A CRITICAL ANALYSIS OF UGANDA'S REGULATORY FRAMEWORK ON OCCUPATIONAL SAFETY AND HEALTH IN THE UPSTREAM, MIDSTREAM AND DOWNSTREAM OF THE OIL AND GAS SECTOR

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DECEMBER, 2022

DECLARATION

I **BRIAN KIRIMA** declare that this proposal is my work and it has not been submitted before to any other institution of higher learning for fulfillment of any academic award.

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APPROVAL

This is to certify that, this proposal entitled "A critical analysis of Uganda's regulatory framework on occupational safety and health in the upstream, midstream and downstream of the oil and gas sector" has been done under my supervision and now it is ready for submission.

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Date.....

DEDICATION

This research thesis is dedicated to my parent for her parental guidance she gave me, my family, my supervisor for the guidance and directions in writing this report and along with my friends for giving in their love and ideas during my studies.

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LIST OF ACRYNOMS AND ABBREVIATIONS

OSH -	Occupational Safety and Health
ILO -	International Labor Organization
PAU-	Petroleum Authority of Uganda
MoLGSD -	Ministry of Labor Gender and Social Development
MEMD -	Ministry of Energy and Mineral Development
UNOC -	Uganda National Oil Company
GDP -	Gross Domestic Product
IOC -	International Oil Company

CNOOC -	China National Offshore Oil Company
EACOP -	East African Crude Oil Pipeline
EITI-	Extractive Index Transparency Index
PSA-	Production Sharing Agreement
JVP-	Joint Venture Partners
O& G -	Oil and Gas
CDC -	Centre for Disease Control
NHIS -	National Health Insurance Scheme
PGI –	Petroleum Governance Initiative
UNESCO –	United Nations Educational Scientific Cultural Organization
OSHA –	Occupational Safety and Health Administration
NIOSH –	National Institute of Occupational Safety and Health
NACOSH	- National Advisory Committee on Occupational Safety and Health
HSC	- Health and Safety Commission
HSE	- Health, Safety and Environment
UK	- United Kingdom
USA	– United States of America
UBOS	– Uganda Bureau of Statistics
NPA	– National Planning Authority
ILOOSH	- International Labor Organization Occupational Safety and Health
OSH-MS	- Occupational Safety and Health Management Systems

PSSI – Principle Specialist Safety Inspector

LIST OF LAWS

The Constitution of the Republic of Uganda, 1995

Occupational Safety and Health Act, 2006

The Petroleum (Exploration, Development and Production) Act 2013

The Petroleum (Exploration, Conversion, Transmission and Midstream Storage) Act 2013

The Petroleum (Exploration, Development and Production) (Health, Safety and Environment) Regulations, 2016

The Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016

The Petroleum (Exploration, Production and Development) National Content Regulations, 2016

Employment Act, 2006

Workers Compensation Act Cap 225

ABSTRACT

The need to curb hazards and risks at work places has created much desire to implement occupational, safety and health standards. This study argues that the deterrence effect created under regulatory framework is not adequate enough to ensure the effective implementation of occupational, safety and health strategies. The slow response to regulation may require the need to amend the rules and yet institutional weakness have created a laxity in the enforcement mechanism creating failings in the management of occupational, safety and health standards. This thesis shall also contend that lack of political will has thrashed the emerging need to have occupational, safety and health a much-needed priority and compounded with man power gaps and inadequate funding means that achieving the effective management of occupational, safety and health standard is empty talk.

The discovery of oil and in Uganda is going to lead to massive growth and industrialization with a big requirement for labor force at all levels from production and development to the midstream element of transportation and the wider petrochemical industry. This massive labor force needs to be protected considering the high-risk hazards associated with oil and gas production and development. With a weak legal and regulatory framework in occupational, safety and health ranging from, weak institutions with inadequate capacity for enforcement, inadequate and weak penal provisions all compound the ineffectiveness in the management of occupational, health and safety. The thesis will analyze the extent of compliance with national regulatory framework that provides for occupational health and safety in the oil and gas sector, assess the key challenges encountered in the implementation of OSH standards in the oil and gas sector, propose mechanisms for improving occupational health and safety standards among others.

CHAPTER ONE

GENERAL INTRODUCTION

General Introduction

The study aims at analyzing Uganda's existing regulatory framework on occupational safety and health in the Upstream, Midstream and Downstream of the Oil and Gas Sector in Uganda. This chapter presents the definition, background to the study, statement of the problem, purpose of the study, scope, methodology, significance of the study; literature review, methodology and findings are addressed.

1.0. Definition

Occupational Safety and Health (herein referred to as OSH) is defined as the science of anticipation, identification, evaluation and control of hazards arising in or from the work place that could impair the health and wellbeing of workers, taking into account the possible impact on the surrounding communities (Ali 2008)¹. According to Myers(2007)² defining and understanding occupational health and safety will require looking at it from two dimensions; the first dimension is looking at it from the method of identifying, evaluating and controlling hazards or risks through putting in place measures and the second dimension is to enforce those measures of those who violate them.

1.1. Background to the study

Globally, the O&G sector still has one of the highest rates of occupational injuries of any industry³. According to Philbey, Lyndall $(2017)^4$, there are a range of hazards present in the extractive industry including oil and gas and these are; contact with plant and equipment, blasting, thermal environments (heat and cold), respiratory health.

¹ Benjamin O Ali (2008), *Fundamental*, Principles of Occupational Health and Safety, *Geneva International Labour Office*

² Myers, Melvin L, Anticipation of Risks and Benefits of Emerging Technologies; A Prospective Analysis Method, An International Journal; accessed on 6th June 2022 on doi:10.1080/10807030701506371;

³ "Mining alert | Excavator engulfed after pit wall failure | Mine Safety News". Australasian Mine Safety Journal. 2019-07-09. Retrieved 2019-09-20.

⁴ Philbey and Lyndall, Mining (2017). "Every Coal Mine Worker Should Know: Black Lung". Australasian Mine Safety Journal. Retrieved 2019-09-20.

According to Gardener (2003), the oil and gas sector has such disasters that include chemical hazards (toxic corrosive, irritant substances and possible carcinogens), physical hazards (noise vibrations that could damage the ear, other form of radiations, thermal extremes) biological hazards (legionella, food poisoning) ergonomic hazards like manual handling and work stations, psychological hazards like associated with work overload that lead to stress and depression.⁵. Philbey, Lyndall (2017) contends that a growing sum of employees in the mining and oil sectors of the industrialized economies complain about 'psychological stress and overwork'. These psychological factors have been found to be strongly associated with insomnia, depression and fatigue, and burn-out syndromes, as well as with elevated risks of cardiovascular diseases. However, below 5 % of workers in developing countries like Uganda and 20-50% of workers in industrialized countries like the US, Norway etc (with a few exceptions) are estimated to have access to adequate occupational health services. With Uganda being a developing country, there is need to OSH systems so as to improve workers' safety.

1.1.1 Historical background

Historically, according to Abrams (2001), the safety of laborers in workplaces was in the 13th and 14th century not a matter of major concern owing to the booming slave market and the era of feudalism. The plight of worker's sicknesses and injuries became a subject of major discussion during 15th Century owing to publications of physicians like Ulrich Ellenbog in 1473 and publicists like Paracelus in 1587 in their writing on the diseases that were affecting laborers in mines, gold and metal smiths and smelters among others. They called for the need to treat these laborers if they were to become effective and productive. The rise of the industrial revolution and nascent capitalism in the 19th Century saw the emergence of the steam engine, rail road and textile heavy machinery which led to an increase of laborers moving from the rural areas to the urban centers for work and even then workers' safety was not one of the major concern as the priority was the capitalists profit. It was not until protest of labor movements that legislation covering workers safety was promulgated notable was the UK Public Health Act of 1848 and also in German the enactment of the 1884 Workers Compensation Act which was social insurance legislation. The challenge with these legislation is that there were only prescriptive and did not provide a

⁵ Gardner R (2003); Overview and Characteristics of some Occupational Exposures & Health Risks on Offshore gas installations; Annals of Occupational Hygiene; accessed on website; www.academic.oup.com on 20th June 2022.

prohibitive and preventive role. The legislations that followed like the 1910 Occupational Health and Safety in the US only covered accidental injuries and later provided for scheduled diseases. The legislations in the UK failed to provide for a wide range of disease and risks that an employee would be compensated from. (Abrams (2001)⁶. This therefore meant that victims only recourse was to sue under the common law doctrine of occupier's liability or negligence (Corbet 2004)⁷. The inadequacies in this legislations and the rise of labor movements pressurized the governments to enact law that would address workers plight like the 1963 Occupational Health and Safety Act in the United States of America. Daele (2008)⁸ says that the establishment of the ILO in 1919 after the First World War was a clarion call to address workers plight. The ILO establishment saw much the promulgation of conventions, recommendations and protocols on occupational health and safety example in in 1947 and 1957 the ILO made recommendations Labor Inspection Recommendation No. 81 and Protection of Workers Health No. 97 respectively. However, it was until ILO 1981 and 1985 that convention than no 155 and 161 were enacted and made important provisions for the maintenance of occupational, safety and health standards by member states. Major stride on occupational health and safety standards, measures and mechanism were made in 2006 with the Promotional Framework for Occupational Health Convention no. 187. However Uganda being a member of ILO has not yet ratified these conventions,⁹

In Uganda, the Factories Act of 1953 was the beginning of legislative action in addressing occupational safety and health of workers as it provided for measures that employers had to put in place and introduced the role of inspectors in regulation of occupational health and safety standards. However, the provisions of the 1953 Factories were inadequate on the inspection powers hence the need for new legislation. Uganda has now enacted the Occupational Health and Safety of 2006 which incorporates some of the standards in the conventions No. 155,161 and, 187 of the ILO. The Constitution of the Republic of Uganda under Article 39 and 40 recognizes the importance of a safe and healthy working environment of all workers and gives workers a right to

⁶ Herbert K. Abrams (2001); A Short History of Occupational Health; Journal of Public Health Policy

⁷ William R Corbett 2004; The Need for a Revitalized Common Law of the Work Place; *Workers Compensation Law Review*.

⁸ Jasmien Van Daele; International Labour Organization; Past and Present Research; Cambridge University Press; accesed on www. Cambridge.org/core.journal

⁹ International Labor Organization website; www.ilo.org, accessed on 19th June 2022

a clean and healthy environment and authorizes Parliament to enact laws to provide for the rights of persons to work under satisfactory, safe and healthy conditions.

The Oil and Gas sector is one of the highly labor intensive sectors and a driving push that increases economic growth and development and hence the need to majorly focus on occupational safety and health.¹⁰

The Oil and Gas Industry has been characterized with occupational injuries and diseases. The United States of America in experiencing an exponential growth in the oil and gas sector, statistics showed that there was a relationship with the growth of the oil and gas sector and the number of fatalities and hence the need of implementing occupational, safety and health standards.¹¹

The ILO (International Labor Organization) estimates that two million workers die as a result of occupational accidents and work related diseases every year, hence loss of GDP as a consequence¹². Statistics for Uganda alone cannot be easily established due to the failure of the sector to undertake inspection and enforcement, therefore they lack data.

In 2006, Uganda discovered oil and is now on the verge of commercial production of oil and gas, and the fact that the production of oil and gas will lead to industrialization and growth of the petrochemical industries that will lead to employment of Ugandans, there is need to address the regulatory framework and regulatory aspects in regard to occupational health and safety so that standard and measures are put in place and enforced to avert any risks of fatalities that are a consequence of these occupational hazards.

Also despite a number of achievements in Uganda's economy, the achievements have not been matched with the necessary safety and health standards, which standards are meant to guarantee safety and good health of the working population which impacts directly on their productivity¹³.

¹⁰ Mrema EJ, Ngowi AV, Mamuya SHD. Status of occupational health and safety and related challenges in expanding economy of Tanzania. *Ann Glob Health* 2015;81:538e47.

¹¹ Krsto L Mason, Kyla D, Retzer, Ryan Hill and Jennifer M. Lincoln (2015) Occupational Fatalities during the oil and gas boom; *National Library of Medicine; online journal* on www. ncbi.nlm.nih/gov; accessed on 19th June 2020. ¹² Meswani HR. Safety and occupational health: *challenges and opportunities in emerging economies*. Indian J Occup Environ Med 2008;12:3e9

¹³ Edwinah Atusingwize, Geofrey Musinguzi, Rawlance Ndejjo, Esther Buregyeya, Barbara Kayongo, Ruth Mubeezi, Richard K. Mugambe, Abdullah Ali Halage, Deogratious K. Sekimpi, William Bazeyo, Jia-Sheng Wang & John. C. Ssempebwa (2018) Occupational safety and health regulations and implementation challenges in Uganda, *Archives of Environmental & Occupational Health, DOI: 10.1080/19338244.2018.1492895*

Poor working conditions leads to low productivity and coupled with poor work methods, processes and procedures, limited awareness of labor laws and limited knowledge of workers' rights and obligations.

1.2 Conceptual Framework

The study will focus on two variables; the independent variable (Occupational Safety and Health Standards) and dependent variable with is (The Regulatory Framework governing the Occupational Safety and Health in the Oil and Gas sector).

Occupational Safety and Health Standards are rules, codes and practices which employers must observe in order to ensure the occupational safety and health of workers. On the other hand the Regulatory Frame Work on Occupational Safety and Health refers to regulator or enforcement mechanism to ensure that the OSH standards are implemented by employers.

1.3 Theoretical Framework

The study will be based on both the deterrence theory and the public enforcement of law theory which are relevant to compliance with occupational health & safety standards.

1.3.1 The deterrence theory

The ¹⁴deterrence theory has two aspects; the "specific deterrence" that deals with specific offenders, and the "general deterrence" for general offenders to disrupt non-compliance. The theory nurtures a clear consideration of the the "conceptual bases of legal principles" and of collective sound-effects of the whole-range of 'rules and procedures' that emphasises on a specific area of an activity. It is clear that effective enforcement of the standards on OSH is important in enhancing the realization of the main objectives of the OSH laws. Hence, the suitability of the deterrence theory for this study.

Further, the deterrence theory assumes that individuals and companies logically act towards profit maximization and thus, they will only observe the laws only if the penalties / costs outweigh the

¹⁴ E Bluff, N Gunningham, & R Johnstone (2004), OHS Regulation for a Changing World of Work, *Federation Press, Sydney, p.151*.

'benefits' of non-compliance.¹⁵ With the deterrence theory, the enforcement-agencies are obliged to avail the costs/ penalties so that it becomes irrational and/or unprofitable for the regulated entities to violate the law.¹⁶' In addition, the theory as well enlightens on the "development of criminal OSH law, which includes imposing criminal sanctions against those who violate the OSH law.¹⁷

The main objective of the deterrence theory is that, if there is a way to frequently expose the offenders of the OSH laws, and then it will make the probable offenders to neatly observe the safety codes. In such conditions, the theory calls for the application of serious costs as a preventive tool, with brutal moves to discourage the non-offenders from becoming victims too. It lays an assumption that if the punishment of violating the rules is higher than the cost of compliance, then the willingness to comply with the OSH laws automatically increases.

Hence, as a result of the deterrence theory, criminal punishments are imposed to shape regulated companies and send a message to the general public for preventive purposes. (Amponsah, 2010). Regards to this approach, regular inspections and monitoring of operations to detect noncompliance are the most important enforcement instruments.

1.3.2 The Public Enforcement of Law theory

This theory relates to regulators and authorities charged with the power to enforce laws and regulations. These could range from the Uganda Police, the Courts of Law, the Inspectors under the Occupational Health and Safety Act, the Inspectors under the Petroleum Authority of Uganda *interalia*. Polinsky and Shavel (2007), argues that this theory analyses the nature of the sanctions imposed that is the effect of a fine or imprisonment, the adjustment of such sanctions, the amount of resources inject to influence the enforcement mechanism and sanction, the cost of enforcement and imposition of the sanction, the relevance of settlement, the effect of self-reporting (self-

¹⁵ Ibid

¹⁶ Ibid

¹⁷ Amponsah-Tawaih, K & K Dartey-Baah, "Occupational Health and Safety: Key Issues and Concerns in Ghana," *International Journal of Business and Social Science, vol. 2, no. 14, pp. 119-126, 2010.*

regulation), the causation of repeat offenders, knowledge about the probability and magnitude of sanctions, corruption, incapacitations or regulatory agencies and the fairness of sanctions¹⁸.

