# THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

## Emerging Security Management Issues Due to Oil Exploration Activities in South Lokichar Basin, Turkana County, Kenya

## Cosmas EkwomKamais

Masters Candidate, Department of Peace, Security and Social Studies, Egerton University, Kenya

## Samson WokabiMwangi

Department of Peace, Security and Social Studies, Egerton University, Kenya

## Eric KipronoBor

Department of Peace, Security and Social Studies, Egerton University, Kenya

#### Abstract:

This study explored emerging security management issues due to Oil exploration in south Lokichar basin, Turkana County, Kenya. Inspiration for the study was drawn from the disagreements between the county government and the national government on the exploration, extraction, production and sharing of Oil benefits. The study was anchored on the Resource Curse Theory explaining that poor resource governance and policies usually results in problems rather than benefits. The study adopted a cross-sectional survey design. A sample of 382 respondents was drawn from a target population was 8,493 adults who consist of the indigenous residents, of south Lokichar basin, Turkana County. The key informants were drawn from the expatriate employees of Tullow PLC, security managers and administrators. Focus discussion group of 12 participants was drawn from community leaders of South Lokichar. Indigenous respondents were sampled using cluster area sampling, while the key informants and FGD were purposively sampled. Primary data was collected using semi-structured interview schedule; while secondary data was collected through thematic review of relevant literature. Qualitative data was analysed using thematic method with inferences being drawn; while quantitative data was analysed using descriptive frequencies, charts and tables. The study was expected to come up with recommendations on how to mitigate negative security implications of oil exploration on socio-economic activities in south Lokichar basin, Turkana County, Kenya. The study found out that on emerging security issues following oil exploration, 55% of respondents confirmed that human rights abuses had occurred, 60% of the respondents reported participation of Civil Society Organisations in oil exploration activities, while 60% confirmed that oil exploration activities have led to increased insecurity. The study further established that 65% of the respondents felt that the security measures in place were insufficient to deal with security threats as a result of oil exploration while 60% of the respondents did not feel primarily entitled to the benefits of oil exploration and production. Finally, the study concluded that oil exploration had both positive and negative security implications on socio-economic activities in South Lokichar Basin, Turkana County, Kenya.

**Keywords**: Oil exploration, security management, community participation, regulatory framework, resource governance, resource curse, security challenges

## 1. Introduction

The announcement of oil discovery, in March 2012 in Turkana County, led to excitement and high expectations among the indigenous communities of Turkana County and Kenyans at large. Since then, more viable oils wells have been drilled with some having good prospects of recoverable crude oil and gas. With the great economic expectations, minerals such as oil come with challenges that Auty (1993) referred to as "Resource Curse". This phenomenon has been experienced only in some countries and has been attributed to non-existent or bad resource management policies, exploitative corrupt practices, non-participation of indigenous communities, and neglect of other economic activities. However, some scholars have observed that the resource curse phenomenon is diminishing with improvements in resource governance approaches (Stevens, Lahn, & Kooroshy, 2015). Stevens, Lahn, and Kooroshy (2015) further observe that only ten years ago the prevailing wisdom was that resource endowments were not a blessing but a curse – one that constrained growth, fed corruption and fuelled conflict – now international financial institutions, consultancies and donor agencies believe that the curse can be avoided by 'good governance' of the extractive sector and the revenues it generates.

While lessons could be drawn from experiences in countries that have been befallen by resource curse, uniqueness in cultural aspects, geographic variations, socio-political developments and historical experiences warrants attention to each country and region in terms of their natural resource challenges and the solutions thereto (Stevens, Lahn,

& Kooroshy, 2015). Even Auty (1994a) warns that the experiences of resource curse are not iron clad laws that occur every time a resource are discovered. Other scholars such as Sarraf and Jiwanji (2007) note that there is no single reason for 'resource curse' challenges to be experienced by resource endowed countries. They further state that policy suggestion by scholars on how to mitigate such challenges cannot be applied across all resource abundant countries. These scholars recognized the uniqueness on each country's experiences and there the need to treat oil discovery challenges on a case by case basis despite the fact that some lessons can be applied across the countries.

