infirm (proceeded in disregard of the constitutional principles and statutory law).

¹³⁰ Ibid.

¹³¹ Constitution of Kenya, 2010 (eKLR) a10(a).

¹³² Constitution of Kenya, 2010 (eKLR) a35.

¹³³ Constitution of Kenya, 2010 (eKLR) a.69.

*The court referred to article 10 stating that the state and every state organ, state office and public officer is to consult the public when it comes to decision making, application of any law or public policy.”*¹³⁴

Most projects that can cause adverse effects to the environment have failed to carry out proper environmental impact assessments and audits, forcing the courts to revoke licence or seize operations. Concerned citizens have had to drag these companies to court for them to implement the law. In the case of **Save Lamu**, the court held that the environmental impact assessment was not properly done because the respondents failed to consider the effect of Coal poisoning on the Lamu marine ecosystem, biodiversity, tourism, etc. As of now operations in Mui Basin, and Lamu have been halted until the parties tendered with carrying out mining have done a conclusive proper environment impact assessment and public participation. This shows how important public participation and EIA. All national and international laws advocate for public participation and EIA which seems to be majorly ignored in Kenya when energy related projects are initiated.

4.4 Economic development Versus environmental protection.

To sustainably develop a state should provide a clear balance between economic development and environmental protection. Kenya is to exploit its fossil fuels in a way that the future generation will have an opportunity to enjoy the benefits of having the resources. Kenyans are expected to conserve the environment in their quest to sustainably exploit and utilise fossil fuels. In the Netherlands Groningen, environmental rights activists are against Dutch authorities' decision to approve offshore drilling of oil and gas. The main reason is the increased prices of oil and gas in Europe. The environmental activist argues that drilling will damage the biodiversity of the area and pollute the area, threatening the locals' main source of income, tourism. As of now, the drilling process is set to be suspended. The increase in earthquakes in the area has been caused by the drilling.¹³⁵

¹³⁴ Mohamed Ali Badi and others v Attorney General & 11 others, Kenya Law Report, 2018.

¹³⁵ F. Tets and A. Bourdon, 'Dutch Island up in arms against drilling for gas in the North sea,' France 24, 2023, [Website] <https://www.france24.com/en/tv-shows/focus/20230215-dutch-island-up-in-arms-against-drilling-for-gas-in-the-north-sea> (accessed 20th February, 2023).

In Kenya, the environment and lands court argued that fossil fuel plants have to be designed in a way that they don't cause harm to the environment but conserve it. The state must eliminate processes and activities that are likely to endanger the environment.¹³⁶ This is a way for the country to kill two birds with one stone. We should utilise the environment and natural resources for the benefit of the people of Kenya.

Juggling between environmental protection and economic development has been a challenging decision to make for states. Many are facing the predicament of not developing some areas to conserve environmentally -sensitive areas e.g. forests, marine environment, national parks, and reserves. Fossil fuels have enormous economic benefits but we forget to think about their environmental implications. We are greedy to earn revenue from the exploitation of the resources but forget to effectively implement environmental laws when initiating the projects. A good example is in the case of **Save Lamu and 5 others V NEMA & another 2019**, *“The people in Lamu through their representative were aggrieved by the government actions of initiating the building of a coal mining plant on the seashore of Kwasasi area, Lamu. They stated that the government had not carried out a proper environmental impact assessment and public participation. Operation of the coal plant will infringe on their right to a clean and healthy environment and it will interfere with Lamu's sensitive marine ecosystem. The court held that development projects will always have environmental impacts, but the extent of the pollution creates the difference. The law sets a requirement for mitigation measures to be put in place. Failure to initiate the project Kenya will not be able to produce the electricity that it needs under the 5000 Plus MW program which will have adverse socio-economic impacts.”*¹³⁷

Developed states such as China (the main source of energy is coal) choose economic development and disregard environmental protection and preservation. In 2019 China experienced the worst form of air pollution, it had an unhealthy amount of Particular Mater 2.5 pollutants that led to 1.42 million premature deaths. These levels exceeded WHO Air quality levels. China has experienced the worst forms of air pollution in the world to an extent that people had to wear facemasks due to the presence of harmful gases in the air (as early as 2013).

¹³⁶ Constitution of Kenya, 2010 (eKLR) a69(1g).

¹³⁷ Save Lamu & 5 others v National Environmental Management Authority (NEMA) & another, eKLR, 2019.