1.4 Problem Statement

According to Total Energies EP General Manager, Uganda will have its first oil by 2025.¹⁹ The production of oil and the establishment of the refinery will result in the growth of the petrochemical industries that rely on the bi products from refined oil meaning that many industries will emerge and these industries in the down-stream will employ many Uganda notwithstanding that many have been employed in the upstream and midstream. Yet statistics show that Uganda show that Uganda's preparation on compliance with occupational, safety and health standards is still lagging being leading to many occupational hazards.

According the Auditor General's report of 2016 while auditing the MoLGSD, it was established from available records that between 2006 to 2008 there were 1520 people who were victims of occupational hazards and of these 856 contracted various occupational diseases. Many of these victims have died and others have suffered permanent disability, Also, between 2008 to 2009 over 40 buildings collapsed killing many workers in Uganda. Fire outbreaks have also occurred killing many Ugandans like the Hima factory fire explosion that killed worker.s²⁰ These statistics on the number of occupational hazards could be more owing to the fact that many of these work places are not inspected because of inadequate inspectors. According to MoLGSD, the Department of OSH only has 22 inspectors and yet Uganda has over 1 million work places. This therefore means that many work places have not been inspected and occupational hazards have not been reported.

With regulatory weakness in ensuring the observance of occupational, safety and health at work places, it is imperative that we analyze the regulatory framework to ascertain the effectiveness of occupational, health and safety standards at work place.

¹⁸ Mitchell Polinsky and Steven Shavell (2007); Theory of Public Enforcement Law; Hand Book of Law and Environment: Volume 1.

¹⁹ Daily Monitor, 22nd April 2022

²⁰ Daily Monitor, 18th June 2022

1.5 Purpose of the study

This purpose of this study is to understand the effectiveness and efficiency of the regulatory framework, (regulatory bodies together with the laws and regulation in place) in effecting occupational, safety and health standards in the Upstream, Midstream and Downstream of the Oil and Gas Sector in Uganda.

1.6 Significance of the study

The research will be used by policy makers to come up with policies that best serve the purpose of OSH in the oil and gas sector in Uganda.

The researcher believes that the study will be of great relevance to the regulatory authorities in identifying the loopholes in the compliance mechanism especially with the IOC's in complying with occupational health and safety standards.

Also the study will also contribute to a review of the laws and regulations in Uganda on occupational, safety and health and create amendments of the laws.

The study will as well be an additional contribution to the existing pool of knowledge for the purposes of further research in the related field of study.

1.7. Justification of the study

Uganda has recently begun exploration, development and is projected to begin the commercial production of its oil and gas resource by 2025. With about 6.5 Billion barrels of oil in place and 1.4 barrels of recoverable oil and over 500 cubic feet of gas, the IOC's have been attracted to harness Uganda's oil and gas. The IOCs that are participating in Uganda's oil and gas space include; Total E&P, CNOOC, Armour Energy and Oranto that have already obtained licences to develop Uganda's Oil resource in the Albertine Graben. Total E&P and CNOOC are operating the Tilenga and Kingfisher projects respectively in a JVP with UNOC. In the midstream, Total E&P is spearheading the construction of the EACOP with the other JVP like UNOC and CNOOC. The

Albertine Graben Refinery Consortium is leading in the development of the refinery²¹. These IOC's in the process of development, producing and transporting Uganda's oil resource will employ many Ugandans as in line with the national content regulations.²² Further the development of the refinery will also pave way for the petrochemical industry that will also employ many Ugandans. The need to protect and create safety for Ugandans that are going to work in Upstream, Midstream and Downstream segment is of fundamental importance hence the need to address Occupational Safety and Health of these workers. Right from Production Sharing Agreements (PSA's) to the various petroleum laws²³ have made provision for the protection of workers and have been a bedrock for the flow of regulatory power on occupational safety and health standards for workers in Uganda.

The justification of the study is to evaluate the regulatory control and strategies in regard to enforcing occupational, safety and health standards at work places and how effective are these regulators in ensuring that occupational, safety and health is maintained at the work place. The study will analyze the standards as shown in the law and rules with the purpose of reviewing their inadequacies and propose standards as enshrined in international convention with the goal of strengthening occupational, safety and health standards at the work place. This importance of protecting workers from injury and harm while fostering workers' productivity at the work place is a justification. The research will thus benefit institutions responsible for ensuring compliance with occupational health and safety standards, such as the Ministry of Energy, Ministry of Labor, Oil and Gas Companies, and communities surrounding Uganda's oil and gas production areas, by protecting workers' health and safety and allowing Uganda to develop a better legal and institutional framework.

²¹ Petroleum Authority of Uganda website; The Oil and Gas Sector in Uganda accessed via www. pau.org on 6th June 2022

²² The Petroleum (Exploration, Production and Development) National Content Regulations, 2016

²³ Refer to the Petroleum (Exploration, Development, and Production) Act of 2013 and, the Petroleum (Refining, Conversion, Transmission, and Midstream Storage) Act of 2013 and the Occupational Safety and Health Act of 2006 among others

1.8 General Objective

The General Objective is to critically analyse Uganda's regulatory framework on Occupational, Safety and Health in the upstream, midstream and downstream of the oil and gas sector

1.8.1 Specific Objectives

- 1. To analyse the adequacy of existing laws and regulations, the efficiency of regulatory bodies and the effectiveness of the enforcement mechanisms in addressing occupational, safety and health risks and hazards.
- To assess the regulatory challenges and conflict encountered in the implementation of occupational, safety and health regulations and standards in the oil and gas sector in Uganda.
- 3. To make a comparative analysis on implementation of occupational, health and safety regulations and standards between Uganda and IOC conventions.
- 4. To make recommendations for the effective implementation of occupational, health and safety standard in Uganda's oil and sector.

1.9 Research questions

- 1. Whether the current laws and regulatory bodies are adequate and have the necessary capacity in ensuring that employers in the oil and gas sector comply with occupational, health and safety standards:
- 2. What enforcement mechanism should the regulators adopt to ensure employers or the IOCs strictly comply with occupational, safety and health standards?
- 3. What is the comparison between Uganda and other developed oil countries on the effectiveness of OSH regulatory framework?
- 4. What are the possible recommendations of the various mechanisms that can enhance OSH regulatory compliance in Uganda?

1.10 Scope of the research

This study is aimed at analyzing Uganda's regulatory framework on occupational, safety and health in the Upstream, Midstream and Downstream of the Oil and Gas Sector. The study will analyze the laws and regulations to assess their adequacy in ensuring compliance with occupational, safety and health standards. The study will assess the effectiveness of the enforcement mechanism under those laws. The study will also analyze the regulatory bodies that enforce the laws like the Ministry of Labor, Gender and Social Development and the Petroleum Authority of Uganda. The specific laws and regulations that the study will look at are the Petroleum (Exploration, Development and Production) (Health Safety and Environment) Regulations, 2016 together with provisions of the Upstream Act of Petroleum (Exploration, Development and Production Act, 2013 relating to regulatory control and authority. The regulations in the midstream like the Petroleum (Refining, Conversion Transmission and Mid-storage) (Health, Safety and Environment) Regulations 2016 together with the provisions of the midstream and downstream Act of the Petroleum (Refining, Conversion, Transmission and Mid-storage) Act, 2013 also relating regulatory control and authority. The regulatory authority and the effective of compliance of the provisions in the Occupational Health and Safety Act 2006. The conflict in regulatory function shall also be discussed in this research and the institutional capacity, regulatory approaches to ensure effect OSH standards, effectiveness of enforcement mechanism, the use of common and other post enforcement mechanisms and institutions like judicial bodies and other institutions will also be discussed.

This study will take a time frame of 3 months to from April – June, 2021 for the purposes of data collection analysis and report writing. Though every step will be done under the supervisors' guidance.

1.11. Research Synopsis

This proposal comprises of three chapters, chapter one will entail the introduction of the research topic; Chapter two will entail literature review which will begin with introduction of the literature review, then the analysis of the regulatory frame work on OSH in the oil and gas sector in Uganda, in this analysis we shall look at the occupational hazards, the licensing and enforcement, the precautionary approach and self- regulation, comparison of the standards in Uganda's laws and

rules international conventions; compare other countries regulatory regime, the penal approach and the enforcement mechanism in regard to regulatory framework on OSH, effectiveness of the regulatory enforcement mechanism, system of accountability, regulatory independence, the standard of proof in criminal and civil liability, the need to establish negligence and intent of corporate body, the effect of financial penalties and equity, the dutch disease, a limitation on the enforcement of occupational, safety and health standards and recommendations. Chapter three shall discuss the methodology.

1.12. Chapter Conclusion

The study introduces the study by describing the study backdrop, the problem statement, the purpose of the investigation, the scope of the study, the importance of the study, the theoretical review, and the study synopsis.

CHAPTER TWO LITERATURE REVIEW

2.0 Introduction and regulatory approaches

Harmonizing the existing regulatory framework on occupational safety and health in the Upstream, Midstream and Downstream of the Oil and Gas Sector in Uganda will require a thorough understanding of the regulatory system that governs this respective sector in regards to OSH. Critical to understand will be the relevant law and regulations together with the regulatory bodies that enforce those laws and regulations;

Uganda's oil and gas industry is still in its early stages, with commercial oil production projected to begin by 2025. The industry is a key engine of economic growth, and it is intended to help Uganda achieve middle-income status through reducing poverty, transferring technology, increasing the country's GDP and meeting the national development plan goals and achieving Uganda's Vision 2040. However, the oil and gas industry with all its advantages in terms of creating employment for Ugandan people, can on the flip side be an oil curse and notably if the negative effect of oil exploration, development, production, transmission and refining are not addressed. Notable among these is the risks and hazards that will affect employees at the work places and hence the need for enforcement of OSH standards.

2.1. The Occupational Hazards

²⁴. According to Philbey, Lyndall (2017)²⁵, there are a range of hazards present in the extractive industry for example in mining, leading hazards include; contact with plant and equipment, blasting, thermal environments (heat and cold), respiratory health. These health hazards are confirmed by CDC. Just like mining the oil and sector has many hazards that are dangerous to workers health. According to Gardener (2003) such disaster range from chemical hazards (toxic corrosive, irritant substances and possible carcinogens), physical hazards (noise vibrations that could damage the ear, other form of radiations, thermal extremes) biological hazards (legionella, food poisoning) ergonomic hazards like manual handling and work stations, psychological hazards

²⁴ "Mining alert | Excavator engulfed after pit wall failure | Mine Safety News". Australasian Mine Safety Journal. 2019-07-09. Retrieved 2019-09-20.

²⁵ Philbey and Lyndall, Mining (2017). "Every Coal Mine Worker Should Know: Black Lung". Australasian Mine Safety Journal. Retrieved 2019-09-20.

like associated with work overload that lead to stress and depression.²⁶. Philbey, Lyndall (2017) contends that a growing sum of employees in the mining and oil sectors of the industrialized economies complain about 'psychological stress and overwork'. These psychological factors have been found to be strongly associated with insomnia, depression and fatigue, and burn-out syndromes, as well as with elevated risks of cardiovascular diseases. However, below 5 % of workers in developing countries like Uganda and 20-50% of workers in industrialized countries like the US, Norway etc (with a few exceptions) are estimated to have access to adequate occupational health services. With Uganda being a developing country, there is need to OSH systems so as to improve workers' safety.

Philbey and Lyndall 2017 and Gadner (2003) clearly document the importance of stating hazards so that they are clearly confirmed by the health regulator like CDC. This is so as to avoid ambiguity as to whether an illness is related to an occupational hazard.

In Uganda unfortunately, there has been no or little research on the hazards and the related occupations. There is no clear documentation of all the kind of illnesses that could be caused as a result of working in an oil and gas sector. Some of these hazards could later manifest as longtime sicknesses and hence the importance of research writing and documentation.

The need to adopt a good regulatory approach is paramount in ensuring effective compliance with occupational, safety and health standards and will be discussed as follows;

2.1.2 The Licensing Enforcement Approach

Greg Gordon²⁷ et al (2011) argues that licensing as a mechanism is an effective way in ensuring regulatory compliance in the oil and gas sector. He further discusses that the provision of punitive sanction of revocation of the license for failure by the licensee to comply with license requirement could create compliance and has a deterrence effect. Whereas this could be the case in the UKCS as the United Kingdom has a developed system of regulation, in Uganda, the licensing approach may not help in creating regulatory effectiveness in the implementation of OSH standard and yet

²⁶ Gardner R (2003); Overview and Characteristics of some Occupational Exposures & Health Risks on Offshore gas installations; Annals of Occupational Hygiene; accessed on website; www.academic.oup.com on 20th June 2022.

²⁷ Greg Gordon, John Peterson, Emre Usenmez (2011); Oil and Gas Law; Current Practices and Emerging Trends Dundee University Press, 2nd Edition

licensing is provided for within our laws. Section 59 and 76 of the Petroleum (Exploration, Development and Production) Act 2013 gives the Minister powers to issue licenses in consultation with the Petroleum Authority and approval of cabinet, The requirements and conditions to be fulfilled within those licenses do not show the requirement of fulfilling and implementing occupational and health safety standards and codes. Even though they provide for carrying out an environmental impact assessment, it does not stipulate the respective sanction in failing to comply with such conditions. Yet the provision relating to cancellation under S. 90 do not provide for cancellation of the license for failure to provide for OSH standards and codes.²⁸ John Peterson, 1997²⁹ states that more times than not the law or rules may fail to provide a solution as it may not be exhaustive enough and could precisely be the reason why even after Alpha Piper disaster in 1997, it was found that even with the prescription approach there is need for a much detailed regulatory approach. However, this argument may not work in Uganda's setting where there is an inadequate institutional capacity and, it could still face challenges of enforcement because of regulatory weaknesses.

However, the justification on the licensing approach as an effective regulatory approach is that owing to the high capital injection by IOCs in Oil and Gas projects, having a licensing regime with penal sanctions of revocation where there is non-compliance with OSH standards and codes could create a high level of compliance to ensure workers safety at work place. Having OSH standards and codes spelt out without an equal force of penal action could be ineffective in deterring licensees from strictly complying. It is further argued that the perception of the gravity of the risk that could deter an offender from committing an offense rather the punishment itself. It follows therefore that a punitive action of cancellation of a license on grounds of failure to observe the OSH standards and codes could have a high effect in ensuring compliance because of fear of loss of enormous amount of capital injected.

The Minister having a conclusive role in licensing IOCs without an approval check of the regulator PAU underscores the checks and balances within the licensing system and only leave PAU with a

²⁸ This has been reiterated in the provisions of section 10 that provides for considerations of the grant of the license and section 30 on suspension and cancellation of the license under the Petroleum (Conversion, Refining, Transmission and Storage) Act 2013.

²⁹ John Peterson, Behind the mask, regulating health and safety in Britain's offshore oil and gas industry; *European University Institute* on www.cadmus.eui.com on 12 June 2022.

consulting role which consulting role leaves the Minister with overriding powers that could in turn favor the licensees and create a state capture. The detriment of a state capture as argued by Hellman et el 2000³⁰, is that most of the times there is compromise with the compliance of the law and regulations as decision making is influenced by political and selfish interest at the expense of the greater good. However, Hellman does not analyze institutional weaknesses and incapacity in the enforcement of regulation as cause for preference of a licensing approach.