Issues of oil related security challenges have remained varied and viewed from different perspectives. According to World Bank (2009), countries dependent on oil are mostly associated with civil wars, inequitable resource allocation and marginalization of some communities or places in the country. In other words, oil-dependent countries are more likely to suffer from insecurity motivated by grievances or greed and this has been particularly observed to be true for states in sub-Saharan Africa. However, and on the contrary, the discovery of oil also creates a sense of hope and expectation that the revenue would lead to the development of indigenous communities and the countries as a whole. And for this to be realized, the need for greater involvement of the people of oil producing areas in oil production cannot be overemphasized.

According to Collier et al (2008), natural resources such as oil and gas do not only bring challenges to any economy, but it also has a propensity to generate civil conflict. Such security challenges are a threat to the overall stability of the oil producing region. However, the primary security threat posed to oil producing countries lies in the domestic effects of oil discovery. In many cases, sizeable petroleum reserves in less developed countries have not improved the overall national economic performance and more so the indigenous communities. Fearon (2010) observed that in many petroleum-rich underdeveloped states, exploitation has reduced the competitiveness of previously productive economic sectors, leading to declining wealth, social and political unrest, increasingly disaffected populations, emergence of rebel organizations, government corruption, and destabilized domestic security. In other words, access to such a valuable resource has pitfalls for less developed states lacking the capacity to properly develop and exploit the resource.

A survey by Collier et al (2008), looking into the relationship between oil discovery and internal insecurity, concluded that there is evidence linking oil to some instances of internal insecurity. However, not all oil-rich countries experience negative security implications; hence insecurity is clearly not an inevitable result of oil discovery (Stevens, Lahn, & Kooroshy, 2015). Theoretical studies into the links between natural resource and insecurity have focused on the possibility that security challenges are the result of competition over resources. Lei (2013) examined the effects of giant oilfield discoveries around the world since 1946 and found that they increase the incidence of internal insecurity by about 5-8 percentage points. This increased incidence of insecurity due to giant oilfield discoveries is especially high for countries that had already experienced armed conflicts or coups in the decade prior to discovery. These surveys posited an interest for further investigation in Kenya where cattle rustling and post-election violence has been witnessed.

Conversely, the discovery of oil deposits raises new opportunities for revenues, employment and other benefits, which may impact positively on community activities and peace-building. Collier (2007) notes that involvement of the indigenous community will ensure that they are effectively mobilized to contribute to the oil producing processes with a view to guaranteeing that reasonable margins and standards of safety and security are followed. Indeed, partnering with the people of oil producing communities will create and sustain better understanding among stakeholders in the oil industry and make conflict resolution less cumbersome. This will require good governance which according to UNDP (2011), "is the exercise of economic, political and administrative authority to manage a country's affairs at all levels comprising of the mechanisms, processes and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations and mediate their differences". Governance involves the manner in which allocative and regulatory mechanisms are exercised in the management of resources and broadly embraces the formal and informal institutions by which authority is exercised and thus inclusiveness is key.

Despite gains in economic growth related to the extractive boom since 2002, Africa remains one of the world's poorest, least developed regions (Elbadawi and Soto, 2015). The great potential benefits notwithstanding, the extraction of these finite resources poses significant security threats not only to the community but the country as whole in the form of localised insecurity or civil wars. Such negative security incidences cause death and injury, loss and misallocation of assets, and potentially a negative trajectory of socio-economic development in the long-run. It has thus been warned that the new oil discovery is likely to exacerbate existing tensions in the Turkana County where growing militarised inter-ethnic and cross-border insecurity are mainly caused by competition for scarce pastures and water resources (Johannes, Zulu and Kalipeni, 2014). Much depends on the successful implementation of a more inclusive political settlement as promised by the decentralisation provisions of the 2010 Constitution. Oil discovery in post-conflict countries may be expected to revive old animosities and political risks, particularly when the past insecurity had significant territorial dimensions such as among the Pokot and Turkana.

