AN ASSESSMENT ON THE IMPACT OF OIL AND GAS EXPLORATION ACTIVITIES IN THE ALBERTINE GRABEN

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A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF BACHELOR OF SCIENCE IN OIL AND GAS MANAGEMENT OF UGANDA CHRISTIAN UNIVERSITY

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UGANDA CHRISTIAN UNIVERSITY

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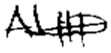
DECLARATION

I, **Atugonza Immaculate,** hereby declare that this dissertation is my work and it has not been submitted before to any other institution of higher learning for fulfillment of any academic award.

Signed……  ……

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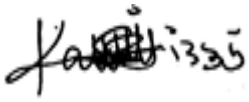
APPROVAL

This is to certify that, this dissertation entitled **"An assessment on the impact of Oil and Gas exploration activities in the Albertine Graben, Buliisa District"** has been done under my supervision and now it is ready for submission.

Signature…  ……

Ms. Isabella Izimba Kasiko

Date…3rd April 2024……

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LIST OF ACRONYMS

ANEEJ	African Network for Environment and Economic Justice
BDLG	Buliisa District Local Government
E&P	Exploration and Production
ESIA	Social Impact Assessment
HOCADEO	Hoima Caritas Development Organisation
IFC	International Finance Corporation
IUCN	International Union for Conservation of Nature
MEMD	Ministry of Energy and Mineral Development
NAPE	National Association of Professional Environmentalists,
NOGP	National Oil and Gas Policy
PAPs	Project Affected Persons
UBOS	Uganda Bureau of Statistics
Ugx	Uganda Shillings
ULA	Uganda Land Alliance
UNCTAD	United Nations Conference on Trade and Development
UNEP	United Nations Environment Programme
US$	United States Dollar

ABSTRACT

This research is about "**An assessment on the impact of Oil and Gas exploration activities in the Albertine Graben**". Chapter 1 includes the background of the study, problem statement, objectives of the study; to examine the oil and gas exploration activities in Buliisa district, to identify the negative effects of oil and gas exploration activities on the standard of living in Buliisa district and to evaluate the negative effects of surveying on the surrounding communities of Buliisa district, research questions, purpose of the study, significance of the study, scope of the study and the conceptual framework. Chapter 2 is about the contextual background and reviewing of all the specific objectives. Chapter 3 is about the methodology employed that is the research design, area of study, the study population, sample size, the sample technique, methods and instruments of data collection, primary data, questionnaires and analyzing of data. A descriptive research design was adopted to realize the study objectives, using both quantitative and qualitative approaches and a questionnaire as an instrument of data collection.

The research findings revealed that Oil and Gas exploration activities have greatly had a negative impact on the standard of living of the people in Buliisa district and the surrounding communities. Some people in Buliisa district have regretted the existence of oil and gas in their area because they perceive it as a curse. Recommendations in the report include; the government must educate people on how to appreciate the natural resource as a blessing through sensitization, monitoring and engagement of the local people. The government should exercise transparency in property or land valuation when compensating the affected persons, enhance and implement mitigation measures to save the main forms of livelihoods and ensure simplicity in relevant legislations are simple and available in local languages. In addition the research would help the concerned bodies like Uganda Land Alliance, Petroleum Authority of Uganda and National Environmental Management Authority in addressing Oil and Gas exploration issues earlier before their occurrence.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter includes the background of the study, problem statement, objectives of the study, purpose of the study, significance of the study, scope of the study both the geographical and time scope and the conceptual framework.

1.2 Background of the study

Oil and gas exploration encompasses the processes and methods involved in locating potential sites for oil and gas drilling and extraction. Earlier oil and gas explorers relied upon surface signs like natural oil seeps, but developments in science and technology have made it more efficient through geological surveys (Tusiani et al, 2017). According to International Union for Conservation of Nature (IUCN, 2003), oil and gas exploration along with production pave way for economic activities in relatively undeveloped areas, which promotes economic and social activities; comprising of migration, unstructured settlements and land uncertainty. Over time localities where oil is located tend to suffer from lower economic growth, lower per capita incomes and greater dislocations. Economically oil fails to offer long term sustainable employment. The rapid influx of people and the higher relative salaries of oil project workers inflate the local prices of key goods and services bringing about a significant increase in the cost of living for example the municipalities of Yopul in the state of Casanare, Columbia abruptly filled with migrants hoping to find employment at salaries three to four times the minimum wage, even before nearby massive oil fields at cusiana-cupiagua came on stream rents and prices increased by 300% virtually overnight (Karl, 2012).

Africa is well endowed with minerals, including fossil fuels and gas resources. In Africa, considerable oil and gas resources are believed to exist thus providing the potential to spar growth of the continent (Demierre et al., 2015). 38 out of 53 African countries still depend on oil imports from elsewhere because of limited exploration of this resource (Jiang, 2009). Oil fields only exist in Libya, Nigeria, Angola and Algeria (African Development Bank and the African Union, 2009). Knowledge about the quantities of these resources is limited and a comprehensive, country-based assessment still remains a challenge. The exploration activities have impacted the population. Nigeria, for instance, has experienced unparalleled damage to the Niger Delta environment thus

inducing multifaceted problems in the region such as miserable poverty, social conflict, and much more (Amadi and Tomuno, 2012) the ever-increasing discoveries of new oil and gas for example, in Ghana, Tanzania, Mozambique and Uganda and other countries is key for the continent to learn from the failures of the past and fully maximize the benefits of the new oil and gas discoveries.

Oil exploration is taking place along the entire western rift of Uganda, an area which is politically sensitive, because it lies between two countries with a history of violent conflicts and border disputes. This area is also characterized by a number of conflicts, including violent rebellions, ethnic conflicts, land conflicts and insecurity. The Albertine region is an area that embraces a multiplicity of local government authorities, traditional institutions and people of various ethnic groups. The discovery of oil has the potential to stir up tensions along different lines. Most of the serious conflicts in the oil exploration area are about land ownership and land use. In-migrations have been reported in the exploration area and this has led to scarcity of land as well as changing lifestyles. Land has become fragmented due to the increasing population, leading to a high demand for land a change associated with oil exploration activities taking place in these areas. Fraudulent sale of land is more common in the Bunyoro region (International Alert, 2013).

According to Uganda Land Alliance (2011) and the Secretariat Convention on Biological Diversity (2010), most people in Uganda depend on subsistence agriculture where they grow food crops like bananas, cassava, maize and legumes, alongside coffee, cotton, tobacco and tea (Kwiringira et al., 2019). They also keep livestock such as cattle, sheep, goats, and pigs for their livelihoods, grazing and fishing as another prime source of livelihood for the people in Buliisa District (Kwiringira et al., 2019).