¹³⁸ China is one of the Largest producers of greenhouse gases. States have convened to fight against climate change. Currently, China is facing a very hard Dilemma of environmental protection and the need to continue having rapid economic growth.¹³⁹

The world has come together intending to save the planet. Developing states have been left with a critical decision to strike a balance between economic development and environmental protection. States in the United States e.g. Hawaii have made a hard decision and chosen to abandon the use of Coal as a source of energy.

4.5 Complexity in implementation of laws

The environmental sector is very complex. According to the National environment policy 2013, the environment is multifaceted. The need to integrate environmental considerations in all development planning and activities calls for cooperation and consultation among responsible government agencies and stakeholders at all levels.”¹⁴⁰

When implementing laws we are to consider different factors like the area, demographics, climate, and geology vary from place to place. Environment protection procedures to be taken in Lamu are not the same as that of Mui Basin. In Lamu, they have to consider the marine ecosystem, the people, security (al Shabaab threat), and the effects of pollution on Somalia. China has received great criticism due to major air pollution (caused by coal mining). The mining has caused major smog/fog (atmospheric pollutants choking) affecting its neighbours in Japan and South Korea. This means that environmental matters are to be dealt with on a case-to-case basis.

4.6 Institutional Incapacity

Institutions’ incapacity is very important for the implementation of laws. Institutional capacity is the ability of an institution to function as required under the law. Different factors affect an institution’s capacity to perform efficiently. They include finance, human resource management,

¹³⁸ ‘Is Air Quality in China a Social Problem?’, China Power, February 26 ,2021, [website] <https://chinapower.csis.org/air-quality/>, (accessed 11thApril 2021).

¹³⁹ S. Ligang and W. Thye, ‘China's Dilemma: Economic Growth, the Environment and Climate Change’, Anu Press, 2008, [website]<https://library.oapen.org/handle/20.500.12657/33795> (accessed 20th January 2022).

¹⁴⁰ National Environmental Policy, 2013, P. 45.

modern technology, clarity on their functions etc. Institutions have to have the capacity to prosecute environmental injustices. If the Courts, ODPP, DCI, and the ethics and anti-corruption lack enough revenue, skilled human resources and modern technology environmental cases will drag in court, and evidence will not be easily acquired thus affecting the outcome of cases.

Finances are very important for our day-to-day growth. Institutions require adequate funds to carry out their duties adequately. Insufficient funds lead to the inability to carry out proper environmental audits and impact assessments, lack of highly skilled human resources to carry out tasks, poor services and inability to purchase environmentally friendly technology. Without enough funds being pumped into the investigating authorities, the energy sector and environmental sector the implementation of the laws will be a difficult task to perform.

4.7 Lack of proper community benefit mechanism.

The constitution of Kenya requires the equitable sharing of accruing benefits acquired from the production and exploitation of fossil fuels. Bringing out the question of who benefits from the Oil mined in Turkana. In Nigeria, it is only the rich, the state and the west who benefit from the oil. The locals continue to languish in property which has led to an increase in insecurity in the areas.

Kenya lacks proper procedures to assist in equitable sharing of revenue. Many communities in Kenya whose land possesses natural resources don't benefit from having those resources, they continue languishing in poverty while the companies and government benefit from the profits. Turkana County which boasts of having oil is among the counties currently experiencing the worst form of starvation, malnutrition and poverty. The law states the percentage of the funds is to be distributed among the communities, how should the community spend it?Bringing the need for legislation to assist in proper equitable distribution of benefits.

4.8 Lack of modern environmentally friendly technology.

Modern technology plays a big role in providing smart, clean mining practices to conserve and preserve the environment. Lack of the best available technology prevents the contractors from achieving proper environmental protection and safety of workers and the community around

them. Modern environmentally friendly technology is to assist institutions in carrying out environmental assessments and audits quickly and efficiently. Institutions are to encourage the use of environmentally friendly modern technology to eliminate pollution. A good example is in the Edmor Steel millers case the court held that the company was to acquire modern technology to enable them to recycle and treat harmful substances that were released in the air. NEMA refused to renew their emission licence due to air pollution.

In April 2021 the USA approved 75 million dollars in funding to assist coal and oil plants to install carbon capture technologies.¹⁴¹ This will put America on the map by complying with global decarbonization technologies. Most states have come up with ways of using technology to protect the environment. Many are switching from old to new smart technology that aids in recycling and treating waste from fossil fuels. Lack of modern technology will fail in reducing emissions and protecting the environment and will end up experiencing the worst form of pollution like what is being experienced in China, Nigeria and South Africa.

In South Africa, “An Environment justice group in South Africa sued the South African government over coal air pollution. The activists claim that the government has failed to tackle the high air pollution caused by the coal-fired power station in a highly dense area. As of 2016, the burning of coal has led to major health complications and death.”¹⁴² This shows we need to adequately prepare to prevent all forms of pollution.