According to Turkana Baseline Report (2015), "...without access to information and meaningful consultation, most indigenous communities confronted with oil, gas and mining will eventually resist projects that have a negative impact on them". When negative impacts are not adequately redressed and benefits are unevenly distributed, trust is further undermined and the risk of intra-community and community–company tensions increases. Insecurity over resources are not only about natural resources. They are about social and cognitive boundaries, in demarcating resource ownership and thus selective assignment of enmity (Schlee 2014). This idea supports the perceived definition of a "community"; i.e. a sense of belonging anchored in institutions as well as naturalised conventions which are a necessary condition to the agreements about the appropriation, use and sharing of natural and land resources (Jacob 2004). This raises the question about inclusion/exclusion mechanisms and dynamics within a community and between communities.

Residents of Turkana county who have been faced with a lack of electricity, water shortages and banditry, famine, etc., would thus be optimistic that their economic, security and infrastructural status will improve with the discovery of oil. The attention of the government has also shifted to Turkana county as a significant economic contributor. This is a shift from the previous governments' attitude towards the region as remote and economically insignificant. The discovery of oil in Turkana County could drive the central government and regional actors towards renewal of peace talks and a more inclusive political settlement for the region (International Crisis Group, 2008). Political leadership (notably the Kenyan government) and the role of regional actors are factors that will determine whether extractive industries in the region result in a developmental impact in the community. With many studies emphasizing on the economic implication of oil discovery particularly in the developed countries, scanty documentations have placed emphasis on the security implications of the same particularly in developing countries.

## 1.1. Statement of the Problem

The Turkana community has been victims within a vicious cycle of insecurity. This insecurity has traditionally been attributed to the proliferation of small arms and light weapons, political incitement, competition over scarce and diminishing water and pastures, celebration of a culture of heroism that elevates the social status of raiders, the decline of the role community elders, marginalization by successive governments and little presence of state security (Pkalya and Masinde, 2003). This generalised attitude on the insecurity causes in ASAL areas seem to be perpetuated even after oil discovery. With the excitement brought, oil is not viewed as an added factor of insecurity (Okuthe, 2015). Thus, the insecurity issues surrounding oil discovery were not considered either in policy or practice leading a publicised spat between the county government of Turkana and the national government between 2017 – 2018 when a settlement was finally brokered. In as much as the discovery of oil in Turkana County could be viewed as a sign of relief in a marginalised region, a more realistic assessment is that the oil could further destabilize an already insecurity-prone area. The presence of resources, such as oil, could be a key ingredient in generating further instability in the county (Imana and Mmbaili, 2016). While many studies have majorly emphasized on the economic implication of oil discovery particularly in the developed countries, scanty documentations have placed emphasis on the security implications of the same particularly in Kenya. Therefore, this study sought to explore the emerging security management issues due to oil exploration activities in South Lokichar Basin, Turkana County, Kenya.

#### 2. Literature Review

## 2.1. Overview of Oil Discovery in Kenya's Turkana County

Oil discovery in Kenya was announced on 12<sup>th</sup> March, 2012 making public the discovery of oil deposits in Turkana County (which is located in the Northern West part of Kenya). Kenya has the highest petroleum potentiality since her neighbours such as Uganda, South Sudan and Ethiopia have all discovered oil already. The exploration of petroleum in Kenya started in the early 1950s and the first well was drilled in the year 1960. The first companies to do explorations works in Kenya were British Petroleum (BP) and Shell companies (1954) whereby they drilled ten wells in Lamu District which is along the Kenyan Coastline. Companies such as Adobe Oil Company and Frobisher Company limited were among the first companies that did gravity and seismic surveys in the northern east region of Kenya (Mandera basin); which did not actually materialize into drilling programs afterwards. On the other hand, Tullow Kenya Company and African Oil Company (A.O.C) carried out successful work in Turkana County. It has been verified that Kenya will release 5,200 barrels of oil per day (Bybee, 2013). This is the first potentially commercial flow rate as Kenya waits more to come. In fact, Tullow and A.O.C were expected to test more than three other wells before the end of April, 2013 which was expected to double if not triple the number of barrels per day. Kenya's 5,200 barrels per day is way far from Saudi Arabia which produces 10.3 million barrels per day (Elbadawi and Soto, 2015).