Natural forests, which were sources of medicinal herbs for most women and hunting grounds and communal grazing areas for men have been destroyed for effective mapping and surveying and seisimic data collection (Kyomugasho, 2016). Fishing has been an immense source of incomes to many people in Buliisa District but due to exploration activities Lake Albert's access has been restricted (Kyomugasho, 2016).

During oil and gas exploration activities, the economies of countries with the mineral resource may benefit but also experience negative effects in terms of peoples' livelihoods (Kadafa and Ayuba, 2012). Activities such as seismic data collection, drilling and extraction of oil and gas

samples affect human beings both directly and indirectly inform of displacement, price changes, influx of people, poverty, Crimes and social issues. (Ayuba, 2012).

1.3 Statement of the problem

Buliisa district in the Albertine region is where renewed large-scale oil and gas exploration is taking place; communities largely depend on fishing, hunting and subsistence farming as their livelihood activities all of which are facilitated by biodiversity resources (Gwayaka, 2018; Sserwanga, 2018). Due to oil and gas discovery and related activities such as drilling, surveying, mapping and environmental studies, most of the African countries have been affected (African Development Bank and the African Union, 2009). The difference in exploration activities and techniques employed in different localities, account for differences in the emerging effects too. Louis (2015), a shift in government policy from wild life conservation to oil and gas exploration, whose intension is to offer Ugandans with economic and social benefits could impart devastating pressure on soils and ecological units of flora and fauna, hence affecting people's livelihoods both directly and indirectly.

Oil exploration has led to the violation of property rights due to land, housing and livestock conflicts which have threatened the existence of the indigenous people. The media has reported the threats emanating from the land, housing and livestock uncertainty as a result of oil exploration like hatred between the oil exploration company and the indigenous people, and displacement in the Albertine region (Kisembo, 2019). Despite the government effort through legal instruments like the Constitution and the National Oil and Gas Policy (NOGP), housing, livestock and land conflicts still exists in the Albertine region (International Alert, 2013). HOCADEO 2012, indicate majority of the individuals acknowledge land grabbing issues 143(46.7%) who strongly agree, 84(27.5%) who agree to the statement. Ogwang (2020) indicate the low compensations given say a tree which was to be compensated at Ugx 100,000 compensated at Ugx 80,000 and the change in prices of goods and services due to influx of people which increase on the standards of living making life complicated since people lose their wealth for the exploration set-up.

1.4. Specific objective

i. To examine the oil and gas exploration activities in Buliisa district.

ii. To identify the effects of oil and gas exploration activities on the standard of living in Buliisa district.

iii. To evaluate the effects of surveying on the surrounding communities of Buliisa district.

1.5 Research questions

i. What are the oil and gas exploration activities in Buliisa district?

ii. What impact has the exploration for oil and gas had on the standard of living in the Buliisa district?

iii. What are the effects of surveying on the surrounding communities of Buliisa district?

1.6 Purpose of the study

This study provides an assessment on the impact of oil and gas exploration activities in the Albertine region in Buliisa district. It specifically focuses on oil and gas exploration activities in the area and the livelihoods.

1.7 Significance of the study

i. The research findings will be of a great importance to the government of Uganda, Buliisa district, MEMD in formulating and implementing policies on how the Oil and Gas companies and other individuals are to handle the demands of the local people concerning their displacement, health and the community at large.

ii. The research will be used as reference and also to further research by researchers and for all stakeholders that would like to know more or to learn about how oil and gas exploration activities affect the people and the community.

iii. The research findings will enhance the researcher's research abilities and also enable the researcher to fulfill a requirement for completion of undergraduate studies.

1.8 Scope of the study

1.8.1 Geographical scope

This research will be carried out in Buliisa District. The District is located in the Bunyoro (Albertine) Sub Region-Mid-western part of Uganda. It is bordered by Nebbi District to the northwest, Nwoya District to the northeast, Masindi District to the east, Hoima District to the south, and the Democratic Republic of the Congo, across Lake Albert, to the west (Kawa Uganda, 2020)

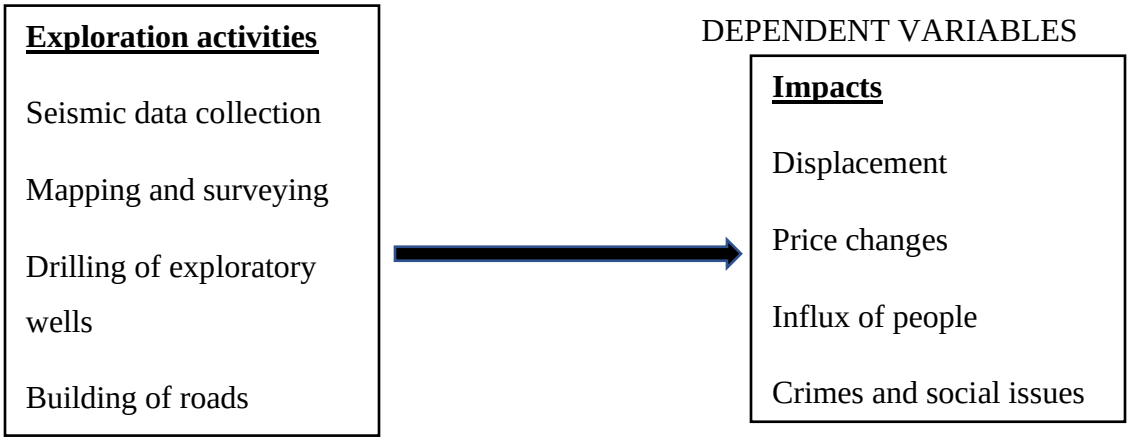
1.8.2 Time scope

The research will look at all the oil and gas exploration activities that started in the 1970s when exploration activities began in Uganda up to the present time (2024).

1.9 Conceptual framework

This research will be conceptualized on the conceptual framework as shown below

INDEPENDENT VARIABLES



Source: Johnson. L, 2007 modified by the researcher

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, there will be the contextual background and reviewing of all the specific objectives.

2.2 Literature on resource curse

Literature available on resource curse (Sachs & Warner, 1995) and the paradox of plenty (Karl, 1997) relate both resource abundance and resource dependence to low levels of human development, corruption, repression, poor economic performance. For example in Buliisa district people have depended on the oil and gas exploration activities inform of employment opportunities where they thought a lot of income would be earned than the usual work they were doing like agriculture, hunting and fishing. This has resulted in low crop yields, leaving families without food, high poverty level and breakup of families because the earnings cannot develop their families and the community at large. Uganda Land Alliance, (2011); Bomuhangi and Doss, (2012) because of the desire to establish and accomplish the oil and gas exploration activities people have been displaced and to some people, they have been left homeless because of poor accountability thus to the people in Buliisa Oil and Gas has been a curse.