Further it is important that emphasis is placed on the regulatory role at the licensing stage owing to the complex nature of the oil and gas sector, a sector that is understood by a few especially the workers. Many workers in Uganda are not aware of their rights to a safe and healthy working environment and have remained exposed to unhealthy working conditions, faulty plants and equipment, dangerous civil works and constructions leading to ill health and death. This has resulted into failures to implement and make best use of the existing laws of OSH, consequently leading to injuries, accidents, disabilities and death. Occupational health issues affect individuals, families and communities as well as the citizens of the world hence the need for occupational health

Schremmer and Steincamp (2018)³¹ argue that regulatory responsibility requires regulators to look at licensee record on compliance with the laws and regulations before issuing licenses and hence the need to consider prior enforcement mechanism likes licensing. However in developing countries like Uganda this may not be possible as it is not a consideration that the Minister will consider before granting a license.³²

Onyekuru and Anthony (2011)³³ conducted a study on the occupational safety and environmental regulations and their influences on Nigeria's economic decision. By taking the Niger Delta petroleum crisis as a case study, Onyekuru and Anthony (2011) found that even though the Nigeria petroleum industry is governed by sufficient laws and regulation, those regulations failed to achieve the desired results; that is, making a case for a prior enforcement mechanism like setting

³⁰ Joel S. Hellman Geraint Jones, Daniel Kaufman, (2000); State Capture Corruption and Influence in Transition; World Bank Policy Research Working Paper; WPS 2444

³¹ Joseph A Schremmer and Charles C Steincamp (2018); Imputing Regulatory Failure in Oil and Gas Licensing; A Discussion and Proposal; hein journals accessed on www.heinonline.org on 20th June 2022

³² Section 12 of the Petroleum (Exploration, Development and Production) Act

³³ Onyekuru and N. Anthony (2011); Environmental Regulations and Nigerias Economic Decision on the Niger Delta; *The Way Forward; Asian Journal of Experimental Biological Science*.

tough conditions upon licensing and ensuring that occupational, health and safety safe guards are in place and there is sustainability. However, Oyekuru and Anthony (2011) underscore the grave effect of corruption within the political class in Africa in the licensing process.³⁴

In a similar vein, the World Bank (2010) reported on the results of a survey conducted by the Petroleum Governance Initiative (PGI) to measure the OSH and environmental governance in 27 oil-producing developing countries. "The results of that survey were compared with a benchmark, representing best OSH and environmental practices in oil and gas industry in five countries; Brazil, Canada, Italy, Malaysia, and Norway. The survey was on ten areas that were considered as essential elements of good environmental governance in oil and gas development. These areas include; legal, regulatory, and contractual framework, institutional structure and governance capacity, public consultation, environmental assessment, environmental monitoring and follow-up, Regulatory enforcement and Barriers to information collection, disclosure, and dissemination etc". The need for the regulator to critically understand the importance of the above prior to licensing was fundamental and having the involvement of the Regulators and Authority at licensing stage is pivotal.

2.1.3 The Precautionary approach and self-regulation

The precautionary principle and approach acknowledges our common-sense notion about taking precaution. For example, look before you leap or better be safe than to be sorry According Kriebel et al, (2001)³⁵some of the major components of the precautionary approach is taking the preventive action, in the face of un certainty, shifting the burden of proof to the proponents of the activity and exploring a wide range of alternatives to possibly harmful effects.. The principle embodies the longstanding preference in public health for primary prevention over secondary prevention whenever possible (UNESCO, 2005). Efforts towards primary prevention are aimed to head off health problems before they happen (Kriebel et al, 2001). The precautionary principle looks at society's goals, to the extent to which its negative impacts can be prevented while meeting the social goals. The principle also proposed that government should explore other ways to meet

³⁴ According to Reuters Nigeria lost up to 40% of its oil revenue to coruption

³⁵ D. Kriebel, J. Tucker, P. Estein J. Lemons, R. Levins E.L Loechler, . Quinn, R, Rudel, T. Shettler and M. Stoto (2001); Precautionary Principle in Environmental Science; Environmental Perspectives; *journal accessed on website; www.ehp.niehs.gov on the 20th June 2022*

society's goal with less risk (Kriebel et al, 2001). The precautionary principle mandates regulatory authorities such as government management agencies to re-evaluate a safety problem when there is sufficient evidence to suggest a potential negative impact. The evaluation requires the identification of risks. However, Kriebel et al (2001) does not critically analyze the negative effect and system impact of undertaking a precautionary approach.

In the past five decades several countries have enacted the occupational safety and health policy with emphasis on establishing agencies that will identify risks and putting in place provision under the law that create safety guards to address those risks like in the USA the Occupational Health and Safety Act in 1970, This law established a regulatory or enforcement agency called the Occupational Safety and Health Administration (OSHA) which was established. In addition, the National Institute for Occupational Safety and Health (NIOSH) was also established to provide research and technical assistance. The National Advisory Committee on Occupational Safety and Health (NACOSH) was appointed. Representatives of both labor and management are included amongst the members of the advisory committee.

The British Health and Safety at Work Act was enacted in 1974. The Health and Safety Commission (HSC) a tripartite policy-making institution was set up together as its inspection and enforcement agency in 1974. The Health and Safety Executive (HSE) coordinated the implementation of the policy.

In Uganda's oil and gas sector the precautionary principle has been promoted within the legal and regulatory framework on OSH through a self-regulatory approach for example Regulation 4 of the Petroleum (Refining, Conversion, Transport and Midstream Storage) Regulations require the license to put in place safe guards so as to prevent incidents, accidents, hazards and any risks that have consequences on human health. The law imposes a duty on the licensee to assess occupational health and safety hazards and risks and formulate solutions to those risks. Also under Section 14 of the Occupational Health and Safety Act requires employers to put in place safety measure for workers at the work place to prevent occupation accidents and hazards. The proponents of self-regulation have stated that it is those who create the hazard that are based placed in position to

address the risk. Graham and Woods (2006)³⁶ has argued that self-regulation help in resolving the lack of institutional and administrative capacity especially in low developing countries that have weak government and administrative capacity. However, this argument does not envisage that lack of institutional capacity could also mean lacking the technical capacity to audit self-regulated systems and could lead to over reliance on the technical ability of the IOCs

As Ekhator (2015) argues, the poor labour standards and environmental degradation in Nigeria oil and gas sector have partly been as a result of self-regulation. This self-regulations most likely leads to state capture as the IOC's proposed measures and systems that are meant to curb hazards and maintain occupational health and safety are easily accepted by the government or regulatory agency without undergoing a thorough audit process to test their effectiveness.

In Uganda therefore, the regulatory framework in place giving the IOCs the vast responsibility of creating systems that will avert OSH hazards, could be ideal in the short run owing to institutional and technical incapacity however in the long run such a situation could lead to state capture and system compromise owing to corruption and influence.³⁷

2.1.4. The Penal Approach as an enforcement mechanism.

The oil and gas industry is still rendered among the most hazardous industries that require high occupational health and safety standards.³⁸ The legal and regulatory framework in the oil and gas laws on occupational, safety and health in Uganda also has instances that create a penal approach to cater for violations of mandatory provisions. Some of these sanctions include compensation and damages, forfeiture, fines and imprisonment which will require judicial authority and determination (Khudur and Safaa 2019)³⁹. Other sanction under the law include administrative actions like cancellation or suspension of the licensee. Other actions like injunctive reliefs and restoration orders are primarily in the sphere of environmental law.

³⁶ David Graham and Ngaire Woods (2005); Making Corporate Self-Regulation effective in Developing Countries; *journal on world development*; accessed on doi.10.1016.j.worlddev2005/04.027

³⁷ Uganda is ranker no 144 on the Corruption Perception Index as per Transparency International on website www.transparency.org accessed on 12th June 2022

³⁸ Oil and Gas: How prepared is the Health Sector? The Independent (Kampala, 6 July 2019)

³⁹ Shwan Omer Khudur, Safaa Aldden, Mohamed Gazaai (2019); Penal Protection of the Environment from Oil and Gas Operators Pollutants; Koya University Journal of Humanaities and Social Sciences Vol 2

The penal or prescription approach in the oil and gas sector in regard to the OSH standards developed in 1965 after the Sea Gen Inquiry which was commission after the collapse of the oil rig in UKCS and among the recommendations in inquiry report was the adoption of the prescription approach with clear sanctions that are prohibitive as per Gordon (2011). However, in Uganda, the penal provisions in the oil and gas laws and occupational, health and safety laws are not prohibitive enough to deter noncompliance.

However Ayres and Braithwaite (2015)⁴⁰ have argued against the taking the prescriptive or penal approach in favor of a modern persuasive approach. They argue that the prescription or penal approach creates a burdensome enforcement and oversight role compared to persuasion approach where enforcement pyramid structure where there is a mutual benefit between the regulator, licensee and the third party and in this our case, a worker. For example, incentives to the licensee could influence the licensee to behave in a particular way that is beneficial and could uphold OSH codes and standards. The persuasion approach is majorly seen to support those who are willing to follow what the law requires and are referred to as the good law abiding citizens while the punitive model is that which will generalize without excluding the good and the bad. However, Ayres and Braithwaite's persuasion approach may not be applicable in Uganda in absence of policies on incentives for regulatory compliance.

The penal approach has faced many challenges in the enforcement of penal sanctions for example the fines and penalties have been quite inadequate and lacking a deterring effect especially for the IOCs that have deep pockets. The lack of deterring effects of these regulations on imposition of fines may not strictly ensure compliance with OSH standards.

For example, under Section 77 of the Petroleum (Exploration, Development and Product) Act, 2013 a person who obstructs an inspectors or authorized officer in the execution of their duties or in enforcing any provision of the law or regulation, the fine imposed is UGX 200,000,000/= or imprisonment not exceeding five years. These punishments are not grave enough especially for financially powerful IOCs and may not serve the deterrence purpose they are intended to serve. Unlike other jurisdictions which have severe penalties like in the UK, the health and safety breaches attract a penalty as high as 500,000 British Pounds under the Sentencing Guidelines for

⁴⁰ Ian Ayres & John Braithwaite (2015); *Responsive Regulation, Transcending the Deregulation Debate;* Oxford Handbook.

the Corporate Manslaughter Act that came into force in February 2016. Under the said guidelines, several companies have suffered the wrath, For example, a £1 million penalty levied on SMEs companies such as Watling Tyre Services Ltd and the record £5 million fine imposed on Merlin Attractions, for safety breaches. Large Companies such as Scottish Power Generation Ltd, Balfour Beatty, and Conoco Philips (UK) Ltd were fined over £1 million each for two separate health and safety offenses.

The rationale for imposing a punishment on a corporate offender is deterrence.⁴¹ Unfortunately, the same cannot be said of Uganda's case as the fines are not deterrent.

Conversely, it has been argued that high penalties will not deter the occurrence of fatalities in the oil and gas sector as accidents due to lack of technical supervision and high quality measures are not in place.⁴² British Petroleum (BP) Plc is cited having been penalized with exorbitant fines for serial OSH breaches. For example BP settled for hefty fines in the Deep Water Horizon, and agreed to pay over US Dollars 20 Billion⁴³

It therefore follows that much as Uganda laws on occupational, health and safety in the oil and gas sector make provision for penalties, these penalties are not deterring enough to ensure compliance.

CHAPTER THREE: LEGAL AND REGULATORY ANALYSIS

To deter the OSH challenges, the constitution requires Parliament to pass legislation governing the extraction of minerals and petroleum. Parliament has since passed various laws in the oil and gas sector that have provided for OSH standards. The legislation that Parliament has passed have provided for passing of regulations with the effect of implementation of OSH standards.

⁴¹ John T Byam (1982), 'The Economic Inefficiency of Corporate Criminal Liability', *Journal of Criminal Law and Criminology, Vol 73 Issue No 2 Summer* https://scholarlycommons.law.northwestern.edu accessed on 10th December, 2018

⁴² Andrew Oyen Arewa,(2018) 'Analysis of Penalties Imposed on Organisations for Breaching Safety and Health Regulations in the United Kingdom', *Safety and Health at Work; https://www.e-shaw.org accessed on 28th November*, 2018

⁴³ The Deep Water Horizon was an explosion from a rigl that happened on the Macondo Prospect in the Gulf of Mexico that led to the death of many.

The Constitution of the Republic of Uganda under Article 39 and 40 recognizes the importance of a safe and healthy working environment of all workers and gives workers a right to a clean and healthy environment and authorizes Parliament to enact laws to provide for the rights of persons to work under satisfactory, safe and healthy conditions. These laws as already discussed include the Occupational, Safety and Health Act, 2006, the Petroleum (Exploration, Development and Production) Act 2013, The Petroleum (Exploration, Conversion, Transmission and Midstream Storage) Act 2013, The Petroleum (Exploration, Development and Production) (Health, Safety and Environment) Regulations, 2016, The Petroleum (Refining, Conversion, Transmission and Midstream Storage) (Health, Safety and Environment) Regulations, 2016, The Petroleum (Refining, Conversion, Transmission and Midstream (Exploration, Production and Development) National Content Regulations, 2016, Employment Act, 2006, Workers Compensation Act Cap 225. These legislations have provisions whose objective is to ensure safety and health of workers at the work place. However the challenges of the codification in the enactments have been more of compliance and inefficient regulatory systems.

3.1.1 Effectiveness of Regulatory Enforcement

The implementation of Ugandan laws has been hindered with challenges in enforcement. The Auditor General's report for the year 2016 noted that the regulator had not delivered on its key mandate of monitoring and inspecting work places. The regulator had only inspected 476 workplaces out of the estimated 1,000,000 workplaces. It was further established that the regulator was underfunded and short of the technical manpower to deliver on its mandate hence lacking in institutional capacity.⁴⁴ As Umeakafor (2014) argues that enforcement of occupational health and safety standards requires addressing both external and internal factors; factors like political influence, insecurity and lack of government will, and bribery analyzed as external factors while others like inadequate staffing, lack of technical skills to ensure proper monitoring and supervision of occupational health and safety standard, poor remuneration of staff in the regulatory bodies are some of the internal factors that have affected the enforcement of occupational health and safety standards. However, addressing both external and internal factors may not be realized until a proper approach is determined. This has been supported by Thompson (1996)⁴⁵ who argues that it

⁴⁴ The Auditor Generals Report of 2016 page 106

⁴⁵ Barton H. Thompson (1996);*Searching for Regulatory Alternatives* <u>www.heinoline.com</u> searched on 30th June 2022.

is paramount to have appropriate regulatory approach that would achieve particular outcome rather than dictating specific processes.

According to the Auditor General's report 2016 the Department of Occupational Health and Safety was under staffed with only 47 working staff of which only 38 were technical and yet the ILO Standards requires that for proper and effective enforcement of occupational health and safety standards, there should be a ratio of 1 inspector to 500 workers.⁴⁶ Uganda working population is estimated to be nine million employed people according to the Uganda Bureau of Statistics (UBOS) Annual Labor Force Survey 2018/2019 report, it was estimated that Uganda had around 10.2 million employed Ugandans meaning that the ration of 1 inspector to 213,000 Ugandan workers which is far below the ILO Standards. This underfunding explains why the Auditor General in his 2016 report finding found that of the one million work places only 765 had been inspected, registered and issued with registration certificates a figure that is to low and only equates to 0.1 percent. This state of affairs is worrying considering that the oil and a gas sector is going to employ many Uganda and according to the Petroleum Authority of Uganda, 14,000 Ugandans are estimated to be employed once productions of oil commences.⁴⁷ It follows therefore that Uganda is not prepared in regard to staffing levels on inspectors who are going to ensure and maintain occupational health and safety standards in the work places in the Oil and Gas sector.

⁴⁶ International Labor Conference 98th Session Report

⁴⁷ The Independent Magazine, 15th March 2022

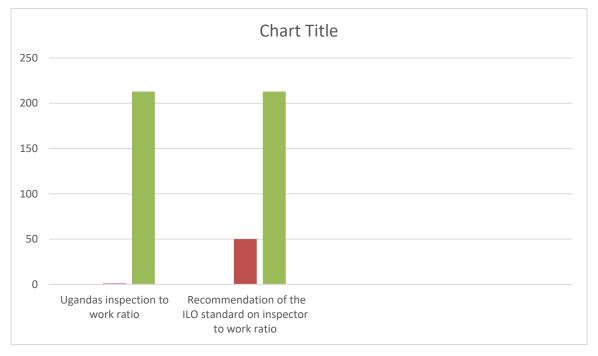


Table comparing inspectors in Uganda viz a viz the ILO recommended inspectors

Chart showing the number of inspected and registered work places viz a viz the total number of work places in Uganda



Further the inadequate funding by government to ensure that occupational health and safety standard is glaring and a worrying situation. An example according to the Auditor General's

finding, the Department of Occupational Health and Safety only received 7,451 Million in the financial year of 2012 to 2015. The department of occupational health and safety is still underfunded with poor remuneration. Onyanche et el (2014)⁴⁸ argues the need to foster performance of workers with good pay and a good pay cheque can attract workers and retain the existing workers while enhancing their effectiveness and driving skill development. With underfunding, a good remuneration would not be possible leading to demotivation or in other cases influencing corruption. However, at times good remuneration may not foster performance owing to other factors like technical incapacity. With the oil and gas sector having IOCs with a lot of money yet having an underfunded department in a regulatory entity is so risky as it could easily lead to compromise on enforcement of occupational health and safety standards leading to enforcement failure. The oil and gas sector being a technical area would require occupational health and safety inspectors that have talent and skill and a good remuneration that will attract such people leading.