Moreover, Kenya's potential in hydrocarbon has been evident in her four large sized sedimentary basins. Anza, Lamu, Mandera and tertiary rifts basins are the main sedimentary basins existing in Kenya. The Hydrocarbon exploration interest in Lokichar basin (Tertiary Rift basin) revealed negative results with typical half-graven geometry (Okuthe, 2015). However, Kenya did not lose its hope of oil and gas explorations until the efforts finally bore fruits in, South Lokichar basin, Turkana County. Managing oil revenue and production, issues related to areas of security, compensation and resettlement formula, communities' involvement and the laws related with investment, especially in the energy industry are vital. The Kenya Government should endeavour to make plans on how oil in Turkana will be managed lest what was meant to be a blessing becomes a curse for this Nation. This is critical in this study since it endeavours to examine the potential pitfalls in petroleum resource management so as to act as an eye-opener for policy makers to craft ways of prudently manage the discovered oil and thus avoid potential insecurity that might arise.

#### 2.2. EmergingSecurity Management Issues Due to Oil Exploration

Natural resource governance entails the formulation and application of Natural resource management policies and regulations. In a study by Imana and Mmbaili(2016), examining community participation in natural resource management in North-western Kenya, they defined Natural Resources Management as: "...the norms, rules and institutions that regulate the decisions, actions and interactions of governments, civil society and the private sector in relation to the use of natural resources". This definition underscores the need for wholesome approach to natural resource management with community participation at its core. Natural resource insecurity can escalate especially when it is related to rights issues such as land tenure or conflict between socio-cultural rights of one group and mechanization of agriculture by the

other group. If the conflict is politicized it can escalate into civil war. In the past, failures to address such issues have been attributed to, among other things, lack of a comprehensive understanding of natural resource insecurity. Lack of comprehensive solution to natural resource insecurity often leads to cycles of grievances. The uproars in Lokichar due to oil matters indicate lack of adequate community participation. Community participation in oil exploration and natural resource management is thus crucial to stem resistance to such projects.

A study by Mukutu (2014) depicts that in developing countries, mineral wealth has usually failed to benefit most people at both national and indigenous levels. Tension between indigenous communities and investors and/or governments over perceived lack of indigenous opportunities and negative impacts such as environmental degradation is common. In 2012 a substantial reserve of oil was struck in Turkana, bringing hopes of boosting the national and indigenous economy, and leading to grand-scale plans for infrastructure development across the region. However, conflicts over land rights, job opportunities and tenders have already begun to emerge, leading to the brief withdrawal of Tullow Oil staff from the site in 2013 and a blockade of oil route for the Early Oil Pilot Scheme (EOPS) at KaalemNg'orok area in June – July of 2018. Turkana has a number of existing security challenges, such as rampant cross-border and interethnic livestock raids, a high prevalence of illegal small arms and low state penetration of security with an over-reliance on armed civilian volunteer forces (the Kenya Police Reserve). This indicates a loophole in security management strategies by stakeholders especially on the protracted socio-economic activities focused around the oil exploration in Turkana County Kenya.

A study in Uganda by Manyindo et al (2015), on resource governance dynamics: The challenge of 'new oil' in Uganda, using a qualitative and inductive approach highlights emerging spaces of governance within a new Petro-state of Uganda. The research findings highlight four significant governance gaps: (1) lack of coherence among civil society organisations; (2) limited civil society access to communities and the deliberate centralisation of oil governance; (3) industry driven interaction at the indigenous level; and (4) weak indigenous government capacity. It is well established that Petro-states suffer from information, monitoring and participation deficits over time (Karl, 2007; Ross, 2012). These deficits are manifest both at the indigenous and national levels. Civil society may not be able to hold international oil companies or governments to account due to the over centralization of power within the executive, ineffective fiscal accountability and increasing rentier culture. Normal entrepreneurs, such as domestic and international NGOs, think tanks, donors, international finance organizations and even industry associations, have sought to counteract these negative impacts of resource extraction through governance initiatives. However, little is known about the level of participation of civil societies, or challenges they face, in a new era of oil exploration in Turkana County, Kenya.