Sorena (2011) summed up resources curse as 'a cluster of observed, cross national relationships between natural resource on the one hand and poor economic performance, state weakness, political corruption and civil conflict on the other'. As in Buliisa district, the natural resource (oil and gas) have contributed to poor economic performance as people have been stopped from fishing for effective exploration activities and this has reduced or led to no income earned affecting their economic status and performance. People's crops were destroyed and yet most of the people are agriculturalist causing the prices of goods to increase because of low supply and high demand as the result of immigration.

2.3 Exploration activities

Beginning of exploration

Brian keane et.al (2008) Oil exploration in the western Amazon started as early as the 1920s in Peru and Ecuador, with a production boom arriving in the 1970s. Direct impacts associated with seismic testing activities during the exploration phase of projects include deforestation for access

roads, drilling platforms, and pipelines, and contamination from oil spills and wastewater discharges. Indirect effects arose from the easy access to previously remote primary forest provided by new oil roads and pipeline routes, causing increased logging, hunting, and deforestation from human settlement For example, much of the extensive deforestation in the northern and central Ecuadorian Amazon followed colonization along the oil access roads.

Exploratory well drilling activities last from 1 to 2 years, commonly 2 or 3 wells will be drilled during this exploratory stage (oil and gas journal, June 7, 1982, p.66-67). There is a precedent of increased health and other social problems connected with oil exploration drilling of exploratory wells for example studies from Nigeria and Ecuador documents indicate increased health risks to communities as result of pollution from oil exploration. There are also risks associated with transfer of disease by migrant populations to their new communities. Dadiowei (2003),

Elenwo et al. (2015) expresses that oil exploration activities have serious implications on the survival of communities near oil reserves. The neighboring communities through livelihood activities like hunting and wood fuel collection usually depend on the native plant and animal species. Oviasuyi et al. (2010) notes that oil exploration increases the risks and dangers associated with women undertaking their reproductive roles. These risks and dangers arise because of the predisposition to peculiar diseases in communities where oil exploration takes place. Hurtig and Sebastián (2005) and Sharma et al. (2013) affirm that women living in communities near oil fields are at a 2.5 higher risk of spontaneous abortion than other women are.

Changes in oil and gas exploration activities

UNCTAD (2007) report indicate that the participation of transnational corporations in the exploration activities like mapping and surveying and drilling of exploratory wells result in human rights abuses such as the disappearance of people, arbitrary detention and torture and loss of land and livelihoods without negotiation and without compensation.

UNEP (2024), Seismic operations like short-hole drilling acoustic sources (vibrations, explosions); cause disturbance to human and wildlife (consider seasonality). Low level noise and light from camp activities; cause disturbance to local environment. Exploration and appraisal drilling require site preparation which cause removal of vegetation, land conflicts, construction noise and disturbance to local population.

Ogwang and Vanclay (2019) argues that irrespective of their purpose, large projects require land and sometimes very large tracks of land which in most cases cause displacement. And if not well managed, resettlement can have severe consequences for the local communities and create human rights impacts like forced resettlement.

According to joint E&P forum (1997, p.4-5), exploration survey is the first stage of the search of hydrocarbon-bearing rock formations, geological maps are reviewed in desk duties to identify major sedimentary basins and data acquisition is carried out. A seismic survey is the most common assessment method and is often the first field activity undertaken. Seismic survey provides detailed information on geology and the potential requirement on ground include access to onshore and marine resource areas, possible onshore extension of marine seismic lines, onshore navigational beacons, onshore seismic lines and seismic operation camps. (Joint E&P forum, 1997, p.12) states Exploration and production operations likely to induce economic, social and cultural changes. The extent of these changes is especially important to local groups, particularly indigenous people who may have their traditional lifestyle affected. The key impacts may include changes in land-use patterns, local population levels as a result of immigration, land use conflicts, conflict between development and protection and displacement.

World Oil (2023) technology is transforming every area of the oil and gas industry. There are numerous existing and developing technologies that serve the upstream segment of the industry in capacities such as exploration geological surveys, automation, 5G (fifth-generation mobile network) robotics and drones instead of use of bombs to explore the oil and gas at the expense of noise pollution. These technologies have reduced or limited the noise produced favoring the health and environmental concerns of the communities.

Oil and gas exploration in Uganda

Africa Research Institute for Energy conservation (2009) provides that influx of immigrants due to mapping and surveying and construction of roads has led to increased population and boosted demand for local goods and services while heightening tribal cultural sensitivities and prejudices as a result of competing interests, values, customs and practice.

Resource exploration are typically associated with a large influx of job-seeking migrants into the resource area (IFC, 2009; Aristide and Moundigbaye, 2017). Such population growth frequently leads to new types of poverty and other social problems, such as alcohol abuse and prostitution

(Vanclay, 2002; Pegg, 2006; Vanclay et al., 2015; Hansen et al., 2016; Esteves et al., 2017). With the increasing population of humans and livestock, land availability is becoming limited, which has led to overgrazing. Because of the in-migration (also known as the honey-pot effect), some social evils have been witnessed in the Albertine Graben region. Prominent among these is prostitution, which allegedly was never previously heard of in these villages "but when oil operations started, prostitutes from DR-Congo across Lake Albert flocked into the areas occupying most of the fish landing sites like Kaiso, Sebagoro, and Kyehoro, Buhuka" (NAPE, 2016:9)

According to International Alert (2013), Oil exploration has a direct impact on economic, social and cultural dimensions of the community. These impacts include changes in livelihood patterns, including fishing, agriculture, and livestock rearing strategies, hunting and eco-tourism. A considerable percentage of households (22%) earn less than Ugx 50,000 (about US$20) a month. However, regional differences are significant, with higher proportions of households in Acholi and West Nile (37% respectively) earning less than Ugx 50,000 compared with Rwenzori (5%), Bunyoro (12%) and Kigezi (25%). This reflects high levels of inequality and poverty in the region. International Alert (2013) oil exploration by-products – such as mud cuttings, drill cuttings and waste are more likely to contaminate the underground aquifers. The African Network for Environment and Economic Justice (ANEEJ) observed that oil exploration contaminates streams and rivers through the discharge of various materials into the environment.

Africa Research Institute for Energy conservation (2009), influx of immigrants due to the discovery of oil and gas has led to increased population which has boosted the demand for local goods and services creating a reliable and ready market.