The high levels of corruption and the lack of accountability has led to enforcement failure in occupational health and safety, Scholars have rightly argued that the regulation of OSH regime can fail due to corruption.⁴⁹ This may happen where the companies bribe the regulator to give clearance for their non-compliant safety systems during inspections.⁵⁰ Currently Uganda is ranking poorly at position number 151 out 175 with a score of 26 out of 100 in the 2017 corruption perception index.⁵¹ With such a poor country integrity record, the possibility of the oil companies not complying with the OSH safety standards and compromising the regulatory authority is high.

In Uganda, the regulatory agency in enforcement of OSH codes and standards in the oil and gas sector is quite not clear. With the Occupational Health and Safety Act 2006 provides that the regulator is the Ministry of Gender, Labor and Social Development as the implementing agency with the commissioner and inspector playing a pivotal role. However, in the Oil and Gas sector, the Petroleum Authority of Uganda being the regulatory authority for example the Petroleum

⁴⁸ Oyanche Nyanumba Wilfred, Charles Munene, Willy Muturi (2014); Effect of Remuneration on Employees Performance in the Ministry of Internal Security; *A Case of Kisii County*.

⁴⁹ Nnedinma Umeokafor, David Isaac Keith Johns, Boniface Umeadi, (2014) 'Enforcement of Occupational Safety and Health Regulatons in Nigeria: *An Exploration'*, *European Scientific Journal https://www.pdfs.semanticscholar.org accessed on 10th December,2018*

⁵⁰ Umeokafor, fn 66

⁵¹ Uganda Corruption Index, Transparency International (2018) https://www.tradingeconomics.com accessed on 10th December, 2018

(Exploration, Development and Production) (Health Safety and Environment) 2016 provide that the regulator shall be Petroleum Authority of Uganda. Yet those regulations provide for the compliance and enforcement of the provision under the Occupational Health and Safety Act, 2006. This leaves a question on whether the inspector under the Occupational Health and Safety Act could enforce compliance with the provisions of the Act against IOCs. The Petroleum Authority of Uganda being the regulator on the activities of IOCs would mean that inspectors under the Occupational Health and Safety Act irrelevant in playing their statutory enforcement duties under the Act. This could create an administrative dilemma as both government agencies are performing overlapping roles; Landau (1991)⁵² has argued that if there should be two or more organizations operating or doing a similar role then action should be taken to consolidate them and bring them under one control. However, Laudau's (1991) argument does not envisage a policy framework creating a coherent synergy that will build coordination between two organizations even though they have similar roles but with different mandates.

Nitesh Bharosa (2009) rightly argues that lack of coordination in multi-agency regulation may lead to possible failure.⁵³ Multiple regulators were cited by the Burgoyne Committee as one of the loopholes that contributed to the Piper Alpha Disaster. The Committee hence recommended that the government's role should be to set objectives aimed to achieve a uniform high standard of safety throughout the industry under a single government agency.

3.1.2 System of Accountability

According to Quinto and Taylor (2014), there is need to hold regulators accountable as they exercise their statutory mandate through a system of checks and balances. Though such a system of controls like checks and balances could create unnecessary bureaucracies (Nyadera and Nazmil (2020)⁵⁴ In holding regulators accountable, there is need to create a system of accountability

⁵² Martin Laudan (1991) Multi Organizational Systems in Public Administration; Journal of Public Administration; Oxford University Press.

⁵³ Nitesh Bharosa (2009), 'Challenges and Obstacles in Sharing and Coordinating Information during multi-agency disaster response: Proposition from the field exercises', *Information Systems Frontiers https://www.link.springer.com accessed on 8th December, 2021*

⁵⁴ Israel Nyaburi Nyadera and Nazmil Islam (2020) Link between Administration, Politics and Bureaucracy, *Global Encyclopedia of Public Administration, Public Policy and Governance, Vol 1.*

where an entity is checked and overseen by another, so as to put in place checks and balances. The legal and regulatory regime in the oil and gas sector does not clearly portray such system of accountability. Looking at the oil and gas laws and regulations both in the midstream and upstream, there is no clear a system of accountability. More so in the enforcement of the occupational health and safety standards. PAU appears to have overriding powers in matters of occupational health and safety in the oil and gas sector. Further the Minister has overriding powers in regard to licensing. In the enforcement of Occupational Health and Safety Standards in the oil and gas sector, PAU is given the leading role yet the Ministry of Labor, Gender and Social Development that is in-charge of labor is not be able to exercise an oversight role on PAU's activities in respect of labor. It would therefore appear that PAU's has a bigger mandate in occupational, safety and health in the oil and gas sector than the Ministry in charge of labor and yet there is no person to play an oversight role and render PAU accountable because it is an autonomous body⁵⁵.

3.1.3. Regulatory Independence

Quinto and Taylor 2014⁵⁶ have argued for need for regulatory independence to avert pressures of political interference. However, what they don't address is that for such regulatory independence to occur, the organization must have technical, financial and institutional capacity to withstand any interference. In Uganda, it has severally been found that there has been a lot of political interference of government projects. Nana and Nkoya (2015) have stated that the government agricultural reforms in Uganda have been limited in implementation because of political interference. This should not be limited to political interference but also financial limitations. A notorious fact is Uganda's political elite who always meddle in regulatory affairs have compromised regulatory compliance and hence leading to ineffectiveness⁵⁷. It is therefore imperative that Regulatory Independence is upheld to shield regulators from such political interference. Where the Regulator are answerable to the political class like the Minister, this could lead to compromise of officers working for the regulator in executing their role and hence creating

⁵⁵ Section 14 of the Petroleum (Exploration, Development and Production) Act, 2013

⁵⁶ Marc Quinton and Micheal W *Taylor (2014);* Should Financial Sector Regulator be Independent, *International Monetary Fund*

⁵⁷ The government of Uganda signed a coffee deal for an Italian investor even on the orders of the President even though the said deal was opposed by parliament .

ineffective regulatory functions. Under the Occupational Health and Safety Act under Section 10, the Occupational Health and Safety Board is appointed by the Minister, who in most cases is a political appointment and whose appointment may be influenced by political considerations and not based on competence. Also in Petroleum (Exploration, Development and Production) Act of 2013 provides under section 14 that PAU shall be an independent body, however a contradiction is created in the same Act where the Minister of Energy is given power to issue directives to the Authority to observe and implement certain policies.

It therefore follows, that the Regulatory independence in Uganda oil and gas sector is hampered by political interference even though the law may require their independence.

3.1.4. Standard of Proof in Criminal versus Civil liability

Pardy (2005) has argued that civil liability rather than criminal liability is more effective against infringements as it emphasizes strict liability as against absolute liability.⁵⁸ However his assertion are arguable as criminal liability would instill a deterring effect as most people would rather pay a fine than go to jail. Pardy (2005) continues to argue that civil systems are better tuned to assessing appropriate financial sanctions. This helps companies to extend conventional forms of cost-benefit analysis into any consideration of health and safety policy. However, at time well organized criminal investigation and prosecution systems often result in a form of overdeterrence that dissuades companies from providing important services. Although the executive officers may be reluctant to accept health and safety responsibilities because they fear personal criminal convictions. Criminal liability may not offer effective mechanisms because the standard of proof is higher meaning proof beyond reasonable doubt hence creating a cover and protection to offenders as at times the weight of evidence may not be heavy enough to sustain a conviction. Also coupled with a weak investigation system with the Uganda Police and the ineffective prosecution by the DPP would lead to the offender not being held criminally liable. Companies have exploited these deficiencies to avoid criminal sanctions in the aftermath of an adverse event.

Therefore, in order to ensure compliance with IOC's on the law and regulations on occupational health and safety there is need to have an effective liability strategy and civil liability would be

⁵⁸ Bruce Pardy (2015); Applying the Precautionary Principle to Private Persons; Should it affect Civil and Criminal Liability; *journal les cahiers de droit*; accessed online www.erudit.org.e.journals accessed on 20th June 2022.

more effective as the standard of proof is not high like in criminal liability matters and it would also create a compensatory mechanism where the victims and also government would benefit through payment of hefty sums.

3.1.5. The need to establish negligence and intent of corporate body

In the prosecution of IOC's that have violated occupational, safety and health, one standing aspect has been establishing negligence and intent. According to Anderson (1984) one challenge of enforcing corporate criminal liability has been establishing the negligence and intent of the corporate party. ⁵⁹Under section under 163 of the Petroleum (Exploration, Development and Production Act provides that an offence is deemed to have been committed by a corporate body if the offence has been committed by a director, secretary and manager and officer, however it does not envisage a situation when the offence is committed by laborer below the rank of an officer. These legal loop holes could be used by the IOC's to escape liability.

Where the law does not stipulate or envisage a particular safety measure to be put in place, then non observance of such a safety standard may not lead liability as a result of negligence. It can be very difficult to identify particular individuals with the necessary 'guilty state of mind' when an adverse event happens yet the safety standard was not envisaged. It is not always necessary to establish intent in order to achieve a conviction, negligence may be proven only where the standard operating procedures and wider industry norm are in place. This raises problems when those norms may themselves be inadequate to protect public safety.

And further Anderson (1985) also support the argument that, negligence may be the result of many lesser failures on the part of different managers within an organization. This can result in extremely complex legislation and case law based on many organizational structures. Thus, as a way of addressing the shortcomings, several countries have started to reform this aspect of their legal systems in the face of public concern over failures to convict corporations under this approach.⁶⁰

However Anderson does not relate her argument with the common law doctrine of occupiers

 ⁵⁹ Linda C Anderson (1984); Corporate Criminal Liability for Specific Intent; Crimes and Offenses of Criminal Negligence; *St. Mary's Law Journal, Volume 15.* ⁶⁰ *ibid*

liability where the owner of the premises is liable for injuries to person on the premises and places the general duty of care on the owner of the premises to ensure safety of person on their premises regardless of their status⁶¹

3.1.6. Effect of financial Penalties and Equity

Some jurisdictions have made provision and allowed for unlimited and hefty fines. The precise amounts levied after liability are calculated in terms of a proportion of the profits earned by a commercial organization. This fines can be collected by government and put in a compensation pool or carry out a sensitization project in occupational health and safety and also carry out restorative justice initiatives. As a result, there have been calls for more innovative forms of restorative justice where companies and not-for-profit organizations are required to reform their safety policy and provide resources to improve the health and safety of the wider community.⁶²

3.1.7. The Dutch Disease; a limitation on the enforcement of occupational safety and health standard

Ebrahim, (2003) in his article "Back to Basics: Dutch Disease. Too Much Wealth Managed Unwisely" (2003) avers that resource rich countries which upon exploitation of their natural resources experience a decline in pre-existing sectors of the economy are said to have caught the "Dutch disease"⁶³ Production of oil usually leads to industrialization and growth of the petro chemical industries. This could lead to Dutch disease where other sectors are not given priority. With the low levels of staffing and the growth of the oil and gas industry will lead to limitation in regulatory enforcement of other sectors. However Ebrahim (2003) does not suggest an effective regulatory system that can insulate an oil producing country from catching the disease which would be used as study in Uganda's situation as it prepares for commercial production of oil.

In a study conducted by Sachs, Humphreys and Stieglitz $(1995)^{64}$ it is argued that resource rich countries grow more slowly than resource-poor countries even after such variables as initial per

⁶¹ Rowland v Christian Supreme 69 Cal 2d 108 Supreme Court of California

⁶² Ibid Braithwaite, 2002

⁶³ C. Ebrahim-zadeh (2003) "Back to Basics: Dutch Disease. Too Much Wealth Managed Unwisely" Finance and Development Journal 40 (1): 50-51

⁶⁴Sachs, Humphreys and Stieglitz (1997) Environmental Management in Oil and Gas Exploration and Production: An Overview of Issues and Management Approaches, at 2-3

capital income and trade policies are taken into account. The usual explanation for this is the "Dutch disease". Sachs et el (1995) argues that when a country exploits hydrocarbons, a sudden inflow of dollar-denominated revenues often leads to a sharp appreciation in the domestic currency, which tends to make non-oil sectors such as agriculture and manufacturing less competitive on world markets, thus leaving oil to dominate the economy with all the attendant consequences.⁶⁵ Hence when oil resources are depleted the entire economy may easily go on its knees. This argument may not always be the case for countries whose oil revenues have been siphoned through corruption as oil revenue and petro dollars would be galloped by the political elite making oil discovery a non- reactor to other sectors of the economy.

Oil wealth management depends on the county's capacity to plan properly and failure to plan and adopt accountability and transparency. S.Oppong, (2010) discusses that developing countries have a tendency of using a large share of resource finances to undertake development activities like road construction and poverty alleviation and ignore issues such as management of occupational, health and safety as compared to the developed world.⁶⁶ An example is in Ghana where a report on SMEs revealed that finance, credit services, and skill development have priority in occupational health and safety training as compared to other areas.⁶⁷ According to Oppong, (2010), apart from the measures recommended for the management of the HSE hazards, there is a need for attitudinal change among the government officials representing Ghana's interest in the oil and gas sector, corporate leadership of the oil companies themselves, and the employees who will work on the oil rigs.

3.2. Recommendations for the effectiveness of the regulatory framework on occupational safety and health.

3.2.1 Strengthen legal and institutional frameworks through adoption of an enforcement policy

There is need to enhance compliance with health and safety principles through strengthening the legal framework such that it is preventative in nature as opposed to being reactive. For example

⁶⁵ Ibid

⁶⁶ Oppong, S. (2010). Preparedness of Ghana to Manage Occupational health and Safety in the Oil and Gas Industry. Unpublished Manuscript, Regent University College of Science & Technology, Ghana.

⁶⁷Arthur, P. (2007). Development Institutions and Small-Scale Enterprises in Ghana. *Journal of Contemporary African* Studies 25 (3) (From WIEGO OHS for Informal Worker Project Ghana, March 2009, Abstract)

under section 163 of the Petroleum (Exploration, Development and Production) Act, 2013 imposes a small penalty on an individual who is a director, manager or officer and has been found guilty of a negligent act of one month imprisonment or 2 currency points which is Ugx 40,000. This amount is so small as to send a deterring message to those person who are charged with the responsibility of maintaining occupational health and safety standards. Having such a small fine is not deterrent enough in light of the IOC's that are wealthy. Imposing high fines could help in compliance by licensees.

Also having a social insurance fund that where IOC's are required to deposit a certain amount of money depending on the level of impact their petroleum activities would have on the occupational health and safety. PAU in coordination with the Minister of Gender, Labor and Social Development should come up with rates after determining the impact of the petroleum activities on occupational health and safety hazards of workers. This kind of insurance will be compensatory in nature as it will be used to compensate workers who are victims of occupational hazards.

3.2.2 Need to foster transparency and accountability in observance of occupational, safety and health standards.

There is need for Uganda to implement the objectives of Extractive Industries Transparency Initiative (EITI) since Uganda is already a member and one of the objectives of the EITI is to foster a system of accountability by ensuring that natural resources benefit the citizens of that country. Such benefits also extend to ensuing that those citizens employed in the extractive industry are protected from hazards in course of their employment.

3.2.3 Ratification of the ILO conventions like Occupational Safety and Health

Uganda being a member of the International Labor Organizations needs to ratify Occupational Safety and Health Convention (No 155) and the Occupational Framework of Occupational Safety and Health Convention (No 187). The two conventions are instrumental in the promotion of ILO standards on occupational safety and health standards. For example, under Article 9 of Convention Number 155 provides that enforcement laws shall be secured by an adequate and appropriate system of inspection. Ratification of this convention will entail putting in place a robust inspection system in the regulatory body like the Department of Occupational Health and Safety in the Ministry of Labor, Gender and Social Development to effectively inspect work places in the oil

and gas section for purposes of ensuring that occupational safety and health standards are maintained. Further under Article 9 of Convention No 155 provides for the need for member states to put in place an enforcement system that shall provide for adequate penalties for violations of the law and regulations. The laws and regulations need to amended to provide for adequate and deterrent penalties especially against the IOC's in the event of violation.

Convention No 187 requires member states to provide for a National Tripartite Advisory Board where the employer , regulator and the workers are represented. Whereas section 11 of the Occupational Safety and Health Act provides for an advisory board, it does not state that this board should be tripartite. According John (2002), Building and maintaining a preventative safety and health culture requires tripartite engagement, therefore, there is need for the law to be streamlined to reflect this position.

Convention No, 187, also provides for the need for provision of advisory and information services on occupational safety and health. There is need to provide a regulatory framework that will enable the licensing of occupational safety and health service providers or practitioners. This will create opportunities, income and also widen the tax base owing to the income flow.