Land is the cornerstone of all other natural resources (Imana and Mmbaili, 2016). Therefore, land rights are critical to realizing resource related peace, stability, equality and economic growth. Resource scarcity or abundance can fuel insecurity if benefit sharing is in dispute. Good policies and governance practices can help mitigate such conflict for example public spending and public service delivery. Other relevant measures include; checks, accountability mechanisms, penalties, and mechanisms to resolve disputes. Therefore, the Turkana county government to institute steps towards management of land and natural resources in era of oil exploration.

According to World Bank (2009) resource governance throughout the value chain has five core components. These include award of contracts and licenses, regulation and monitoring of operations, collection of taxes and royalties, revenue management and allocation, and implementation of sustainable development policies and projects. However, the World Bank's conceptualization of the extractive industry value chain as a template for transparency and information disclosure interventions has limitations. The value chain is depicted as a linear typology which misses the scalar and temporal dynamics of the industry, particularly in a 'new oil' country context such as Turkana County, Kenya. The participation of the indigenous community in such chain more so in tender allocation, employment allocation, scholarship allocation or development project implementation, is crucial. This ensure transparency and satisfaction through wide and representative consultation. The need for consultative mechanisms that ensures transparency is critical.

Decentralization is often seen as desirable for its economic efficiency, responsiveness and improved equity, as centres of decision making are closer to the people, and more representative of indigenous needs, cutting out expensive and unnecessary bureaucracy (Bogdanor, 2010). Devolution may also be a useful context for experimentation, allowing indigenous governments to innovate new responses to indigenous issues. Devolution may have the potential to alter the balance of power in devolved units and raise the stakes in existing conflicts as players may now vie for political power previously beyond their reach. The 'politics of belonging' as some groups lay claim to areas which they have occupied for longer than those they view as 'outsiders' is a long running narrative in Kenyan politics (Lynch, 2011). This issue may become important in the devolution process as regional identities are strengthened, and indigenous leaders may not represent minority groups, leading to potential insecurity. An important question is whether devolution reinforces ethnic identities, fuels ethnic conflict and even the drive for secession. With oil discovery in Lokichar, Turkana community at large feel primarily entitled to the resource. At indigenous levels, those in south Turkana constituency, wherein Lokichar ward is found, feel entitled to the oil and view other Turkana from the North as outsiders. This is a likely flashpoint of indigenous skirmishes between the North and South Turkana.

Ordinarily, abundant natural resource wealth should enhance a country's economic and social development. Unfortunately, evidence from the oil fields of the Persian Gulf to the diamond mines of West Africa shows that millions of people in resource-rich countries have derived little or no benefits, and many have seen their lives devastated as a result of exploitative commercial relations, corrupt governance, and war (Le Billon and El Khatib, 2017). Related sentiments have been expressed by Johannes et al., (2015) when they noted that if not handled properly, the discovery and exploitation of oil could exacerbate current insecurity between the Turkana and their neighbours on the one hand, and between the

Turkana and external actors at the national and international levels on the other hand. Various national and international actors offer a new dimension to an already complex and volatile situation which if not properly handle can exacerbate the security situation.

According to Magstadt (2006), the goal of any state (government) is to provide a reasonable amount of security for its citizens. Accountability for the security of countries and people from both domestic and international perspectives is one of the core obligations of governments and states all over the world. This has been a challenge to Kenya more so in the remote areas such as Turkana where security on the ground is scarce or non-existent. However, scholars such as Collier (2011), see security as multi-disciplinary and from a multidimensional approach as an all-hazards and holistic approach that involves several departments working simultaneously to attain security goals and objectives collectively. This brings about the concept of collective security which involves citizens, private sector and government partnering together in ensuring the protection of lives and property of the citizens. Adequate and holistic security is vital in addressing extant security challenges and not only focused on oil fields and routes.