2.4 Effects of the exploration activities

Ukoli (2005) and Briggs (1996), oil and gas exploration activities involve surveying, exploratory well drilling and seismic acquisition of land. Surveying and mapping surface and subsurface geologic features are to identify areas of oil and gas deposits. Collecting seismic data is to evaluate economically producible quantities of oil and gas and identifying the best location to drill exploratory wells as well as testing the formation. Engineers determine the possibility of accessing oil and its quality in these worldwide activities. There is always drilling and delineation of wells when determining where oil and gas is, to measure the area and thickness of the oil and gas bearing reservoirs.

Land is a very important resource. Several reports for example Uganda Land Alliance, (2011); Bomuhangi and Doss, (2012) indicate that oil exploration activities, such as the digging of seismic wells and drilling, have led to changes in ownership of land, conflict, and displacement as well as an influx of migrants competing for opportunities in the Albertine Graben.

The growing migration triggers population growth, increase land pressure, and escalate competition among the indigenous people and newcomers, more demand on the already limited social services of education, health and water in the region. This large movement of people has implications for fiscal expenditure and allocation as well, making it critical to capture land issues, demographics and changes in social infrastructure, including schools and hospitals and other physical infrastructure aspects such as roads and telecommunications. In addition, there is a precedent of increased health and other social problems connected with oil exploration: For example, studies from Nigeria and Ecuador document increased health risks to communities as result of pollution from oil exploration. There are also risks associated with transfer of disease by migrant populations to their new communities (Dadiowei, 2003).

Chen et al. (2000), provides that there are seven main categories into which sources of pollution and dangers from building activities can be broken down: dust, dangerous gases, noises, solid and liquid wastes, fallen objects, ground movements, and others. Chen et al. (2005) divided construction-related effects into eight categories: contamination of the soil and ground, contamination of underground water, construction and demolition waste, noise and vibration, dust, hazardous emissions and odors, impacts on wildlife and natural features, and impacts on archaeology. Cole (2000), on the other hand, claimed that the environmental effects of the construction process encompass resource uses, ecological loadings, and difficulties with human health. Cardoso (2005) states that common adverse effects of the construction activities include trash creation, mud, dust, contamination of the soil and water, harm to public drainage systems, plant destruction, visual impact, noise, increased traffic, a lack of parking spaces, and damage to public space.

HOCADEO (2012) report on the baseline study on the current trends of oil exploration and socio-economic implications of the emerging oil and gas industry on the livelihood security of the local communities in the Albertine region indicates that local communities have not yet benefited from business opportunities related to oil and gas exploration activities in the Albertine graben. The

majority of beneficiaries are not residents in Bunyoro sub-region. Despite the huge business potentials of the industry nothing substantive had been made to tap these unique opportunities. These infrastructure developments, especially road construction, are important because they enhance labor and capital productivity which are key measures of sustainable economic development.

Oil and Gas exploration companies have created positive community relationships by providing support to community groups and organisations through sponsorships, scholarships and investment (Venture Taranaki, 2010a) to ensure effective exploration activities. These can have positive impacts for the Taranaki community. For example, the aquatic centre and the raceway in New Plymouth have been sponsored by Todd Energy while Puke Ariki, the regional museum, was sponsored by Shell. Both companies are also major event partners of the annual World of Music, Arts & Dance (WOMAD) International Festival in New Plymouth which encourages and promotes cultural diversity.

TotalEnergies (2022) TotalEnergies EP Uganda (TEPU) has been offering scholarshios to students since 2013 at various education levels say "O" level, "A" level, vocation training and university level for example in 2021 it sponsored 3scholars under master's progam in geoscience disciplines at IFP, created capacity building activities such as supporting oi andgas realted courses at Makerere University under Total Professeurs Associes (TPA). Through TEPU, TotalEnergies has been awarding scholarships to empower the youth from less advantaged areas for example in 2023 girls in Buliisa district and 10 girls in Nwoya Distict received "O" level scholarship program.

2.5 Effects of Oil and gas exploration activities on the standard of living

The standard of living is a term used to describe the level of income, necessities, luxury, and other goods and services that are generally readily available to a certain socioeconomic area or geographic area. Standard of living is quantifiable by economic factors like average income, available goods and services, inflation rate, poverty in the area, cultural activities and employment levels (CFI, 2015).

An increase in the local population as a result of job migration puts additional strain on schools, hospitals, and recreational facilities. Furthermore, due to poor planning, the scenario has a tendency to result in urban slums. Gabon is an excellent example where Shell's operations have acted as a stimulus for the establishment and growth of Gamba/Ivinga as a small town which is

one of the five operation field EP (2017). The scenario has resulted in encroachment on neighboring woodland for bush meat and other purposes, as a result of the limited cultivation, biodiversity is being destroyed. In Ghana's case, an increase in local currency would be beneficial but the population growth, especially in Takoradi and Sekondi, would need the development of housing to meet the demands of the swollen population As a result of this condition, vegetation may be cleared for such purposes and projects.

Oil and gas exploration lead to the destruction of structures that once provided livelihoods for women in oil- producing communities, which puts an undue burden on women in these communities forcing them to turn to commercial sex (Olaniyi, 2011; Jike 2010; Fiorella et al., 2015) in addition Obi (2001) noted that oil exploration leads to decline in farming and fishing as viable economic activities which increased propensity for women to choose commercial sex work for income generating purposes. Commercial sex brings disastrous consequences to women's livelihood. This is because women are usually the gender involved in agriculture as the source of income. The influx of foreign oil workers who are often paid large sums of money as expatriates makes the profession of commercial sex work potentially more lucrative in such communities. For example in Nigeria small girls from Lagos and other parts of Nigeria found the activity lucrative for every day and night with the white men and staff (Olaniya et al., 2015).

According to the Jobs and oil living earth project report (2013) in western Uganda, exploration activities have led to influx of people posing challenges to the capacity of the council to provide infrastructure and other services, stretching the resources to the limit. It is also leading to unplanned development including encroachment on road reserves and wetlands and the expansion of slums, and increase in immoral behavior.

Basedau, (2005) reveals that the oil industry employs mainly high-skilled workers to operate activities such as construction of infrastructures and carrying out seismic surveys which lead to hiring of people from outside the region who are qualified. The local population, however, has nurtured exaggerated expectations of employment opportunities. These hopes are likely to be dashed which, in turn, could lead to tensions between communities and oil companies.

Vokes (2012), oil and gas activities result into induced in-migration, which leads to population increase that lead to the increase in cost of living, limited available social services, and limited access of services to the poor. The Tilenga Project ESIA acknowledged that, because the various

projects have different timelines, a high population growth would continue to be experienced for many years. The cumulative population growth worsens project impacts, especially access to land and shelter. The increasing demand would result in inflation, including in the price of land and housing (International Alert, 2013). And the project affected persons (PAPs) who have been paid cash compensation will find it very difficult to find replacement land as the prices increase beyond the levels of compensation paid, as experienced by the people displaced by the Kabaale Industrial Park.