Convention No 187 provides for offering training on occupational health and safety standards to workers, employers and the regulators. Training on the potential occupational hazards and risks and effective systems that will ensure occupational health and safety would enable employers build systems and policies at the work place that will avert occupational hazards. Training also involve putting in place training institutes and hiring the requisite tutors to develop training programs and enroll employers and workers for knowledge acquisition.

Training of Labor Inspectors is paramount, According to Valentic et el (2005), Oil and gas inspectors are required to have higher levels of technical and scientific qualifications than other inspectors. The Points of Consensus adopted at the Global Dialogue Forum on Future Needs for Skills and Training in the Oil and Gas Industry (Geneva, 12–13 December 2012) stress that: "Governments need to work with oil and gas companies to ensure that labor inspector training reflects developments in the industry" (ILO, 2013b, p. 20).

Further this convention also requires that adequate research and development in occupational safety and health should be undertaken, this means the research and development fund should be

put in place to enable adequate research. Also the convention requires member states to put in place a mechanism for the collection of data on occupational and safety. This is part of a component of creation of a strong occupational safety and health management system, As Meswani, 2008⁶⁸ argues that having a an occupational, safety and health management system is important for maintaining and implementing occupational safety and health standards. The important of such data is to enable the department on occupational health and safety have important statistics on the occupational risks and hazards that occur. However in a country where there is no awareness on matters of occupational, safety and health among public and workers having such a system may lack effect.

The convention also requires that an adequate social security scheme covering occupational, health and safety be put in place.

3.2.4 Conditional Licensing

Another recommendation would be to require putting stipulations in the license on observance of occupational safety and health before the issuance for the licensee. Schremmer and Steicamp (2018) asserted that government should create a legal and policy framework for compliance with respects human rights and freedoms especially rights of workers at work places basing on the right to a healthy and safe environment before issuance of a licence. However, Uganda's high level of political interference could render such system ineffective coupled with corruption. While, Gordon, (2019) in support of license as an enforcement mechanism adds that oil companies should be enjoined with in the license to respect, protect and provide remedies to victims of their corporate quest for the exploitation of natural resources. Issuing a certificate of compliance in accordance with the provisions of Section 13(6) of the Public Finance Management Act, 2015, is one aspect that shows conditional licensing.

3.2.5 Public Disclosure as an accountability measure

⁶⁸ Meswani HR (2008). Safety and occupational health: challenges and opportunities in emerging economies. *Indian* J Occup Environ Med 2008;12:3e9

Mugisa A., (2012)⁶⁹ underlines the importance public disclosure as a tool for accountability. However in Uganda where the media is heavily regulated by the state, it remains to be seen how such a mechanism could enhance regulatory effectiveness.⁷⁰ It is imperative that IOC's are required to make public disclosure on the mechanism they are using to maintain occupational health and safety standards, Such public disclosure should extend to incident reporting of any occupational, safety and health hazard. This will help the public to evaluate the effective of the disclosed mechanism in line with the risks and hazards. Also such disclosure could also instill sense of fear as the IOCs are accountable to their shareholders who would not want bad publicity. Xueteng et el (2019) also argue that reputational loss could lead to credit ratings downgrades and fall in share prices.⁷¹

3.2.6 Implementation of Management Systems on OSH

The requirement for employers in the oil and gas sector to adopt and implement occupational safety and health management systems (OSH-MS) should be emphasized. The ILO Guidelines on Occupational Safety and Health Management Systems (ILOOSH, 2001) provide a detailed guidance and tools for assisting organizations, competent national institutions, employers, workers and other social partners in establishing, implementing and improving occupational safety and health management systems, with the aim of reducing work-related injuries, ill health, disease, incidents and deaths (Joskow P. 2008)⁷². ILO-OSH 2001 provides a unique international model, compatible with other management system standards and guides. The guidelines also reflect ILO values such as tripartism and relevant international standards. They comprise a set of five elements integrated in a continuous cycle of policy, organizing, planning, implementation, evaluation and action for improvement. These follow the internationally accepted Demming cycle of Plan-Do-Check-Act, which forms the basis of the "systems" approach to managing OSH. ILO-OSH 2001

⁶⁹Mugisa A. David (2012) "Occupational Safety and Health Issues In Uganda", *Working paper for Department of Occupational Safety and Health, Ministryof Gender, Labour & Social Development, 29 October 2012*

⁷⁰ According to Human Rights Watch Report 2nd May 2010, there was increased threat to freedom of expression in Uganda.

⁷¹ Xuenteng Chen, ZongzhiWu, Wentao Chen, Zongxue Kang, Xingzen He, Yongchun Miao (2019); Selection of Key Indicators for Reputational Loss in the Oil and Gas Pipeline Failure Event; *Engineering Failure Event Vol 99* ⁷² Joskow, P. (2008) 'Lessons Learned from Electricity Market Liberalization; *Energy Journal 9*.

encourages the integration of OSH management system elements into overall policy and management arrangements of the enterprise. Although it is not legally binding and its application does not require certification, as with other international standards, countries may formally recognize it as good practice and use it in developing their own guidance on the subject. ILO-OSH 2001 promotes the establishment of a national framework for OSH-MS including the nomination of competent institution(s) for OSH-MS, the formulation of a coherent national policy, and the establishment of a framework for an effective national application of ILO-OSH 2001.

Management systems have the component of identifying risks and hazards. Preventing occupational accidents and diseases requires, first, the identification of hazards, and second, the determination of measures to address them. According to Joskow, (2008), risk assessment, as a principle and a practice, is essential to the preventative approach to safety and health. The assessment of occupational risks or hazards is a basic principle that should be promoted through the national OSH policy, and the national OSH programs should be based on the principles of the assessment and management of hazards and risks, in particular at the workplace level. Horowitz, D.L (1997) as cited by Edition (2011) views that, in the workplace, risk assessment is a practical tool for improving safety and health. It consists of a process of identifying hazards, analyzing and evaluating the risk associated with the hazards identified and determining the appropriate manner to eliminate or control the hazard. It is indeed a continual process that consists in the careful examination of what could cause harm to people and that enables a consideration of whether enough precautions are in place or whether more should be done to prevent harm to those at risk, including workers and members of the public. Further according Valentic, et el (2005), the five main steps for a successful risk assessment at the workplace are: (1) identify the hazards; (2) identify who might be harmed and how; (3) evaluate the risk and identify and decide on the safety and health risk control measures; (4) record who is responsible for implementing which control measures, and the time frame; and (5) record the findings, monitor and review the risk assessment and update when necessary.

However, these systems proposed by Valentic et el (2005), Horowtz (1997) and Josknow (2008) may not be effective in Uganda's context as they require regulatory auditing for their effectiveness and with institutional weaknesses of inadequate staffing in labor inspection may make such systems irrelevant in their implementation.

3.2.7 Cooperation on OSH at the enterprise level

Cooperation on OSH between management, workers and their representatives is an essential element in the prevention of occupational accidents and diseases. The establishment of joint safety and health committees in the workplace, in accordance with national law and practice, is an important component of promoting a national preventative safety and health culture (Valentic et el; 2005). A majority of SSA countries require the establishment of structures for cooperation between management, workers and their representatives at the level of the undertaking, and several of these countries also provide for a general obligation to engage in cooperation at the level of the undertaking on OSH. Some countries provide that workplaces of a certain size are required to establish health and safety committees. Côte d'Ivoire's law sets out a threshold of more than 50 employees for establishing an OSH committee. Gabon's Labour Code states: "The establishment of an occupational safety and health committee is only compulsory if the workforce size was composed of 50 workers during 12 months, be it consecutive or not, over the previous three years (Labour Code, Art. 214).

In Mozambique, an OSH committee must be established in industrial enterprises with a workforce of over 50 employees, and in enterprises that present exceptional risks of occupational accidents, an occupational safety commission must be established. In South Africa, a committee would be established in any enterprise with over 20 employees (Valentic et el, 2005). Promoting cooperation between management, workers and their representatives is challenging in small and micro-enterprises, and establishing bipartite OSH committees may be difficult for such enterprises. Yet these essential preventative mechanisms may be most needed in smaller workplaces, where a large number of accidents occur. Angola's law guarantees that unions can participate in OSH activities regardless of company size.

However, Valentic proposal of having a tripartite system may not be applicable in Uganda case because of the political will and the government's inclination to protecting investors in the name of job creation coupled with employee fear of loss of job could make such system ack any idealist purpose. For example a recent strike organized by teachers, the Ugandan government instead of address the concern gave ultimatums to teacher to return to their stations or lose their jobs.⁷³ This

⁷³ The daily monitor newspaper of June 28 2022, striking teachers were to be fired by government if they did get back to teaching.

would be mean even where workers seek to insist on occupational, safety and health systems at work, they could face disciplinary action including dismissals.

3.2.8 Collective agreements

Collective agreements are recognized as one of the tools in the occupational health and safety system. According to Summer (1969), collective agreements is an agreement that creates a three sided relationship of the employer, employees and the employee organizations like a trade union that spell out the rights and obligations and their labor relations. Article 4 of the ILO Convention 187 on Occupational Safety and Health provides that member states should provide for collective agreements within their occupational, safety and health systems. Such collective agreements should contain precise provisions to ensure compliance with OSH in the oil and gas industry, including the prevention of occupational accidents and diseases, the use of individual and collective protective equipment, and measures on ventilation, light and safety signs, among others. These collective agreements enhance employee bargaining positions that will in effect successfully employer to put in place systems at works place that will ensure occupation, safety and health standards are implemented. Summers (1969) argues that such collective agreement could provide for a system on compliance with employee rights, However in Uganda's context much as the constitution provides for right to form trade unions and have collective bargain agreements,⁷⁴ these agreement have many times not been respected by employers because of the imbalanced labor relations. This is also coupled with the fact that most employees may not be members of the trade union for fear of being reprimanded make enforcement of these collective agreements difficult.⁷⁵ This would also mean that with the very unequal relations between employer and employee, the enforcement of collective bargaining agreements even with terms that seek to maintain occupational, safety and health standards could fail to lead to compliance by the employer.

3.2.9 Improving the Emergency Response Systems

Dealing with potentially vast and serious incidents has remained a challenge for the oil and gas industry. where there is an evident lack of emergency response structures and technical competence, as well as inadequate legal and regulatory frameworks. Therefore, training personnel

⁷⁴ Article 29(e)of the Constitution of Uganda

⁷⁵ Article in the daily monitor newspaper on August 11 2020.

for emergency preparedness is critical for saving lives, putting out fires, managing evacuations and other rescue procedures (Valentic et el, 2005). However, for such an emergency system to be effective, there is need for proper coordination of regulatory bodies to fulfilling their mandate towards disaster preparedness and management. According to Uganda's Policy on Disaster Preparedness and Management, 2010 requires coordination among stakeholder so as to deliver on their mandate on disaster preparedness and management. ⁷⁶ However, with challenges of inadequate funding and institutional weakness, regulators may find it difficult to properly coordinate to deliver effective emergency response systems.

3.3. Conclusion

The literature has analyzed that regulatory framework on occupational, health and safety in the oil gas sector is still of inadequate because of the inadequacies and ineffectiveness of the regulatory approaches. There is need to identify an appropriate regulatory approach within the legislative and regulatory framework that is effective in the enforcement of occupational health and safety standards. A proper regulatory approach should consider institutional capacity in delivering on tit's mandate on occupational, safety and health and also consideration should be given to the effectiveness of the enforcement mechanism. Having the appropriate approach would lead to effective regulatory enforcement and hence a good regulatory framework.

⁷⁶ www.opm.ug

CHAPTER FOUR

RESEARCH METHODOLOGY

4.0. Introduction

This chapter presents the research methods that were employed in the due research process. It consists of; research design, area of the study, population size, sample size, questionnaire and interview technique, Data Collection Instrument, questionnaire, interview guide, Data Analysis Plan, Quality Control, data analysis, ethical considerations and concludes with methodological limitations with their respective strategies.

4.1. Legal context and research setting

4.1.1. Research Design

The study adopted a qualitative research approach that involved both formal and normative aspects of the existing regulatory framework on occupational health and safety standards in the oil and gas sector in Uganda.

The qualitative paradigm/approach was used as means to explore the understanding and meaning which the respondents ascribe to the study problem⁷⁷. This provided an in-depth understanding of the respondent's experiences and perspectives as can be interpreted by the researcher. Therefore, the researcher was able to draw statistical inferences and provide in-depth analysis on nationals' participation in the occupational health and safety space in the oil and gas sector in Uganda.

4.1.2. Area of the study

The study was conducted at the Ministry of Labor, Gender and Social Development and in particular the Department of Occupational Health and Safety; and the Petroleum Authority of Uganda (PAU).

The Occupational Health and Safety departments of Ministry of Labor, Gender and Social Development and PAU have inspectors who inspect work places. The researcher picked interest in the entities due to the fact that; the two organizations are duly in charge of labor and all

⁷⁷Thanh, N.C., &Thanh, T.T.L. (2015). "The Interconnection Between Interpretation of Paradigm and Qualitative Methods in Education". *American Journal of Educational Science*, *1*(2), 24-27.

operational activities in the O&G sector. Therefore, since oil and gas sector is employing many people, the researcher was interested in knowing how PAU and the Ministry of Labor is working together and with other actors in the sector to address workers occupational health and safety.

4.1.3. Population and Sample Size

The study involved sending questionnaire first with an accompanying letter seeking authorization to interview and after authorization was given, the researcher interviewed 6 people who were 2 officials from PAU and MoLGSD respectively and 4 other staff who were not official with two coming from PAU and the other two were from MoLGSD.

Category	Population	Sample size	Sampling Technique
PAU:			
Officials from HSE department	1	1	Purposive sampling
Staff at PAU	2	2	Random Sampling
Ministry of Conder Labour and So	aial davalanma		
Ministry of Conder Labour and So	cial davalanma		
Ministry of Gender Labour and So Officials from OSH department	cial developmen	n t:	Purposive sampling
•	-	nt: 1 2	Purposive sampling Random Sampling
Officials from OSH department	1	1	

Table 1: Showing the distribution of the Sample Size

Source: Primary Data, 2021 and Sample Size determined by Krejce & Morgan, (1970)

4.1.4. Sample size determination

The sample size of the study originally was 10 people, however owing to organization procedures I was able to sample 6 target population through purposive sampling means and random sampling. Whereas purposive sampling was chosen by the research owing to the experience and expertise of the respondents, random sampling was chosen by the research to ascertain the understanding of occupational, safety and health among ordinary workers with a probability of choosing any respondent was 50%. For purposive sampling, the research put in consideration the nature of data to be generated that requires technique for better understanding of the research problem under

investigation. Besides this the approach is also commonly known for achieving higher degree of validity and reliability as well as elimination of biases.

4.2 Data Collection Instrument

The study mainly adopted two data collection instrument which include: the Questionnaire and Interview Guide.

4.2.1. Document Review Guide.

Document review is a way of collecting data by reviewing existing documents. The documents may be internal to a program or organization or may be external. Documents may be hard copy or electronic and may include reports, meeting minutes, newsletters, and newspaper, report from other MDA's. The researcher was able to review documents on the organization and was able to understand the history, structure and operation of the organization which was being evaluated.⁷⁸.

4.2.2 Questionnaire and Interview Guide

. The study was based on the general interview guide approach that is an instrument that contains structured and unstructured question items to collect qualitative data. The questionnaire and interview guide helped in obtaining detailed information from the respondents and ensured that the areas of information were collected from each interview. This provides more focus and a degree of freedom and adaptability and gave for learning from the respondent and resaercher's experience. The researcher interviewed 6 respondent though he targeted 10 respondents..⁷⁹ These 6 were Officials and Staff from PAU and MoLGSD.

4.3. Data Analysis Plan

4.3.1. Quality Control

Validity; the study relied on official responses and other verifiable data readily available and the relevance assessed by the supervisor leading to proper clarity of the wording and the items in the instrument. In this case the study gathered information from the existing sources and thereafter, it

⁷⁸ www.cdc.gov/health

⁷⁹ In view of the Covid-19 challenges –government officials working from home..

was tested using confirmatory factor analysis thus helping in attaining a validity of the study items.⁸⁰

Reliability for the qualitative instrument was achieved with the help of consultations from the supervisor. The data was systematically checked and focus was maintained on the consistent identification and correction of errors⁸¹.