Insecurity has existed in Turkana even before discovery of Oil. Traditionally, a combination of factors such as availability of small arms, unfavourable climatic conditions and geographical contiguity to pastoralists across Kenya, Uganda South Sudan and Ethiopian borders have conspired to confine the pastoral communities to the lowest levels of poverty. These factors have led to the shrinking of the resources and provoked persistent inter-communal conflicts with devastating ramifications on environmental security (Onyango, 2013). Though the problem of insecurity among pastoral communities is a consequence of several factors, governance deficit is a major one. Oil discovery will definitely add to existing factors of insecurity and therefore the need to establish if oil discovery is a factor of insecurity in South Lokichar basin, Turkana County.

#### 2.3. Theoretical Framework

Theoretical framework focused on reviewing and discussing the relevant theories as pertains to the study. This study was anchored Resource Curse theory and Environmental Justice theory.

#### 2.3.1. Resource Curse Theory

The resource curse theory was postulated by Auty (1993) in his studies titled, 'Sustaining Development in Mineral Economies: The Resource Curse Thesis'. The theory is premised on the counterintuitive phenomenon where countries with an abundance of natural resources (like fossil fuels and certain minerals), tend to have less economic growth, less democracy, and worse development outcomes than countries with fewer natural resources. Auty (1993) in developing this theory conducted and a cross country comparative survey of four South American and African countries of Peru, Chile, Bolivia, and Zambia. In the study, he found a common phenomenon that indicated that despite the resource abundance in these countries, their economic performance over time tended to decline. He attributed such decline to the Dutch disease phenomenon where boom in oil revenues causes shift of focus from other tradeable sectors of the economy and the they eventually capitulate. Inflation also is an effect associated with increase in oil revenue making imports expensive. Auty (1993) further observed that rent seeking behaviour from corporations and the government is a common outcome of oil exploration. Corporations get to control large shares of the oil industry with minimal economic benefit to the host country. Ultimately, it gets down to government economic policies which could either encourage resource curse or avoid it.

The idea that resources might be more of an economic curse than a blessing began to emerge in debates in the 1950s and 1960s about the economic problems of low and middle-income countries. The term resource curse was coined by Auty (1993, 2001) to describe how countries rich in mineral resources were unable to use that wealth to boost their economies and how, counter-intuitively, these countries had lower economic growth than countries without an abundance of natural resources such as Taiwan, South Korea, China etc.

Studies have found a strong correlation between natural resource abundance and poor economic growth (MacNeish, 2010). Scholars have now evaluated the effects of resource wealth on a wide range of economic outcomes, and offered many explanations for how, why, and when a resource curse is likely to occur. The lottery analogy has been propounded by some scholars. Examining the impacts of terms of trade growth and volatility Blattman, Christopher, Hwang and Williamson (2007) found that prices of commodity exports depended on geography and chance reminiscent of a gamble. A succinct explanation of Lottery analogy is that oil brings about a lot of income that a country has no proper plans of utilization. Many observers have likened the resource curse to the difficulties that befall lottery winners who struggle to manage the complex side-effects of newfound wealth (Donald,2010). This analogy points towards the lack of proper plan to benefit from natural resources in the form of proper policies exploitation strategies and development plans, by the endowed country.

On the contrary, there have been speculations and much academic debate about the reasons for and exceptions to these adverse outcomes. Most experts believe the resource curse is not universal or inevitable but affects certain types of countries or regions under certain conditions (Stevens, Lahn, & Kooroshy, 2015). These speculations tend to point towards the notion that resource curse is not necessarily the fate of resource abundant countries. Auty (1994a) cautions that the resource curse thesis should not be interpreted as an iron law but a recurrent tendency in resource abundant countries. Also, Sarraf and Jiwanji (2007) observed that in Botswana, adoption of good economic policies and good management of the windfall gains have allowed the country to continuously manage success manage growth and become one of the greatest success stories of developing countries. Furthermore, Sachs and Warner (1995) asserted that oil wealth need not necessarily lead to inferior economic or political development but rather it is best to view it as a double-edged sword with both benefits and dangers. The outcome is dependent on how it is managed.