PAU, (2022) about 10,111 Ugandans are estimated to be directly employed in the sector and this number is expected to grow to 13,000 at peak. The investments in the sector will also stimulate indirect and induced employment in the region to a tune of 35,000 and 100,000 respectively. These opportunities are valued at over US$1 Billion.

2.6 Effects of seismic surveys to the lives of the people

Seismic surveys refer to the methods used in investigating the subterranean structure for exploring mineral deposits, petroleum and natural gas. It is inform of geophysical survey that aims at measuring the earth's properties by means of physical principles such as magnetic, electric, gravitational, thermal, and elastic theories. It is based on the elastic properties and the activity is conducted by the geophysicists who have the scientific knowledge on locating and extracting the different natural resources from the earth (Britannica, T. Editors, 2017).

Noise pollution is one of the emerging conservation issues of the 21st century. Although methodologies for the assessment of the environmental burdens and their impacts are difficult in all fields, this area is especially difficult with noise pollution, and particular forms of noise pollution such as low-frequency. Due to such difficulties, until recently there was little international scientific agreement even on the methodologies for estimating some forms of noise pollution and its impacts on humans, let alone non-human species. Nevertheless, it is estimated that as of 2007 an estimated 113 million Europeans have been exposed to noise levels high enough to cause serious health problems. In some instances, even prolonged noise levels at low frequencies may have large impacts. Noise pollution can also produce detrimental impacts on non-human animals. (Gillespie, 2011).

Exposure to very high intensity noise can cause direct physiological damage, such as tissue or cell ruptures. Temporary threshold shift can occur at longer ranges that is to say lower received levels of sound; this is basically a temporary loss of hearing, so that a sound must be louder than normal in order to be heard or understood (Mark, 2005). Permanent threshold shift, which is in effect permanent partial hearing loss, is also possible after incidental exposure to extremely loud sound or chronic exposure to moderately loud sounds, though this has not been well studied, especially in the wild.

Walter (2014), observed that in the experience of his Council (South Taranaki District Council), the main issues of community concern with respect to petroleum exploration were "noise, road damage and road safety, visual impact and more noise" with the addition of excessive light at night, vibration, dust, and stock disturbance. A number of approaches were developed and used to minimize these impacts. Local authorities worked to develop uniform approaches to district 18 planning and companies recognized that communication, consultation and consistency of compensation are vital to community acceptance. The voluntary land access code agreed by Federated Farmers which clarified company and community responsibilities was considered a significant advance (Walter, 2015).

EarthSky, (2013) Reflection seismology through the seismic technology help in understanding the geology and capturing the carbon dioxide which leaves the environment carbon free without affecting peoples' lives. And as per the campaign of the zero carbon emissions, seismic technology is dependable. When using the reflection seismology, an acceptable energy source is deployed on the surface of earth and then an appropriate number of seismic sensors across the Earth's surface that record the waves reflected.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter indicates the methodology that was employed when conducting this research. It explains the research design, area of study, the study population, sample size, the sample technique, methods and instruments of data collection, primary data, questionnaires and analyzing of data.

3.2 Research design

The study adopted the descriptive research design using quantitative and qualitative approach. The study employed simple random sampling. Brewerton (2001) asserts that a case study provides an in-depth study of the problem with limited time scale. Ghauri and Gronhaug (2005, p.56) asserts that using descriptive, the problem will be structured and well understood a fact that Mugenda and Mugenda (2003, p.29) agrees that the design is the most preferred because it give a report on things as they actually are.

The quantitative approach was justified on grounds that some effects of oil and gas exploration are quantifiable and presented statistically while qualitative data collected respondents' views, opinions and comments whose interpretation and presentation suits bests using narratives. Qualitative data involved analysis of data in form of statements as obtained from key informants while quantitative data involved the use of statistical technics to collect, analyze and communicate study findings in form of frequencies and percentages.

3.3 Area of study

The study was conducted in Buliisa District. It houses the Budongo Forest Reserve, Murchison Falls National Park and Bugungu Wildlife Reserve and there are 30 parishes and 125 villages. Its western margin hosts Lake Albert whose basin has been discovered to be rich in oil and natural gas deposits. The area was chosen because most of the exploration activities were undertaken in the area. Buliisa District had a total population of 113,569 people in according to the National Population and Housing Census (2014). With 106,284 people (93.6%) residing in rural areas compared to 7,285 people (6.4%) in urban centers (UBOS, 2016). The gender distribution was

reported to be males: 58,076 (51.1%) and females: 55,493 (48.9%). About 95.1% (108,059) of the population form the household population and only 4.9% (5,510) non household.

3.4 Study population

According to Amin (2005), a target population is the population to which the researcher ultimately wants to generalize the results. The target population of the study was 35 respondents that included those with knowledge about the impact of oil exploration activities on the wellbeing of communities and local people in the area that have been impacted by the exploration activities.

3.5 Sample size

This refers to the number of items being selected from the universe to constitute a sample (Kothari, 2004). The sample comprised of 32 respondents which were extracted from the population of 35 determined by the Small Sample Technique of Krejcie and Morgan (1970). The sample from each category for the questionnaire survey was determined by proportionate sampling.

3.6 Sample technique

The study adopted simple random sampling. Simple random sampling is a sampling technique by which an individual is chosen randomly and entirely by chance, giving each individual accessible in population an equal chance of being included in the sample (Clark & Creswell, 2008). This category of respondents was targeted because they are the inhabitants of Buliisa district who have faced the impact of oil and gas. It was preferred because of being cost effective in monetary terms, time saving while collecting data, highly flexible, accurate and free of bias. The names and numbers were written on pieces of paper, folded and placed in a box. The papers were shuffled and a single paper was drawn out at a time until they all were selected. This enabled collecting of data from a representative sample for generalization of the findings.

3.7 Methods of data collection

The collection of data for this study involved use of quantitative and qualitative approach that was done with the help of questionnaires. A questionnaire survey is a data collection method by which the participants are directly questioned about their feelings on the study problem (Dumondor, 2017). The questionnaire survey was very useful because it is fast to use in data collection.

3.8 Instruments of data collection

The data was collected from primary sources using questionnaires. This was done by drafting the questionnaires and supplying them to the respondents to provide information. The questionnaires were supplied to the sample size that had knowledge about how the Oil and Gas activities have had an impact in Albertine region basing on the exploration stage.