There have been numerous instances where the government has incurred challenges in rehabilitating the environment contaminated by oil and gas leaks. Rehabilitation of the environment has proved to be a really difficult task due to the lack of adequate locally available modern technology to aid in retrieving leaked oil in water bodies and land, and skilled personnel to rehabilitate the areas.

¹⁴¹ ‘Fact Sheet: Biden Administration Outlines Key Resources to Invest in Coal and Power Plant Community Economic Revitalization,’ White House, 23rd April 2021, [Website] <https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/23/fact-sheet-biden-administration-outlines-key-resources-to-invest-in-coal-and-power-plant-community-economic-revitalization/> (accessed on 5th December 2022).

¹⁴² ‘South African government sued over coal and industrial air pollution’, Reuters, 2019, [website] <https://www.reuters.com/article/us-safrica-coal-idUSKCN1TB1Q7> (accessed on 12th November 2022).

The United States environmental laws require all dust, and water originating from coal mining operations to be controlled and the area restored to its original condition.¹⁴³ With Proper modern environmentally friendly technology some states have been able to properly restore the environment to its original condition. With advanced modern technology, the process of ecological restoration and rehabilitation is easier.

4.9 Lack of sufficient skilled human resources.

Human resources are the personnel in a business or company. Skilled human resources are very important for the success of a company or State. With the fact that the Extraction and production of fossil fuel are still new in the country, Kenya lacks enough skilled personnel to assist in this new venture. This means we have to seek foreign specialists to assist. A good example is during the hearing in the case of Mui Basin, the LAPSSET project, and Save Lamu we had to seek expert opinions by consulting foreign specialists to assist. The expert witness gave their opinions on the effect of the projects on the environment. The government has been forced in numerous instances to carry out benchmarking exercises and seek foreign assistance in fossil fuel production e.g. China's intervention in coal mining, benchmarking coal mining exercises in South Africa, Tullow oil intervention in mining oil, etc. We also lack enough skilled human resources to carry out advanced environmental restoration and rehabilitation of the environment contaminated with fossil fuels.

4.10 Impunity in the government.

Impunity is freedom from harm or punishment or loss. In Kenya, every person is equal before the law and has the right to equal benefits and equal protection of the law.¹⁴⁴ But this has not been the case, government, state organs and private companies with ties to the government have been summoned to court numerous times for disregarding the law. State organs and government officials have been slapped numerous times with fines and compensation orders due to dismissing the law. Impunity has been rampant to the extent many Kenyans don't believe in environmental justice

¹⁴³ ' Effects of Mining Coal,' U.S. Energy Information Administration,[website] <https://www.eia.gov/energyexplained/coal/coal-and-the-environment.php> (accessed on 13th November 2022).

¹⁴⁴Constitution of Kenya, 2010 (eKLR) a27.

Every Kenyan must safeguard and conserve the environment.¹⁴⁵ When one's right to a clean and healthy environment has been infringed, violated, or threatened should seek redress in court. The court may prevent, or stop any act or omission harmful to the environment, compel a public officer to prevent or discontinue the harmful acts, and provide compensation for victims.¹⁴⁶ Due to total disregard for the law by the government, Kenyans in Lamu and Mui Basin whose right to a clean and healthy environment is threatened by the construction and operation of coal plants sought redress from the court and they were given a reprieve. But the government seems resistant to the court's orders and it's proceeding with construction while trying to correct its mistakes. In the case of Save Lamu, the Court held that the state is to change the design of the construction of the coal plant not to interfere with the marine environment, and carry out proper public participation, and environmental impact assessment. Many government projects fail to carry out proper public participation and EIA which is an important step before the issuance of any mining or Nema licence. The previous government assumed they are exempted from public participation and carrying out Environmental Impact Assessments.

Companies tendered with the responsibility of building coal plants in Mui Basin and Lamu are to obey the law by conducting proper public participation and environmental impact assessment and audit. Just because it's a government project doesn't mean it's not subject to environmental laws. Every individual and institution in Kenya is equal before the Law.

4.11 Conclusions

In conclusion many will say the law on paper is different from the law of action. This means when legislatures pass laws, but it is not easy for them to predict practicability and ease of implementing those laws. This chapter has brought out factors like insecurity, inability to balance between environmental protection and economic development, institutional incapacity, lack of proper skilled human resource technology and impunity in government are some reasons making implementation of environmental laws governing fossil fuels very difficult. Countries like China who took advantage and industrialised way before various international laws came to force are still having difficulty implementing the environmental laws because of these factors. The USA

¹⁴⁵ Ibid.