Despite the scepticism around natural resource finds that had been bolstered by the understanding of the resource curse theory, scholarly focus on the resource curse has increasingly shifted towards explaining why some resource-rich countries succeed and why others do not, as is opposed to just investigating the average economic effects of resources (Torvik, 2009). Research suggests that the manner in which resource income is spent, system of government, institutional quality, type of resources, and early vs. late industrialization all have been used to explain successes and failures (Sarraf and Jiwanji, 2007). Brunnshweiler (2008) argues that the curse vanishes when looking not at the relative importance of resource exports in the economy but rather at a different measure: the relative abundance of natural resources in the ground. Using that variable to compare countries, he contends that resource wealth in the ground correlates with slightly higher economic growth and slightly fewer armed conflicts. That a high dependency on resource exports correlates with bad policies and effects are not caused by the large degree of resource exportation. The causation goes in the opposite direction: conflicts and bad policies created the heavy dependence on exports of natural resources. When a country's chaos and economic policies scare off foreign investors and send indigenous entrepreneurs abroad to look for better opportunities, the economy becomes skewed (Brunnshweiler, 2008). Factories may close and businesses may flee, but petroleum and precious metals remain for the taking. Resource extraction becomes the "default sector" that still functions after other industries have come to a halt

Critics of the theory argue that previous assumptions that oil abundance is a curse were based on methodologies which failed to take into account cross-country differences and dependencies arising from global shocks, such as changes in technology and the price of oil. Stevens, Lahn, and Kooroshy (2015) further note that the time span taken to arrive to the conclusions of the resorce curse theory was not sufficient given the changes in socio-economic conditions of a country over time. Researchers studied data from the World Bank over the period 1980–2006 for 53 countries, covering 85% of world GDP and 81% of world proven oil reserves (Kamiar, 2010). They found that oil abundance positively affected both short-term growth and long-term income levels. In a companion paper, using data on 118 countries over the period 1970–2007, Blattman et al (2007) found that it is the volatility in commodity prices, rather than abundance per se, that drives the resource curse paradox.

In Kenya, proper legal policies and strategies as pertains oil exploration and exploitation are non-existent, unsuitable and/or in their developmental stages (Okuthe, 2015). The petroleum bill of 2014, which contains relevant exploitative and revenue sharing provisions is still being thrown around between the National Assembly, Senate and State house; the contentious issue being the revenue sharing formula. Besides, there has been a political fallout between the National government and the County government on the revenue sharing formula; more so the percentage to the community, which the President revised from 10% to 5% and the 20% due to the county government which is then capped at not more than twice what the National government allocates to the county per financial year. Such a move has been understood by the indigenous communities on Lokichar as a unilateral action by the National government to exploit the host community. The resultant fallout is likely to escalate to undesirable levels if not addressed to the satisfaction of the relevant stakeholders. Such escalation are early manifestations of the Resource Curse phenomenon that can impact negatively on the expected economic gains, and even reverse other existing economic benefits.

Resource curse theory was suitable for this study since it indicated that a lack of or bad resource management strategies will eventually diminish, or even eliminate, expected benefits from the oil resource. Furthermore, mismanagement leads to conflicts which creates a negative security environment. However, the theory focuses on availability of natural resource and the ensuing challenges due to mismanagement and bad policies. It ignores the complex ecological interactions of humans, resources and the environment that results in such negative developmental and security challenges.

## 2.4. Conceptual framework

Oil exploration activities represents the study's independent variable. The exploration activities include downstream, midstream and upstream oil exploration activities. Upstream activities are those relating to exploration of oil, determination of viability and extraction. Mid-stream activities relate transportation and storage of oil while downstream are oil activities that relates refinery and marketing of oil.