3.8.1 Questionnaire

The researcher used a self-administered questionnaire. A self-administered questionnaire (SAQs) is a quantitative data collection instrument (Siniscalco & Auriat, 2005). The questionnaire had two sections that are sections A and B. The questions in sections A had background characteristics while the questions in section B contained the main variables. The self-administered questionnaires were close-ended items. Closed questions was selected because they are easy to administer, easily coded and analysed, allowed comparisons and quantification, and they were more likely produce fully completed questionnaires while avoiding irrelevant responses (Artino Jr, La Rochelle, Dezee & Gehlbach, 2014).

3.9 Data analysis

3.9.1 Quantitative data analysis

This involved putting data collected using questionnaires in order and well-structured to attain meaningful information for proper interpretation. The data was sorted and entered into a Microsoft excel to derive tables for the social demographics and mathematical calculation for computing the data collected on the research objectives.

3.10 Data validity

Validity refers to the degree to which results obtained from analysis of the data actually represents the phenomenon under study. The validity of the research instrument was 47 determined by pretesting. Mugenda and Mugenda, (2005) assert that pretesting ensures clarity and accuracy of results so that data collected gives meaningful, reliable results representing variable in the study.

The researcher established content validity of the instruments by making sure that the independent and dependent variables are in accordance with the conceptual framework of the study. The opinion of the supervisors on the relevance, wording and clarity of the items in the instruments was sought and there was validation of the questionnaire items. Validation of the instrument

focused on clarity, completeness and relevance of the questions in relation to the study constructs.

3.11 Data reliability

According to Mugenda and Mugenda (1999), reliability refers to the measure of the degree to which a research instrument yields consistent results or data after repeated trials. Cronbach's Alpha coefficient was used to measure reliability of the instruments. Accordingly to Amin (2005), an alpha of 0.5 or higher is sufficient to show reliability; the closer it was to 1 the higher the internal consistency in reliability Sekaran, (2003). There was consultation with the supervisor for data reliability, more so the questionnaire were designed and pre tested using the respondents within the Buliisa district.

3.12 Ethical considerations

There was respect of the rights of all the respondents. The respondents were informed about the purpose of the study, why it is being carried out and how they were chosen from the many.

There was effort to confidentiality of the respondents for security purposes and disclosing people's status and consent of the information when presenting, analyzing and interpreting of the data collected. Personal confidentiality and privacy was very important since the research will be public that if individuals provide information, their privacy was to be respected.

Accuracy and honesty during the research process was crucial for academic research to proceed. A researcher treated a research project with utmost care, in that there was no temptation to cheat and generate research results, since it exposes the conception of the research.

3.13 Limitations of study

Respondents were unwilling to create time for the questionnaires supplied with the thought that it consumes much of their time and they have busy work schedules like government officials, political leaders and Bunyoro kingdom officials, this ended up causing delays in collecting the information and finishing on the planned time. However it was solved by requesting for contacts from their office attendants and making phone calls or sending them emails to fill in the questionnaires.

Some respondents were not be willing to respond to the questionnaire with fear of being exposed and this limited the researcher in collecting adequate information. To solve this challenge, the

researcher convinced the respondents that their responses were to be kept confidential and only used for academic purposes.

Some of the respondents demanded to be paid before filling the questionnaires and or attending the interviews sessions and because the demands were not met, there was change in attitude where some respondents ended up concealing some information and others avoided committing enough time for the questionnaires. This was solved by laying more emphasis to the respondents that the research is for academic purposes and meant to enable the researcher complete a study program rather than derive commercial gains.

CHAPTER FOUR

PRESENTATIONS AND ANALYSIS OF DATA

4.1 Introduction

This chapter presents findings of the study on social demographics and the objectives. The findings are presented in line with the sole objective of the research study and are intended to give answers to the research questions which are asked in relation to the study. The statistical tools such as frequency distribution tables and percentages were used to generate the results.

4.2 Response rate

Table 1: Summary of response rate

Respondents	Frequency	Percentage
Returned	30	93.75
Missing	2	6.25
Total	**32**	**100**

Source: *Primary data, (2024)*

Findings in table 4.2.1 above indicate that from the 32 questionnaires distributed to the respondents, 30 questionnaires were returned and 2 were not returned. The response rate is adequate for the study because Amin (2005) observed that a response rate of 70% and above was relevant for study. It therefore implies that the study acquired a good response rate which justifiably provides a good analysis of responses on ground.

4.3 Findings on the social demographic of the respondents

Table 2: Respondents gender

Gender	Frequency	Percentage	Cumulative percentage
Female	12	40	40
Male	18	60	100
Total	**30**	**100**	

Source: *Primary data (2024)*

Findings on respondent's gender showed that out of the 30 respondents who were involved in the study, 60% were males and 40% were females which implied that males where the majority in

this study than females. The male respondents actively participated and had good views since they take control of their families with a lot of concerns in as far as oil exploration issues and activities are concerned.

Table 3: Age group

Age group	Frequency	Percentage	Cumulative percentage
20-29 years	3	10	10
30-39 years	6	20	30
40-49 years	12	40	70
50 years & above	9	30	100
Total	**30**	**100**	

Source: *Primary data, (2024)*

Findings on the respondent's age category showed that 10% were in the age bracket of (20-29), 20% were in the age bracket of (30-39), 40% were in the age bracket of (40-49), and 30% were in the age bracket of above 50years. This therefore means that the data was gotten from mature people and majority of them having families.

Table 4: Marital status

Marital status	Frequency	Percentage	Cumulative percentage
Single	3	10	10
Married	15	50	60
Separated	9	30	90
Widowed	3	10	100
Total	**30**	**100**	

Source: *primary data (2024)*

Findings showed that half of the respondents were married as shown by 50%, 10% were found to be single, 30% were separated and 10% were widowed. This implies that the respondents were responsible people with families and children to look after. I disaggregated respondents by marital status because oil producing countries have always had unpredictable results on the effects of oil and gas exploration on the people for example, Dadiowei (2003) has indicated that Garran

communities are confronted with an increase in the number of teenage mothers with fatherless babies as a result of oil exploration.

Table 5: Education level distribution

Education level	Frequency	Percentage	Cumulative percentage
None	9	30	30
Certificate	12	40	70
Diploma	6	20	90
Degree	2	6.7	96.7
Masters	1	3.3	100
Total	**30**	**100**	

Source: primary data (2024)

Findings showed that the biggest percentage of respondents were primary and secondary level (None) by 30%, 40% were Certificate holders, 20% were Diploma holders, 6.7% were degree holders and 3.3% were Masters . This implies that respondents had the ability to read and write.