4.3.2 Data Analysis

Qualitative analysis was carried out through thematic and discursive methods. By thematic analysis, clusters of texts with similar meaning were presented together.⁸²

4.4. Ethics Consideration

The researcher took the responsibility to ensure that the respondents were told about the value of the study being investigated. This enabled the respondents to positively appreciate their contribution as participants in the study (Chorley, 2015).

The researcher will observe the research norms and above all, he will maintain absolute honesty and objectivity in the application of the data collection methods to arrive at the desired results as (Maiangua, 2012).

The researcher will not seek to offer anything in order to solicit for information or data. Responses will be in the interest of the respondents themselves. The researcher therefore will assure them that, transparency and honest values will be put at the forefront to easily conduct the research.

4.5. Limitations with their respective strategies

Time Constraints. The researcher wanted to get views from as many workers in the oil and gas sectors as possible but time constraints would not enable the researcher to get the views from such

⁸⁰Marsh, H.W., Morin, A.J., Parker, P.D., &Kaur, G, (2014); Exploratory structural equation modelling: An integration of the best features of exploratory and confirmatory factor analysis. *Annual Review of Clinical Psychology*, *10*, 85-110.

⁸¹Morse, J.M., Barrett, M., Mayan, M., Olson, K., &Spiers, J.. (2002) "Verification strategies for establishing reliability and validity in qualitative research" *International Journal of Qualitative Methods*, 1(2), 13-22 ⁸² Madill, A., & Gough, B. (2008) *Qualitative research and its place in psychological science*.)Psychological methods, 13(3), 254.doi: 10.1037/a0013220

a number. To overcome this, simple random sampling was used to select the few who would participate in the study and yet this instead narrowed the chances of generalizations on the study phenomena under question.

Another limitation was funds. To cover all the respondents, the researcher required money for transport and other arrangements to the travel to various workplaces in the oil and gas sector.

As well, some people were suspicious and hence not willing to give in the necessary information that the researcher needed. To this, the researcher endeavored to explain to the respondents the purpose and confidentiality of the research.

With the outbreak of the covid-19 pandemic in Uganda it is was challenging to access government officials some of whom were working from home and also interview people who may have the relevant information for this study. To overcome this, the researcher undertook to seek pre authorization from the respective government agency.

CHAPTER FIVE

PRESENTATION, ANALYSIS AND INTERPRETATION OF STUDY FINDINGS

5.0. Introduction

This chapter presents the response rate, demographic factors of the respondents (bio data), and interview analysis based on the existing legal/regulatory and policy framework, challenges encountered in the implementation of OSH laws and regulations and possible recommendations to enhance the effectiveness of OSH laws and regulations in Uganda's O&G sector.

5.1 Response Rate

Table 4.1 below presents the response rate.

Table 5.1: Response Rate

	Frequency	Frequency	Percentage
	Respondent	6	100
Valid			
	Total	6	100.0

Source: Survey data computed by the researcher, (2022)

Results in Table 4.1 above, of the 6 respondents meant for the study, the researcher was able to interview all representing 100% of the total respondents. Hence the overall response rate was 100%. This response rate was found to be satisfactory since according to Mugenda (2003), a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent.

5.2. Demographic Characteristics of the interviewee Respondents

The findings on sex, age, age bracket, designation / sector of the respondent, educational level, Position in the Department and how long they have worked in O & G sector as indicated below;

5.2.1. Sex of Respondents

Table 4.2.1 below presents the Sex of the respondents.

Gender	Frequency	Percentage
Male	3	50
Female	3	50
Total	6	100

Table 4.2.1 Gender/Sex of the Respondents

Source: *Survey data computed by the researcher*, (2022)

Results in Table 4.2,1 above shows that 50 percent of the total respondents were males while 50 percent were females respectively

5.2.2. The Age of the Respondents

Table 4.2.2 below presents the age of the respondents.

 Table 4.2.2: The Age of the Respondents

Age	Frequency	Percentage
28-37	04	60
38- 47	02	40
Total	18	100

Source: Survey data computed by the researcher, (2022)

Results in Table 4.2.2 above show that a good number of interview respondents representing 60% participated in the age group of 28 - 37 years, while, 40% percent participated in the age group between 38 - 47 years. This showed that the interviewees were mature enough, hence they were able to articulate issues concurrently and their responses were mature enough for the study.

5.2.3. Designation of the respondents

Table below presents the designation of respondents involved in the study.

Category	Frequency	Percentage	Cumulative	
PAU O	PAU Officials (OSH department)			
Manager, Health, Safety and Environment	01	40	40	
Staff below managerial level	02	60	60	
Ministry of Gender Labour and Social Development officials (OSH department)				
Principle Specialised Safety Inspector	01	40	40	
Staff below inspectors	02	60	60	
Total	06	100		

Table 5.2.3: designation of respondent	S
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Source: Survey data computed by the researcher, (2022)

Results in Table 4.2.3 above show two of the total overall interview respondents were Manager and Principle Inspector at PAU and MoLGSD respectively representing 40% while the 4 were staff below managerial and inspector level at PAU and MoLGSD respectively representing 60%t.

5.2.4. Number of years of service

Number of years	Frequency	Percentage	Cumulative
0 < 5 year	03	50	50
5 - 10 years	02	40	40
10 years +	01	10	10
Total	06	100	

Table 4.2.4: Level of experience working for the institution by the respondent

Source: Survey data computed by the researcher, (2022)

Results in Table 4.2.4 above indicate that 50 percent of the respondents possess had worked in the organization for five years and below, 40 percent had worked in the organization for between 5 - 10 years and 1 percent had worked in the organization for over 10 years.

5.2.5. Showing the Educational Level of the Respondents

Education levels	Frequency	Percentage	Cumulative
Diploma	01	10	10
Bachelors	03	50	50
Post graduate / Masters	02	40	40
Total	6	100	

 Table 4.2.5: The Educational Level of the Respondents

Source: Survey data computed by the researcher, (2021)

Results in Table 4.5 above show that 10% percent had a Diploma, 50 percent had Degrees while 40% had Postgraduate Diploma/Masters Degree in that field.

5.3. Descriptive analysis as per the specific objectives of the study

In this section, the researcher presents the major findings in relation to the study objectives as here under;

5.3.1. Analysis of adequacy of existing laws and regulatory bodies in addressing occupational, safety and health risks and hazards.

Below is a presentation of the study findings extracted from the interviews conducted about the adequacy of existing laws and regulations in addressing occupational, safety and health risks and hazards;

According to the Manager HSE at PAU, he noted as follows;

"The current laws and regulations regarding occupational safety and health are largely adequate in as far as they provide for putting in place systems on OSH. It is upon the IOC's to have the responsibility to put in place the right systems so that they are held accountable"

From the above assertion, the respondent expresses the regulatory mode of self- regulation meaning that systems on OSH should not be dictated but should be left to the respective employer to put in place so that the Regulator should hold them to account. Graham and Woods (2006)⁸³ has argued that self-regulation help in resolving the lack of institutional and administrative capacity especially in low developing countries that have weak government and administrative capacity. The respondent could have been alive to the fact that being a developing country there was lack of institutional capacity. This respondent in support of lack of capacity further states as follows; "Owing to the national content law and the national content culture that may prove unsatisfactory, there would be a challenge in implementing the HSE standards as the available local skills lack the adequate competencies in regards to management of the health and safety of the oil and gas sector.

However on the other hand, another respondent who is the Principle Specialized Safety Inspector (PSSI) in the MoLGSD seems to disagree on the adequacy of the laws as she states as follows; "there is need for amend the existing legal framework to improve its efficacy in regard to executing

⁸³ David Graham and Ngaire Woods; *Making Corporate Self-Regulation effective in Developing Countries*; journal on world development; accessed on doi.10.1016.j.worlddev2005/04.027

regulatory mandate" she argues that the current OSH Act creates a regulatory gap since it does not extend to the oil and gas sector, yet the petroleum laws refer to the OSH Act, the Petroleum laws appear to create a new regulator on occupational health and safety in the form of PAU acting through HSE leading to a conflict of roles yet the MoLGSD is mandated to handle labor issues. There is need to address these conflicts in the laws where the OSH Act mandate all occupational, health and safety matters and yet the petroleum laws put the mandate of management of occupational, safety and health standards in the petroleum sector on PAU.

Regarding the respondent's answer to the penal provisions under the legislative and regulatory regime on OSH, both officials from PAU and MoLGSD acknowledged some inadequacies as the penal provisions provided for insignificant fines and imprisonment that are not deterrent enough especially to deter the IOC's from violations. However, Manager, HSE further argued that this should not be a point of bother because fines and violations have not had a deterring effect to ensure compliance but rather the fear of loss of reputation. His argument is supported by Xueteng et el (2019) as they also argue that reputational loss could lead to credit ratings downgrades and fall in share prices and hence act as deterring factor that would ensure compliance.⁸⁴ This in most cases deters the IOC's from failing to comply with regulatory standards on health and safety.

Further to the above, it is imperative to analyze the efficiency of the regulatory bodies and agencies in addressing OSH issues.

According to the PSSI at MoLGSD in regard to the questions relating to institutional capacity and independence, she responds as follows; that currently there are only 22 inspectors in the Departments which is way far below the proposed number of 44. These creates a manpower problem and leads to inefficiency and yet the ILO recommends 1 inspector to 10,000 workers. Uganda's working population is 19 million meaning Uganda's ratio is 1 inspector to 380,000 workers". Lack of institutional capacity lead to inefficiency and regulatory failure. As Umeakafor (2014) argues that efficiency in the management of occupational health and safety standards requires addressing both external and internal factors; factors like understaffing and poor

remuneration leads to failure to properly monitor and supervise occupational, safety and health standards.

According to the PSSI, this underfunding is as a result of the lack in prioritizing occupational safety and health by the political class, she argues that there has been limited allocation of resources to the department of OSH which has led to failures in carrying out its mandate of inspection for example of the 1 million work places that are in Uganda only 7000 work places have been inspected and registered as there has been no fund to facilitate the registration and inspection process. The limited resources allocation has also caused poor remuneration which is a motivating factor for employees to effectively execute their role. The above state of affairs support the Auditor Generals findings as explained earlier.

Further from the PSSI's responses it was revealed that the political will is lacking in prioritizing occupational, safety and health at work places in the guise of creating a favorable environment for investors. This has created an investor syndrome as the government has often argued the need to create employment and meet the GDP targets at the expense of complying with OSH standards. This has created a weak regulatory response to ensure compliance with the OSH standards that are stipulated in our laws. As Tumukwasibwe (2010) that the legislative agenda has been to champion neo capitalist agenda in the name of poverty reduction to the detriment of other human rights.⁸⁵

The PSSI further reveals that there is a duplication of roles among the MDAs within the legislative framework which creates conflict and lack of clarity on the role of each regulator. The inadequate synergy leads to poor coordination and laxity in the enforcement of the laws in occupational, safety and health, for example the OSH Act gives the department under the MoLGSD the mandate on occupational, safety and health, this mandate has been limited in the oil and gas sector with the Department of HSE in PAU now managing health and safety standards in the oil and gas space. However, from the response from the Manager, HSE at PAU he reveals that their mandate only extends to the upstream of development, production and the downstream segment of transportation, storage and refining. It is not clear whether their mandate extends to the spills over to the petro chemical industry, yet this petro chemical industry is expected to grow.

⁸⁵ R. Tumumkwasibwe (2010); *Parliament and the Politics of Poverty Reduction in Uganda; A Critical Appraisal*; International Journal of Human Rights; Vol 14

The PSSI further reveals that having mandate overlap could lead fatigue tendencies as the employer has to always interface with multiple regulators with different requirement and at the same time this mandate overlap could lead to friction among the MDAs.

As discussed this state of affairs leads to regulatory ineffective in the execution its mandate and as Nitesh Bharosa (2009) has rightly argued that lack of coordination in multi-agency regulation may lead to possible regulatory failure.

5.3.2 To assess the enforcement mechanism of sanctions and penalties by regulatory bodies and authorities in the management of OSH.

The Manager, HSE at PAU revealed that their enforcement mechanism only related to auditing and inspection and any further sanctions like fines and imprisonment could not be enforced by them as this was subject to judicial administration that needed to be handled by the Courts, DPP and Police. As earlier discussed the high levels of corruption in the police and the courts may lead to compromise in the enforcement mechanism of fines and penalties making it ineffective. This is also coupled with the inadequacy of the penal regime that do not have deterring effect. It is therefore for this reason that PAU would rather adopt self-regulation approach where it audits the IOCs health and safety systems and proposes measures to improve through improvement notices and relies on the IOCs to comply. PAUs approach has been supported by some authors Ayres and Braithwaite (2015)⁸⁶ who have argued against the taking the prescriptive or penal approach in favor of a modern persuasive approach. They argue that the prescription or penal approach where enforcement and oversight role compared to persuasive approach where there is a mutual benefit between the regulator, licensee and the third party.

On the other hand, the nature of enforcement as was revealed by the PSSI in the MoLGSD has been inclined more to a prescription approach which approach requires the regulator setting down the measures and becomes the predominant driver posing successful implementation of regulation.⁸⁷ This regulatory approach on enforcement has been hampered with interference from

⁸⁶ Ian Ayres & John Braithwaite (2015); *Responsive Regulation, Transcending the Deregulation Debate*; Oxford Handbook.

⁸⁷ Robyn Fairman and Charlotte Yapp (2005) *Enforced Self-Regulation, Prescription and Conceptions of Complainces with Small Businesses; The Impact of Enforcement;* Law and Policy; Journal University of Denver

the political class as most times the employers who do not comply appealing to the political class for intervention and because of the investor syndrome, the investors are treated so highly at the expense of compliance with occupational, safety and health standards in the name of providing employment and development.

Further, the inadequate staffing and limited resources also led to enforcement challenges. The PSSI at MoLGSD reveals inspection incapacity which is in the form of poorly a staffed department compared to number of work places that they needed to inspect. The department only has 22 inspectors and as a result they have only inspected only 7000 places out of the 1 million work places. Other inspection challenges include the lack of enough resources to facilitate work operations like having adequate means of transport to access places of work among others leading to enforcement challenges. These challenges work against the prescriptive approach the is currently being followed by the Department of OSH and therefore the need to review the regulatory approach in light of the circumstances. With these challenges, one wonders with oil and gas development that will lead to industrialization and growth especially of the petro chemical industries, how will Department be able to enforce these occupational, safety and health standards.

5.3.3 To assess the regulatory challenges and conflict encountered in the implementation of OSH regulations and standards in the oil and gas sector in Uganda.

The PSSI at MoLGSD, revealed that that the Department of OSH had only 22 inspectors far below the proposed number of 44. This shortage of laborer inspectors was because of the inability of the Ministry of Public Service to recruit more inspectors. This is partly because the Ministry of Public Service lacks institutional awareness to appreciate the urgency of the needs of occupational, safety and health. The recruitment for the department being done by the Ministry of Public Service also leaves the department of OSH without a clear influence on the recruitment of the competent persons being brought in at the department. Further the failure to understand the technical need of man power for the department has created a problem of understaffing for example the department has proposed 40 staff however the department has only 22 staff. This erodes regulatory independence and as Quinto and Taylor (2014) have argued effective regulation requires regulatory independence. Such regulatory independence as argued by Warrik (1997) demands that regulators should be able to have adequate funding through commitment from government to avoid control and compromise of regulatory processes.⁸⁸ The effect inadequate funding leads to regulatory failure to execute duties as there is no resource allocation for operations like transport to reach certain work places resultantly leading to dismal performance for example the Department had only reached 7000 places out of 1 million places required. Other challenges include insufficient training of inspectors owing to financial constraints among others. Such challenges erode regulatory independence and enhance political interference. This challenges have also been noted in the Auditor General's report which found that the budget allocation in the national budget allocated for occupational safety and health in the MoLGSD was small compared to the amount of work that was to be done.

The PSSI revelation on conflict of mandates among MDA's and with overlapping mandates shows that weaknesses in the enforcement mechanism within the regulatory framework. The fact that each entity attempts to fulfill its mandate independent of the other without creating a proper synergy which at times leads leading to employer's suffering from regulatory fatigue owing to compliance on different requirements from each regulator. An example is the Department of Health, Safety and Environment in PAU having a conflicting overlapping mandate with the Department of Occupational, Safety and Health in MoLGSD. This duplication leads to ineffective output by the MDA and weak synergies.