¹⁴⁶ Constitution of Kenya, 2010 (eKLR) a70.

has chosen to forgo the need for economic growth and have been forced to close down plants near highly populated areas as a way to protect and conserve the environment.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Summary of findings and Conclusion.

Earlier we discussed that the law has a conserving, prohibiting and distributive role when it comes to management of natural resources like fossil fuels. Fossil fuels exploration , production and usage is generally not a clean affair. Mining, cleaning, transporting, and disposal of waste, is expensive and messy to the environment. The gaps and weaknesses are proof that the environmental laws and policies have failed to effectively manage the environment when it comes to fossil fuels. The environment sector is multifaceted; this means we have to properly integrate the environment in all development plans and activities. We have to increase efficiency, cooperation and accountability within the institutions involved in environment management to properly implement the laws and manage the environment.

The Government of Kenya is not to pass a blind eye and ignore the environmental repercussions these resources have. They are a blessing and a curse. Countries like Nigeria, South Africa, China, USA have failed to recover to the extent they have damped areas due to coal poisoning or oil pollution. If not properly managed will have destroyed our environment and still not have economic growth as is the case in Nigeria and Syria. Institutions within the energy and environment sector should be transparent, consistent to the rule of law, effective and efficient, responsive and be ready to be held accountable when they fail their mandates.

Sustainable Development can be tedious and expensive for the institutions but will lead to a great outcome. A good example is Lamu, its rich marine ecosystem puts Kenya on the map(tourism). Destroying that beautiful ecosystem by installing a coal plant without following environmental laws is damaging to the economy and environment (area will become inhabitable, will lose proceeds from tourism, marine animals will die, others will migrate, clearing mangrove in Lamu puts Kenya in danger of strong ocean waves, etc.). Kenya is yet not well equipped to handle serious cases like collapsing of mines, fires, sipping of acidic water and harmful metals like mercury into the ocean and rivers. Unless proper planning is done, money is pumped into the energy and environment sector, proper environmentally friendly technology is bought or

invented, and money meant to buy protective equipment and technologies is not pocketed by corrupt officials, as a country will be well equipped to manage and protect the environment.

The environmental laws were put in place to be followed not to decorate our books and websites. In the end we find that fossil fuels pollute the environment but if we enforce our laws and policies, to the latter will be able to at least reduce the emission rate to up to 50%. The Kenyan government should strengthen the enforcement of environmental law and tighten its grip on the fight against corruption. Harmonisation of environmental laws and institutions is required to increase cooperation in the environment sector.

5.2 Recommendation

The environment is very important for human existence. Kenya aims at providing a sustainable, clean and healthy environment to all its citizens no matter their social status.

The research seeks to answer what Kenya can do to increase efficiency within its institutions, implement and make its laws more effective to help protect and preserve the environment during production of fossil fuels.

So as to make our environmental laws and policies more efficient and effective i would recommend:

5.2.1 Government should provide clear clarity on the function and powers of every institution within the environment sector and strengthen the capacity of NEMA to be responsible for the general supervision and coordination of matters relating to the environment. Laws governing the environment to be up to date and be amalgamated into one statute as it was done in the Energy Law Act 2019.

5.2.2 The ministry of energy in consultation with the ministry of environment should invest in training and capturing domestic skilled personnel with adequate experience to assist in matters of the best petroleum/coal industry practice. We should develop a wide range of training opportunities in the field of environment and energy.

5.2.3 Companies tendered to manage and operate oil plants and coal plants should have current modern technology that is environmentally friendly. Industries should have customised

engineering designs to install the internationally accepted carbon capture technology. Engineering design used in the Mui basin should not be the same one used in Lamu. Note: clean carbon capture technology will not eliminate carbon emissions but will reduce them by at least 30%.¹⁴⁷

5.2.4 Carry out vast public education on the right to a clean and healthy environment and how to seek redress when one's right is infringed. For the people to be educated on matters pertaining to the environment.

5.2.5 The investigative organisations like EACC, the DCI and the ODPP should work together to fight against corruption and impunity in government. They should avoid the push and pull among the two offices and put in mind the oath they took while assuming power. Companies tendered with the mandate of operating , building coal plants as well as oil plants to be properly vetted by the national assembly. This is to avoid non existing shell companies as well as companies with no knowledge about operating coal plants and oil plants from managing a sensitive area like this. Companies to be conversant with the _best petroleum/coal industry practice.

¹⁴⁷ Ibid,Pg 24.

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