Table 6: Period of stay

Period	Frequency	Percentage	Cumulative percentage
0-4 years	3	10	10
5-8 years	9	30	40
9 years & above	18	60	100
Total	**30**	**100**	

Source; *primary data (2024)*

It was found out that the biggest percentage of the respondents had been in Buliisa district for 9 years and above by 60%, 30% between (5-8) years and 10% between (0-4) years. This implies that the biggest percentage had lived in Buliisa district, settled with their families and could not escape impacts of oil and gas exploration activities.

4.4 Findings on Research Objectives

The study set out to examine the oil and gas exploration activities in Buliisa district, identify the effects of oil and gas exploration activities on the standard of living in Buliisa district and evaluate the effects of surveying on the surrounding communities of Buliisa district.

The statements were rated basing on a five-point Likert scale ranging between strongly agree, agree, not sure/neutral, disagree and strongly disagree. Respondents ticked the appropriate alternative of their choice.

To examine the oil and gas exploration activities in Buliisa district.

Table 7: Oil and gas exploration activities in Buliisa district

Statement	Strongly agree		Agree		Not sure/Neutral		Disagree		Strongly disagree	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Oil and gas exploration activities like seismic survey and exploratory drilling have been carried out in Buliisa district	09	30	-	-	01	3.3	-	-	-	-
Oil and gas exploration activities have negatively affected the livelihood sources of the people in Buliisa district which have been significant for their family's growth.	06	20	05	16.7	-	-	01	3.3	-	-
People have been displaced, property destroyed and forced to evict in areas where Oil and gas exploration activities have been carried out.	05	16.7	-	-	02	6.7	-	-	01	3.3

Source: *Primary data (2024)*

The findings showed that oil and gas exploration activities have been carried out in Buliisa district where (30% strongly agreed and 3.3% were not sure) whether Oil and gas exploration activities have been carried out in Buliisa district, (20% strongly agreed, 16.7% agreed and 3.3% disagreed) that Oil and gas exploration activities have negatively affected the livelihood sources of the people in Buliisa district which have been significant for their family's growth and (16.7% strongly agreed, 6.7% were neutral and 3.3% strongly disagreed) that People have been displaced, property destroyed and forced to evict in areas where Oil and gas exploration activities have been carried out.

As shown above, majority of the respondents proved that oil and gas exploration activities such of seismic surveys, exploratory drilling have been carried out in Buliisa district and have had negative impacts in the area for example several people have been affected with being displaced and destruction of property.

To identify the effects of oil and gas exploration activities on the standard of living in Buliisa district.

Table 8: Effects of oil and gas exploration activities on the standard of living in Buliisa district

Statement	**Strongly agree**		**Agree**		**Not sure/Neutral**		**Disagree**		**Strongly disagree**	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Price of commodities have been increasing in Buliisa district since oil exploration began as a result of influx of people who come seeking for employment	06	20	-	-	-	-	01	3.3	-	-

opportunities which increased the demand.										
People's property including houses and gardens were destroyed to create adequate land for oil and gas exploration activities.	-	-	03	10	-	-	-	-	-	-
There has been increased land grabbing due to oil and gas exploration activities	-	-	06	20	-	-	-	-	-	-
People more especially the youth have abandoned their agricultural and fishing activities and went to seek for employment in the oil and gas exploration sites.	-	-	-	-	05	16.7	-	-	01	3.3
The oil and gas exploration activities have affected the income generating activities say fishing, livestock farming, poultry and growing of crops.	06	20	-	-	-	-	-	-	02	6.7

Source: *primary data (2024)*

The table above indicates that 20% of the respondents strongly agreed that the price of commodities have been increasing in Buliisa district since oil exploration began as a result of influx of people who come seeking for employment opportunities which increased the demand

while the one person with percentage of 3.3 disagreed, 10% agreed that people's property including houses and gardens were destroyed to create adequate land for oil and gas exploration activities, 20% also agreed that there has been increased land grabbing due to oil and gas exploration activities, 16.7% were not sure whether People more especially the youth have abandoned their agricultural and fishing activities and went to seek for employment in the oil and gas exploration sites whereas 3.3% strongly disagreed, 20% agreed that the oil and gas exploration activities have affected the income generating activities say fishing, livestock farming, poultry and growing of crops and 6.7% strongly disagreed.

The results above imply that oil and gas exploration activities have largely had effect on the standard of living in Buliisa district.

To evaluate the effects of surveying on the surrounding communities of Buliisa district.

Table 9: Effects of surveying on the surrounding communities in Buliisa district

Statement	**Strongly agree**		**Agree**		**Not sure/Neutral**		**Disagree**		**Strongly disagree**	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Communities where informed about oil surveying before the exercise started to ensure there is a healthy relationship and cooperation between the residents and the oil and gas companies.	-	-	-	-	06	20	-	-	-	-
Population increased in Buliisa district due to surveying activities like exploratory drilling and mapping as people seek for employment opportunities.	12	40	-	-	-	-	-	-	-	-

Oil and gas companies listened to views raised by communities during seismic data collection to ensure transparency in all activities being carried out.	-	-	-	-	-	-	-	-	03	10
Crimes such as prostitution, land grabbing and alcoholism increased in Buliisa district due to increased influx of people who came with their cultures different from the inhabitants	-	-	09	30	-	-	-	-	-	-

Source: *primary data (2024)*

From the 30 respondents, 40% strongly agreed that population increased in Buliisa district due to surveying activities like exploratory drilling and mapping as people seek for employment opportunities, while 30% agreed and lamented that crimes such as prostitution, land grabbing and alcoholism increased in Buliisa district due to increased influx of people who came with their cultures different from the inhabitants and 20% of the respondents were not sure whether communities where informed about oil surveying before the exercise started to ensure there is a healthy relationship and cooperation between the residents and the oil and gas companies, 10% of the respondents strongly disagreed and revealed that Oil and gas companies listened to views raised by communities during seismic data collection to ensure transparency in all activities being carried out.

The findings therefore imply that since the start of surveying activities, there has been population increase in the areas surrounding Buliisa district.

CHAPTER FIVE

DISCUSSION, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This chapter consists of discussions of the research findings, recommendations and conclusion.

5.2 Discussion

The research instrument used for the study was self-administered questionnaires with close ended questions. The findings generated from the questionnaire are discussed as below;

5.2.1 To examine the oil and gas exploration activities in Buliisa district.

The findings show that Oil and gas exploration activities have negatively affected people's livelihoods in Buliisa district and this has been as a result of decline in major livelihood activities like fishing, agriculture and access to forest affecting the livelihood sources. To add on Oil and gas exploration activities have spurred increase in displacements due to drilling of exploratory wells as companies seek to confirm the commercial deposits and sufficient land construction sites. Respondents strongly agreed that there has been multiple Oil and gas exploration activities being carried out that is to say surveying, mapping and drilling of test wells and the other exploration activities undertaken on a small scale; site clearance, seismic probing, land acquisition and construction of support infrastructure.