Another challenge she revealed was the limited awareness among the workers and general public who are oblivious to the legal provisions, their rights and obligations in regard to OSH. This is fact was further collaborated with by the different interviewees who were not aware what occupational, health and, safety standards meant to an employee. This has created a poor system of accountability from the employers as the employees who are not aware of the health and safety violations cannot report such violations leading to limited information on occupational, safety and health violations. Also another challenge that revealed by the PSSI is the inadequate OSH data and information sharing between employers and government. This inadequate data limits the system of accounting as it becomes difficult to hold the employer liable when there is limited information. This lack of information also leads to inadequate research and publications in the area of OSH in the oil and gas sector.

⁸⁸ Smith Warrik (1997); Utility Regulators; The Independence Debate; View Point; World Bank; Washington Debatel accessed on www.openknowledge.worldbank.org

At the Department of HSE at PAU, the respondent who was the Manager, Health, Safety and Environment responded as follows to the challenges they faced as a regulator;

Whereas he acknowledged there was a mandate overlap that was created by law, this overlap had a justification because oil and gas was a unique sector that had inherent hazards and risks that required a specialized entity with sufficient competence to give it focal attention and hence the justification to create the Department of Safety, Health and Environment. He further highlighted challenges in creating an effective synergy with other agencies like the Uganda Police, Ministry of Health and Ministry of Disaster Preparedness to formulate good coordination strategies in case emergency situations that would require thorough emergency response systems.

He further stated that the Department of HSE had manpower constraints that would effectively manage and implement their strategic business plan, however they devised a system that every petroleum activity should address health, safety and environment considerations meaning that every department inspecting a petroleum activity had to submit a report on the management of health, safety and environment. This looked to be a work overload considering that the Department only had three inspectors.

As to the enforcement mechanism, Department of HSE enforcement mechanism was auditing and inspections. It did not provide for other enforcement mechanism. The auditing and inspection provisions do not give PAU any powers to invoke penal provisions to the licensee who did not comply and relied more on regulatory approach of self- regulation together with persuasion other than prescription.

However PAU being the technical arm should have the licensing powers so that it can invoke the licensing approach as an enforcement mechanism, These licensing power should be institutionalized other than being left to the whims of the Minister, It is no wonder, that the article published by The Independent Newspaper, October, 2018 read that, Uganda's Prime Minister, and two other ministers allegedly benefited from bribes from oil companies and allegedly benefited from billions of bribes from oil company, Tullow Oil ⁸⁹

⁸⁹ Walusimbi Deo (2013) "Oil Bribes: Why Mbabazi, Kutesa were exonerated; the Observer (Uganda) retrieved on 20th June 2022.

Further it was not clear whether the PAU had put in place training programs for its officer that manage safety, health and environment to impart knowledge and specialized training in health, safety and environment.

He further acknowledged that the Department had funding gaps that have led to man power constraints and need for specialized training on health, safety and environment.

Further he also addressed the requirement of national content within the existing legal framework on national content regulations and the need to create a national content culture as major challenge as majority as there is genuine lack of local adequate skill to be employed in the sector and also understand and observe HSE standards.

He also acknowledged that the existing law were not punitive enough to create deterrence however the fear of reputation is what government was relying on since the IOCs value their reputation, they would comply.

Based on the above challenges according to the PSSI Uganda is not technically prepared in management of OSH standard in the oil and gas and there is still more work to de done.

5.3.4 To make a comparative analysis on implementation of occupational, health and safety regulations and standards between Uganda and ILO Conventions.

From the responses from PSSI in the Department of Occupational, Safety and Health, it was confirmed that Uganda is a member of the ILO but has not ratified the ILO conventions relating to occupational, safety and health. The failure to ratify these conventions means Uganda has not given specific priority to occupational, health and safety as compared to other countries that have ratified these conventions. This partly explains why there is lack of political will in favor of ensuring that occupational, health and safety standards are strictly implemented.

The response from the Manager, HSE in PAU regarding the implementation level in observing the ILO conventions on OSH clearly demonstrated that Uganda oil and gas sector had not taken key interest in observing the ILO conventions on Occupational Safety and Health as he states that as HSE they were not aware of the ILO conventions and that admitted that they needed to study the conventions to adopt some provisions that they would find relevant and helpful within their strategic policy.

However, the PSSI in her response seemed to suggest that failure for Uganda to adopt these conventions could also be the reason why Uganda does not attract foreign funding in the occupational, safety and health space.

However, on the 10th June 2022 at the International Labor Conference, a resolution was adopted to add the principle of a safe and healthy working environment to the ILO Declaration on Fundamental Principles and Rights at Work. This meant that all countries who were members of the ILO were duty bound to domesticate the principle of a safer and health working environment as a human right. ⁹⁰ It is therefore hoped that with this new development, Uganda will prioritize occupational, safety and health issues and improve funding. It could also bring on pressure from Uganda's international partners to government to make Occupational, Safety and Health a priority area. This development could also lead to more donor funding to develop occupational, safety and health management.

In conclusion Uganda has failed to adopted and implement the international conventions on health and safety.

5.3.5 To make recommendations of the effective implementation of occupational, health and safety standard in Uganda's oil and gas sector.

According to the PSSI at the MoLGSD she proposed the following recommendations;

There was need to advocate for increased political will. Advocating for political will requires the electorate to put their leaders to task when they appearing in every election cycle, The electorate should demand that occupational safety and health is made a priority since many electorates are employed in these establishments. This should be part of the social contract of which the political elite should deliver upon.

The employer and employee should be made aware of the legal requirements under the legislative framework to improve compliance. The PSSI in her response said in the periodic inspection, most employers were not aware of occupational, safety and health requirement under the laws. Most at times they feigned ignorance of the legislative requirement. There was therefore need to create awareness through putting in place occupational, safety and health programs on radio, television

⁹⁰ www.etui.org accessed on 22nd June 2022

and social media as they have a wide public outreach. Also training should be organized by government to train employers and employees on occupational, safety and health management systems and legislative provisions.

There should be better enforcement of the existing law. Better enforcement will require employing more inspectors and providing adequate remuneration that will attract and retain skilled staff that will aid in the management of occupational, safety and health standards at the Department. Better enforcement will also entail putting in place systems that will deter corrupt behaviors for example strong punitive measures against the corrupt. Improving the synergy with the regulatory and enforcement bodies like the Uganda Police, the Courts of Judicature. There is need for enforcement bodies to properly coordinate. Many at time there have been instances where inspectors have issued prohibition orders under section 94 of the OSH Act only for the courts to intervene and set aside the orders. This creates contradiction in the enforcement mechanism and hence need for proper coordination.

Also there is need to amend the current laws on occupational, safety and to increase efficacy. The current laws create a duplication of roles to different MDA's. The Minister under MoLGSD should advocate in cabinet that all matters related to workers should be set up under one mandate and possibly should advocate for the Occupation, Safety and Health Authority to be an independent authority so that the issue of duplication of role and overlapping mandates can be eliminated. All workers occupation, safety and health issues should be managed under one authority. This will also ease funding gaps since funding emphasis will be directed to the authority, also it would be easier to recruit skilled staff since the authority would have the know of its skill gaps. Further this autonomy will curtail interference from the political class and other powers as the authority would be able to take independent decisions. Having one regulatory authority will create a one stop business center for health and safety needs whether in the oil and gas sector or any other sector other than investors have to comply with many requirements from different regulators.

Having one regulatory authority will also make it easy for the government to provide adequate specialized training unlike today where there has been significant attempts to train and equip staff of the MEMD and PAU in the Department of HSE however this preparation has not been replicated in the Department of OSH at MoLGSD and yet it has a paramount role it will be plays and will be playing in the petrochemical industry.

There is also need to amend compensation laws like the Workers Compensation Act to improve on the compensation rates that are quite low after workers have sustained injuries at work places. Bartrip (2002) argues that improving compensation rates of injured workers will enhance work value and effectiveness but will also pressurize the Employers to put in place occupation, safety and health at work places.⁹¹

Further the need to train members of the public and workers generally on occupational, safety and health is paramount as most workers seem to think that employers are not obligated to provide occupational safety and health measure. An example was were a factory workers at Hima Cement died as a result of a fire, when the press reached out to some of the workers on the safety in the working environment very few feared to divulge information on safety for fear of being terminated.⁹²

At the Department of HSE in PAU the Manager, HSE recommended the need to create a robust emergency response system. The current emergence response system is inadequate as it fails to create a linkage of synergies between different stakeholders in the management of safety, health and occupation standards. There should be a framework that should coordinate the relevant stakeholders like Uganda Police, the Ministry of Health and the Ministry of Disaster Preparedness in case there is a disaster emergence. He argued that since oil and gas is a unique industry with inherent risks then a new framework for the creation of a stake holder coordination plan should be in place to anticipate and manage any emerging disasters for example an oil explosion. He adds that funding shortcoming and the need for technical competence could be the reason that have affected effective coordination of these agencies. There is therefore need to empower all relevant agencies that are going to interface with oil and gas activities on the technical competence but also improve funding gaps to enable them create systems on health, safety and environment.

Further the need to enhance the staffing levels as health, safety and environment plan within PAU requires that every petroleum activity should be inspected and an inspection report generated. With the few staff at PAU under the HSE it is highly unlikely that there will be effectiveness in the

⁹¹ Bartrip Peter W J Rudop 2002 ; *Adequacy of the Workman Compensation Act*; Induced Diseases Adequate Compensation

⁹² Monitor Newspaper of the 18th January 2022 and story could be accessed on www.monitor.co.ug/uganda/news/national/hima-cement-faulted-on-factory-fire

implementation of this plan. It follows that if the challenge has been the funding gap, government should increase funding to enhance the number of inspectors since any mistake in a petroleum activity could be a recipe of disaster.

5.3.7 Conclusions

The objectives and recommendations point to the fact that there is a regulatory overlap in the management of occupation, safety and health standards in the oil and gas sector. This overlap creates a dilemma and unnecessary friction as the Department of Occupational, Safety and Health in the MoLGSD is mandated under the OSH Act to manage OSH standards and yet petroleum laws put this management under PAU. Whereas PAU has argued that this should not be a cause of concern, the fact remains that MoLGSD is mandated to handle labor matters and they will definitely be a mandate overlap. This coupled with the fact that one agency is given priority over the other in funding could lead to laxity in performance of institutional mandate. The conclusion should be that one regulatory authority on occupational, safety and health should be instituted that would ably manage all occupational, safety and health issues that is properly funded and facilitated. Also the law and rules on rules should be amended to provide for adequate penal sanctions for violations but also adequate compensations for victims. However, in absence of a strict penal system, the self-regulation regulatory approach could be developed further.

CHAPTER SIX

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

6.0 Introduction

The study examined the recommendation and conclusion for the study that concerns the existing regulatory framework, challenges encountered in the enforcement of OSH standards and recommendations to enhance the effectiveness of OSH standards in Uganda's O&G sector.

6.1 Discussion on findings and conclusions

The study findings show that the Uganda's oil and gas regulatory framework on occupational, safety and health is inadequate in terms of the enforcement mechanism and the penal sanction lacking a deterring effect. Other enforcement mechanism like licensing would be ideal however with political interference in the licensing process limits its effectiveness as an enforcement mechanism that would ensure occupational, safety and health standards are maintained. It's my finding that licencing as a regulatory measure would be ideal in enforcement of occupational, safety and health owing to the fact that the licenses are the heart of the IOCs as they have invested a lot in obtaining these licenses and would not want to lose their investment. However, for effective licensing to be done, the licensing should be handled by the technocrats rather than the political class who in most times put into account political considerations other than technical considerations in the licensing regulation.

Other enforcement mechanism like self-regulation have been adopted by PAU through relying on audits and inspections and making recommendations on system development, however self-regulation could easily lead to state capture as the institutions will heavily rely on IOCs proposed systems and audit systems that could be misleading. With Uganda's limited capacity in enforcement in ensuring that occupational, safety and health systems are in place would favour a self-regulation approach where IOCs will propose and put in place systems to ensure safety and these systems are shared with the regulator for inspection and audit. This is ideal in the oil and gas sector owing to the fact that as a country we lacked skilled manpower and oil and gas being a unique sector required specialized which may not be easy. This could partly explain why PAU has a better effective enforcement strategy compared to MoLGSD that relies on the ineffective penal

systems that are subject to compromise. This kind of self-regulation also leads to knowledge transfer.

The legislative framework in the oil and gas on occupational, safety and health has gaps that have led to institutional challenges as it has created mandate overlaps within institutions with one institution like PAU having to perform similar functions under the petroleum law and yet occupational, safety and health matters seem to be left to the mandate of the Department of OSH in the MoLGSD under the OSH Act. It is my finding that this gaps in the legislative framework need to addressed through the legislative process that has to be tabled through cabinet where a central authority on occupational, safety and health should be proposed.

The central regulatory authority should be clothed with independence and should be properly funded with appropriate technical staff competent enough to handle the relevant tasks. This independence will insulate the authority from political interference and enhance its independence in the execution of this duty in line with best international standards.

The institutional challenges in form of funding have resulted in inadequate staffing, poor remuneration and failure to allocate resources for operational work. The result of this has led to poor information gathering as most places have not been inspected and hence inadequate data. This insufficient data and information has also hampered research in occupational, safety and health as there are no proper statistics.

The study findings show the improper coordination among the MDA leads to lack of synergy as an actual finding. Regulator and enforcers should work in coordination with each other to avoid institutional conflict. A framework should be formulated that would guide institutions and enforcers like PAU, MoLGSD, MEMD, The Uganda Police, The DPP and the Courts to coordinate better to deliver an effective enforcement mechanism on occupational, safety and health.

The study findings also show the lack of appreciation of the need to follow international practices on occupational, safety and health. The failure to ratify ILO conventions of occupational, safety and health means that there is a limited follow up on the occupational, safety and health international standards.

6.2 Limitations of the Study

The balancing of time between work and conducting research was quite challenging because of the conflicting interests in doing work which required the researchers time and attention.

Some information was not left to the public which posed difficulties for the researcher while conducting this research. Furthermore, most information especially in text books and journal articles were not freely accessed implying that the researcher had to purchase some materials online.

Difficult in obtaining information after the pandemic led to delays in data collection as most government officials were working from home and getting the relevant officials for interview could take time.

Some respondents were not cooperative enough that they at times were reluctant to disclose some information which was relevant to the study due to confidentiality rules at the work place and suspicion on what the information is needed for.

6.3 Conclusion

Occupational, Safety and Health standards at work places should be given critical attention. Uganda has not effectively implemented occupational, safety and health standard at work places. Labor being a fundamental factor in the production requires protection for it to be efficient and occupational safety and health is one of the important component that will compel workers effectiveness. OSH standard have now been included as a fundamental right under Fundamental Declaration of Rights of Workers and Uganda being a member of ILO should domestic this requirement in our laws so that OSH is a priority. Whereas the legislative provisions may provide for safety and health measures, the institutional weaknesses and poor enforcement mechanism have made the realization of the enforcement of these standards a far reality. The need for political will could prove fundamental in addressing some of these challenges especially with enforcement and institutional balance gaps through legislative action and budget appropriation.

6.4. Recommendations for the study

The following are the practical study recommendations on the proposal to include OSH policy that should be used to develop Uganda's legislative and regulatory;

There should be provision for nationwide sensitization on OSH laws, regulations and guidelines so that members of the public are made aware. Adverts and articles in newspaper, adverts and programs on radio and television should be undertaken so under taken so that members of the public are made aware of OSH standards.

Provision should be made for public participation in the enforcement of OSH standards should be provided for by law so that any violation of the OSH laws, can lead into public interest litigation by members of the public who are not affected. This will encourage civil society organizations to help in the OSH standards and bringing the violators to book.

Provision should be made for companies especially IOCs;s to properly Orient/Train their employees on OSH. Employees must be duly informed about workplace safety measures and trained on how to maintain workplace safety at all times. As an employer, normalize organizing compulsory safety workshops and training that deal with different aspects of workplace safety for all stakeholders in your organization. Safety training in the workplace should focus on familiarizing employees with different workplace hazards and how to identify, report, and prevent them. Employees should undergo proper training before making use of any equipment in the workplace and they should also observe other safety precautions that can help to prevent accidents.

Provision should be made for having one central regular to manage OSH matter. Other than having various regulators, one regulator should be put in place that will handle all concerns of OSH and properly coordinate with other MDA's that are not regulators of OSH but play a role in the enforcement like the Uganda Police, DPP and the Courts of Law.