5.2.2 To identify the effects of oil and gas exploration activities on the standard of living in Buliisa district.

Findings show that as the people's gardens, houses were destroyed and forced to leave their places of residence, there arose scarcity of the crop yields leading to high price of commodities. Increased land grabbing due to site construction, the compensated residents in Buliisa district caused inflation because almost everyone had access to money and as well employment of the youth improving in their incomes. Residents have been limited from accessing Lake Albert to ensure that there is no interference in carrying out exploration activities, this has reduced on earning of the family as most fathers were known of fishing as their work and this has led to low earnings in the families even causing some children to be delayed education opportunity. Buliisa District Local Government report (2012) shows that people who depend on Lake Albert have been adversely

affected by diminishing fish catch numbers and restrictions. Farmers were manipulated by intermediaries into selling their land at less-than-compensation prices. At times, they were threatened or intimidated into selling their land.

5.2.3 To evaluate the effects of surveying on the surrounding communities of Buliisa district.

Findings were that Oil and gas companies did not listen to the communities views while collecting seismic data; communities were not pleased with the way the seismic data collectors communicated with them. The findings are supported by assertions made by Sibson (2011) the distribution of population and its concentration is a major point of concern when addressing possible effects of seismic activities. A simpler yet effective way to understand possible threat from oil exploration, population residing in an area is the 'population potential' which defines the number of persons within a given distance from a point.

Increase in sexual immorality. It was noted that there is emerged commercial sex, where construction workers and foreign workers are involved in commercial sex activities with girls and women in the communities with the hope of improving their welfare since the oil and gas exploration workers are perceived to have financial resources. Even the native men are also involved with some girls and women because of increased income got from working with the oil and gas companies. Such activities of moral decadency are associated with family breakdown, early pregnancies and spread of HIV/AIDS. This finding is in line with Obi (2001) who indicates that oil and exploration activities increase the propensity for women to choose commercial sex work for income generating purposes.

5.3 Conclusion

In conclusion oil and gas exploration activities have had both negative and positive impacts for example there has been increased population due to influx of people causing land conflicts, increased crime and cultural decay like prostitution, break up of families homeless people and reduced earnings. Youth have been employed and this has reduced on the number of unemployed youth in the Albertine region and in Uganda at large, Buliisa health Centre III has been built and this has improved on the health of the people in Buliisa and the surrounding communities.

5.4 Recommendations

The government should exercise transparency in property or land valuation and clear criteria should be used when it comes to compensating the affected people, to ensure that issues of ghost compensation or low compensations are reduced. Land and property were undervalued which complicated people's lives in starting afresh.

The government should sensitize people that have received the compensation funds on how to spend it such that it is beneficial for the family and the dependents within the family, this can be through encouraging residents to form cooperatives. For example many husbands in families within Buliisa district when they received, they mostly used it for luxurious goods like motorcycles which do not add value to the family neither the community.

There should be enhancement and implementation of mitigation measures such as resettlement and compensation of the affected persons, community sensitization, and environmental management to save the main forms of livelihoods threatened by oil and gas exploration activities. All stakeholders in the oil and gas sector should be involved in all key stages. Some of the affected people were left homeless because poor accountability the government can schedule to resettle the affected people.

There should be simplicity in the relevant legislations, available in local languages like Lugungu and in user-friendly formats for affected communities. Information must not only be available, but also accessible. Some people can read their local language and this reduces on conflicts that raise due to language barrier.

5.6 Suggestions for Further Research

Effects of oil and gas exploration activities on employment opportunities in the Albertine region. Oil and gas industry require much labors for their operation and is associated with multiple employment opportunities which require both skilled and unskilled labor, the Albertine region is a mixture of unskilled, semi-skilled and skilled labor thus calling for the research to explore how the oil and gas exploration activities have had an effect on the employment opportunities.

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APPENDIX

QUESTIONNAIRE

I am a student pursuing a Bachelor of Science in Oil and Gas Management carrying out a study entitled **"An assessment on the negative impact of oil and gas exploration activities in the Albertine Graben".** This research is meant for academic purposes, information obtained will be treated as confidential. You are kindly requested to provide answers to the following questions honestly and precisely as possible. Please tick where appropriately the required information in the spaces provided.

Thank you.

SECTION A: SOCIO-DEMOGRAPHICS

1. Gender

Male	
Female	

2. Age group

20-29 years	30-39years	40-49 years	50 years &above

3. Marital status

Single	Married	Separated	Widowed

4. Education Level

None	Certificate	Diploma	Degree	Masters

5. For how long have you been in Buliisa district?

0 – 4years	5- 8 years	9 years and above

SECTION B: OBJECTIVES

Evaluate the following statements by ticking the appropriate alternative of your choice.

Strongly agree	Agree	Not sure/ Neutral	Disagree	Strongly disagree
1	**2**	**3**	**4**	**5**

1. **To examine the oil and gas exploration activities in Buliisa district.**

Statement	**1**	**2**	**3**	**4**	**5**
Oil and gas exploration activities like seismic surveys and exploratory drilling have been carried out in Buliisa district					
Oil and gas exploration activities have negatively affected the livelihood sources of the people in Buliisa district which have been significant for their family's growth.					
People have been displaced, property destroyed and forced to evict in areas where Oil and gas exploration have been carried out.					

2. **To identify the effects of oil and gas exploration activities on the standard of living in Buliisa district.**

Statement	**1**	**2**	**3**	**4**	**5**
Price of commodities have been increasing in Buliisa district since oil exploration began as a result of influx of people who come seeking for employment opportunities which increased the demand.					
People's property including houses and gardens were destroyed to create adequate land for oil and gas exploration activities.					
People more especially the youth have abandoned their agricultural and fishing activities and went to seek for employment in the oil and gas exploration sites.					
The oil and gas exploration activities have affected the income generating activities say fishing, livestock farming, poultry and growing of crops.					

To evaluate the effects of surveying on the surrounding communities of Buliisa district.

Statement	**1**	**2**	**3**	**4**	**5**
Communities where informed about oil surveying before the exercise started to ensure there is a healthy relationship and cooperation between the residents and the oil and gas companies.					
Population increased in Buliisa district due to surveying activities like exploratory drilling and mapping as people seek for employment opportunities.					
Oil and gas companies listened to views raised by communities during seismic data collection to ensure transparency in all activities being carried out.					

Crimes such as prostitution, land grabbing and alcoholism increased in Buliisa district due to increased influx of people who came with their cultures different from the inhabitants					