Provision should be made for the enhancement of worker's participation as an essential element of the OSH management system in the organization. Workers should not be dismissed from their employment for seeking to have OSH standards at work places. The employer should ensure that workers and their safety and health representatives are consulted, informed and trained on all aspects of OSH, including emergency arrangements, associated with their work. The employer should make arrangements for workers and their safety and health representatives to have the time and resources to participate actively in the processes of organizing, planning and implementation, evaluation and action for improvement of the OSH management system. The employer should ensure, as appropriate, the establishment and efficient functioning of a safety and health committee and the recognition of workers' safety and health representatives, in accordance with national laws and practice.

Provision should be made on the enhancement and clarity of liability and accountability of the Company and directors. The employer and the directors of any company should bare the liability of any OSH violations under the law. The laws should introduce strict liability offences that any employer will be required to implement.

Provision should be made on prioritization OSH through statute so as to insulate it from political interference.. Prioritizing OSH will mean that government will allocate more funding to institution that have the mandate to manage OSH standards. Increase in funding would institutional capacity on management of OSH as inspector would be well remunerated and a good remuneration would attract and retain skilled staff, operational funds and tools would be made available to execute the mandate, there would be increase in manpower and also training for competence enhancement would be made.

REFERENCES

Journal Articles and books

Mitchell Polinsky and Steven Shavell (2007); Theory of Public Enforcement Law; *Hand Book of Law and Environment; Volume 1.*

Abolafia, Michael Y. (1985) "Self-regulating as market maintenance: An organization perspective," in Roger G. Noll (ed.) *Regulatory Policy and the Social Sciences. Berkeley*: University of California Press.

Amponsah-Tawaih, K & K Dartey-Baah, "Occupational Health and Safety: Key Issues and Concerns in Ghana," *International Journal of Business and Social Science, vol. 2, no. 14, pp. 119-126, 2010.*

Andrew Oyen Arewa, (2018) 'Analysis of Penalties Imposed on Organizations for Breaching Safety and Health Regulations in the United Kingdom', *Safety and Health at Work Journal* https://www.e-shaw.org accessed on 28th November, 2021

Armstrong, M., Cowan, S., and Vickers, J; Regulatory Reforms: Economic Analysis and British Experience (Cambridge, 1994).

Ayres and J. Braithwaite, Responsive Regulation (Oxford: Oxford University Press, 1992).

Baldwin, Robert & Black, Julia. (2008). Really Responsive Regulation. Modern Law Review. 71.

Bartrip Peter W J Rudop 2002 ; Adequacy of the Workman Compensation Act; *Induced Diseases Adequate Compensation*

Barton H. Thompson (1996) (Searching for Regulatory Alternatives) <u>www.heinoline.com</u> searched on 30th June 2022.

Becker, Howard S. 1963. Out.1iders: Studies in the Sociology of Deviance. London: Coliier-Mannillan.

Benjamin O Ali, Fundamental (2008) Principles of Occupational Health and Safety; *Geneva* International Labor Office C. Ebrahim-Zadeh "Back to Basics: Dutch Disease. Too Much Wealth Managed Unwisely" (2003) *Finance and Development 40 (1): 50-51*

C. Parker, 'Compliance professionalism and regulatory community: *The Australian trade practices regime'* (1999) 26(2) Journal of Law & Society 215.

Cheit, Ross (1990) Setting Safety Standards: Regulation in the Public and Private Sectors.

Clinard, Marshall B., and Meier, Robert F. 1979. Sociology of Deviant Behavior.; *New York: Holt, Rinehart & Winston.*

David Graham and Ngaire Woods; Making Corporate Self-Regulation effective in Developing Countries; *journal on world development*; accessed on doi.10.1016.j.worlddev2005/04.027

Dehousse, R. 1997. 'Regulation by networks in the European community: *The role of European agencies*', Journal of European Public Policy 4: 246_61

E Bluff, N Gunningham, & R Johnstone (2004), OHS Regulation for a Changing World of Work, *Federation Press, Sydney*,

Edwinah Atusingwize, Geofrey Musinguzi, Rawlance Ndejjo, Esther Buregyeya, Barbara Kayongo, Ruth Mubeezi, Richard K. Mugambe, Abdullah Ali Halage, Deogratious K. Sekimpi, William Bazeyo, Jia-Sheng Wang & John. C. Ssempebwa (2018) Occupational safety and health regulations and implementation challenges in Uganda/*Archives of Environmental & Occupational Health*, DOI: 10.1080/19338244.2018.1492895

Eliatu, T. and Ssekimpi, D.K., 2018. 24 The status of emergency preparedness and response in petrol stations in bushenyi and sheema districts in Uganda; *European Public Policy* 297–317.

Gardner R (2003); Overview and Characteristics of some Occupational Exposures & Health Risks on Offshore gas installations; *Annals of Occupational Hygiene*; accessed on website; www.academic.oup.com on 20th June 2022.

Greg Gordon, John Peterson, *Emre Usenmez*; Oil ang Gas Law; Current Practices and Emerging Trends (2011) *Dundee University Press*, 2nd Edition Herbert K. Abrams; A Short History of Occupational Health; Journal of Public Health Policy

Horowitz, D.L. 'The Courts as Guardians of the Public Interest' (1997) 37(2) Public Administration Review 148–54.

Ian Ayres & John Braithwaite (2015); Responsive Regulation, Transcending the Deregulation Debate; *Oxford Handbook*.

Israel Nyaburi Nyadera and Nazmil Islam (2020) Link between Administration, Politics and Bureaucracy, *Global Encyclopedia of Public Administration, Public Policy and Governance, Vol 1.*

Jasmien Van Daele; International Labour Organization; Past and Present Research; *Cambridge University Press;* accesed on www. Cambridge.org/core.journal

Joel S. Hellman Geraint Jones, Daniel Kaufman, (2000); State Capture Corruption and Influence in Transition; *World Bank Policy Research Working Paper; WPS 2444*.

John Braithwaite, Restorative Justice and Responsive Regulation (Oxford University Press, 2002),

John Peterson, Behind the mask, regulating health and safety in Britain's offshore oil and gas industry; *European University Institute Journal*; accessed on www.cadmus.eui.com on 12 June 2022.

John T Byam, 'The Economic Inefficiency of Corporate Criminal Liability', Journal of Criminal Law and Criminology, Vol 73 Issue No 2 Summer (1982) https://scholarlycommons.law.northwestern.edu accessed on 10th December, 2018

Joseph A Schremmer and Charles C Steincamp (2018); Imputing Regulatory Failure in Oil and Gas Licensing; A Discussion and Proposal, Hein Journals; accessed on www.heinonline.org on 20th June 2022

Joskow, P.(2008) 'Lessons Learned from Electricity Market Liberalization; Energy Journal 9.

Joskow, P (2008) 'Lessons Learned from Electricity Market Liberalization; Energy Journal 9.

Josselin, D (1996). 'Domestic Policy Networks and European Negotiations; *Journal of European Public Policy*

Keeler, T (1984). 'Theories of Regulation and the Deregulation Movement' 44 public Choice Journal 103-45.

Konisky, D.M (2007). 'Regulatory Competition and Environmental Enforcement: Is There a Race to the Bottom? *American Journal of Political Science* 853–72.

Kreher, A. (1997); Agencies in the European Community: A Step towards Administrative Integration in Europe' 4 *Journal of European Public Policy* 225–45.

Krsto L Mason, Kyla D, Retzer, Ryan Hill and Jennifer M. Lincoln (2015) Occupational Fatalities during the oil and gas boom; *National Library of Medicine Journal*; online journal on www. ncbi.nlm.nih/gov; accessed on 19th June 2020.

Linda C Anderson (1984); Corporate Criminal Liability for Specific Intent; Crimes and Offenses of Criminal Negligence; *St. Mary's Law Journal, Volume 15.*

Marc Quinton and Micheal W. Taylor (2014); Should Financial Sector Regulator be Independent, International Monetary Fund; *32 Economic Issues; International Monetary Fund*

Martin Laudan (1991) Multi Organizational Systems in Public Administration; Journal of Public Administration; Oxford University Press.

Meisenhdder. Thomas. (1982). "Becoming Normal: Certification as a Stage in Exiting from Crime." *Deviant Behavior 3: 137-53*

Meswani HR. (2008) Safety and Occupational Health: O pportunities in emerging economies. *Indian J Occup Environ Med; 12:3e9*

Mrema EJ, Ngowi AV, Mamuya SHD (2015); Status of Occupational Health and Safety and related challenges in expanding economy of Tanzania; *Ann Glob Health*;81:538e47.

Mugisa A. David (2012) "Occupational Safety and Health Issues In Uganda", Working Paper; Department of Occupational Safety and Health, Ministry of Gender, Labour & Social Development.

Myers, Melvin L , (2002) Anticipation of Risks and Benefits of Emerging Technologies; A Prospective Analysis Method, *A Human and Ecological Risk Assessment; An International Journal volume 13;* accessed on 6th June 2022 on doi:10.1080/10807030701506371.

Nitesh Bharosa (2009), 'Challenges and Obstacles in Sharing and Coordinating Information during multi-agency disaster response: *Proposition from the field exercises; Information Systems Frontiers;* https://www.link.springer.com accessed on 8th December, 2021.

Nnedinma Umeokafor, David Isaac Keith Johns, Boniface Umeadi (2014), 'Enforcement of Occupational Safety and Health Regulatons in Nigeria: *An Exploration', European Scientific Journal*.

Onyekuru and N. Anthony (2011); Environmental Regulations and Nigeria's Economic Decision on the Niger Delta; *The Way Forward; Asian Journal of Experimental Biological Science*.

Oyanche Nyanumba Wilfred, Charles Munene, Willy Muturi (2014); Effect of Remuneration on Employees Performance in the Ministry of Internal Security; A Case of Kisii County

Philbey and Lyndall, Mining (2017-07-02). "Every Coal Mine Worker Should Know: Black Lung". Australasian Mine Safety Journal. Retrieved on 2019-09-20.

R. Macrory, Regulatory Justice: Sanctioning in a post-Hampton World (Cabinet Office, May 2006) (*Macrory Report*); and NAO Report, at [2.34]-[2.36].

R. Tumumkwasibwe (2010); Parliament and the Politics of Poverty Reduction in Uganda; A Critical Appraisal; *International Journal of Human Rights; Vol 14*

Robyn Fairman and Charlotte Yapp (2005) Enforced Self-Regulation, Prescription and Conceptions of Compliances with Small Businesses; The Impact of Enforcement; *Law and Policy; Journal University of Denver*

Sachs, Humphreys and Stieglitz (1997) Environmental Management in Oil and Gas Exploration and Production: *An Overview of Issues and Management Approaches, at 2-3*

Shwan Omer Khudur, Safaa Aldden, Mohamed Gazaai (2019); Penal Protection of the Environment from Oil and Gas Operators Pollutants; *Koya University Journal of Humanities and Social Sciences Vol 2*

Smith Warrik (1997); Utility Regulators; The Independence Debate; View Point; *World Bank; Washington Debate* accessed on www.openknowledge.worldbank.org

William R Corbett (2004); The Need for a Revitalized Common Law of the Work Place; 26 Workers Compensation Law Review 285.

Xuenteng Chen, ZongzhiWu, Wentao Chen, Zongxue Kang, Xingzen He, Yongchun Miao (2019); Selection of Key Indicators for Reputational Loss in the Oil and Gas Pipeline Failure Event; *Engineering Failure Event Vol 99*

Websites

www.pau.go.ug

www.unoc.co.ug

www.energyandminerals.go.ug

www.mglsd.go.ug

www.ilo.org

www.oag.go.ug

www.parliament.go.ug

www.eiti.org

www.academia.oup.com

www.heinonline.org

www.cademus.eui.com

www.cambridge.org

Newspaper articles and magazine

The daily monitor of the 18th January 2022

The weekly observer of the 10th December 2013

The Independent Magazine of 6th July 2019

APPENDICES

APPENDIX 1 : INTERVIEW GUIDE, RESPONSES AND REQUESTS

Interview Guide/Questionnaire

Semi structured interview guide for the Department of Occupational Health and Safety in the MoLGSD and Department of HSE in PAU for research on the regulatory framework on occupational health and safety?

Questions

- 1. How many inspectors do you have in the Department of Occupational Health and Safety or HSE?
- 2. Are the inspectors that are currently employed by the Department of Occupational Health and Safety or HSE adequate ?
- 3. Does your mandate extend to inspection and supervision extend to all sectors in Uganda and how adequate are the laws on Occupational, Safety and Health in the oil and gas sector?
- 4. Has the Department managed to register all work places for purposes of inspection and supervision?
- 5. What are your major challenges in implementation of your mandate in the Oil and Gas Sector?
- 6. What solutions do you suggest should be forwarded to address the above challenges?
- 7. Do you think the should be an Independent Regulatory body and enforcement mechanism would you adopt to achieve your objectives?
- 8. Do you experience conflicting roles with other bodies when executing your mandate with other government bodies?
- 9. What is your view on Uganda's preparedness in ensuring occupational health and safety in the oil and gas sector?
- 10. How is Uganda fairing in implementing the international conventions on occupational health and safety in workplaces?

Responses to the Interview Guide/Questionnaire from the Department of OSH in the MoLGSD

Semi structured interview guide for the Department of Occupational Health and Safety in the Ministry of Labor, Gender and Social Development for research on the regulatory framework on occupational health and safety?

Questions

- 11. How many inspectors do you have in the Department of Occupational Health and Safety?22
- 12. Are the inspectors that are currently employed by the Department of Occupational Health and Safety adequate?
 No, ILO recommends a ratio of 1 inspector (both OSH inspectors and Labour officers) for every 10,000workers, so given the Uganda's worker population of about 19 million workers, we stand at 1 inspector: 380,000workers
- 13. Does your mandate extend to inspection and supervision extend to all sectors in Uganda and how adequate are the laws on occupational, safety and health?
 Yes, the OSH Act applies to all workplaces in all sectors formal and informal, public and private.
- 14. Has the Department managed to register all work places for purposes of inspection and supervision?
 No. The UIA estimates over 1 million workplaces in Uganda, however the department has registered just over 7000 workplaces.
- 15. What are your major challenges in implementation of your mandate in the Oil and Gas Sector?

The first one is weak linkage between institutions, which implies that all government MDAs with a mandate related to O&G operate independently instead of synergizing for more effective output.

Other challenges are resource constraints – limited human resource, inadequate technical resources (equipment for monitoring, vehicles for transportation, specialized training for inspectors, etc.)

Legislative challenges such as an OSH Act that does not sufficiently address OSH in the petroleum sector

Limited awareness among the workers and general public who are oblivious to the legal provisions, their rights and obligations in regard to OSH. This coupled with government's limited resourcing, hence inadequate sensitization of the masses on these issues.

Inadequate OSH data and information sharing between employers and government. This is coupled with lack of adequate research and publications in the area of OSH in O&G in Uganda.

- 16. What solutions do you suggest should be forwarded to address the above challenges?
 - Advocacy for increased political will, employer and employee buy-in into the legal requirements hence improved compliance;
 - Better enforcement of the existing law and amendment of the current law to increase efficacy;
 - Nationwide sensitization to publicize the OSH law, Regulations and Guidelines on various OSH issues;
 - All stakeholders (government, employers, workers, general public) to work closely.
 - Improved co-ordination between MDAs, including OSH in the one stop business centres / investors platforms;
 - Government and employers to invest more in preventative trainings and sensitizations;
 - Capacity building and improved resourcing of the OSH inspectorate
- 17. Do you think the Department of Occupational Health and Safety should be an Independent Regulatory body?

Yes, because this may guarantee better resourcing and independent hence more effective action

18. Do you experience conflicting roles with other bodies when executing your mandate with other government bodies?

Sometimes there is some friction when each government entity attempts to fulfill its mandate independent of the others, and yet there are some areas of mandate overlap.

There is also a tendency to have 'fatigue' on the part of the employers who have to interface with the various enforcement entities, at different times.

19. What is your view on Uganda's preparedness in ensuring occupational health and safety in the oil and gas sector?There have been significant attempts made to train and equip staff of the MEMD and

There have been significant attempts made to train and equip staff of the MEMD and PAU, however this has not exactly been the case for DOSH.

Uganda is therefore technically prepared, however aspects of OSH still need to be stepped up on the side of government.

20. How is Uganda fairing in implementing the international conventions on occupational health and safety in workplaces?

Fairly, but not well enough. The fact that we have an OSH law and OSH provision in Uganda's Constitution are good, however Uganda has not yet ratified the key conventions on OSH such as C155 and C187. This presents challenges in terms of domesticating the recommended OSH