Dependent variables of this study are the emerging security management issues. Variations in these dependent variables is conceptualized to be affected by oil exploration activities in South Lokichar basin. Depending on how oil exploration activities are managed, the dependent variables could either be adversely affected or be positively impacted. The conceptual framework showing the relationship of variables indicated in figure 1 below:

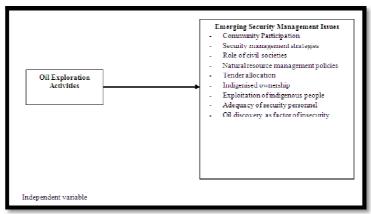


Figure 1: Conceptual Framework

## 3. Methodology

### 3.1. Research Design

The study adopted a cross-sectional survey research design. This research design was best suited to studies aimed at finding out the prevalence of a phenomenon, situation, problem, attitude or issue by taking a cross-section of the population (Kumar, 2014). Kumar (2014) further notes that cross-sectional survey research design is useful in obtaining the overall picture as it stands at the time of the study. The design was chosen because the study seeks to make an assessment of the security effects of oil exploration on the socio-economic activities of South Lokichar Basin residents, as at the time the study was conducted. Furthermore, Cross-sectional research design are comparatively cheaper to undertake and easy to analyse since it involves one contact with the study population. However, follow - up studies required to track changes over time.

## 3.2. Target Population

The target population (N) for this study were residents of Lokichar Ward and Employees of Tullow. According to Mugenda and Mugenda (2009) the target population answers most critical characteristics of the population. According to the Independent Electoral Boundaries Commission (2017), the registered voters in Lokichar ward is 8,493. The IEBC figures was used since it captures a recent statistic of most adults of 18 years and above, and of both genders. The respondents were selected because they live, work in Lokichar and are expected to be affected by impacts of oil exploration.

## 3.3. Sampling Procedure and Sample Size

According to Kothari and Garg (2014) sampling is the procedure by which some elements of a population are selected as representative of the entire population. Sampling enables a researcher to draw conclusions about the entire population. As samples size (n) of 382 respondents was selected using Yamane formula<sup>1</sup> on sample size.

The respondents were then proportionately distributed to the 33 villages of Lokichar ward. According to Kothari (2009:65) area sampling is used whenever a cluster has some geographic subdivision. Interview schedule was administered to the respondents with the help of one trained research assistant. Use of the research assistant was settled on because of low literacy levels especially indigenous respondents (Orodho, 2009). In addition, it ensured collection of accurate information.

## 3.4. Methods of Data Collection

## 3.4.1. Sources of Data

The research was utilized both primary and secondary data. The secondary data was obtained from textbooks related to the study, journals, presented conferences papers and government reports as well as the internet. The primary data on the other hand was obtained from the respondents using interview schedules and focused group discussions.

## 3.4.2. InterviewGuide

According to Kothari (2009) interview schedule is the most appropriate for investigations that are thorough. Interview schedule enable the researcher to get in-depth details and required data by asking probing questions. An interview schedule made it possible to obtain information necessary to meet exact goals of the study (Orodho, 2009). The interview schedules consisted of both open and closed ended questions and was used to collect data from indigenous residents of Lokichar and the Key informants. Open ended items were used to collect qualitative data while closed ended was used to collect quantitative data.

 $<sup>^{1}</sup>n = \frac{N}{1+N(e)^{2}}$ ; Where *n* is the sample size, *N* the target population and e confidence level (in this case 0.05).

#### 3.4.3. Focus Group Discussion

Focus Group Discussions (FGDs) consisting of 8 respondents was drawn from the Community elders of Lokichar. Participants in FGDs was purposively recruited to capture differences in residents' perspectives about Oil exploration activities and its implications on their social and economic activities. According to Sekaran (2013), FGDs allow a researcher to get deeper insight into a situation or phenomenon. FGDs yielded qualitative data given that the questions were open ended. FGDs captured what the respondents said in a given context. The researcher also captured on how the community participates for instance their attitudes, perceptions, opinions and experiences in relation to oil exploration.

#### 4. Results and Discussion

The section presents the results and the discussions thereto. The results were arrived at after a data analysis process. Data analysis is the process of reducing or summarizing a large amount of collected data to data that addresses the initial proposition of the study (Kothari, 2004).

## 4.1. Emerging Security Management Issues

The third specific objective of the study attempted to exploring emerging security management issues due to oil exploration in South Lokichar Basin.

## 4.1.1. Community Participation

Respondents were asked to give their opinion on whether there was sufficient community participation in oil exploration and natural resources management activities in south Lokichar basin, Turkana county. The findings are as presented in Figure 2 below:

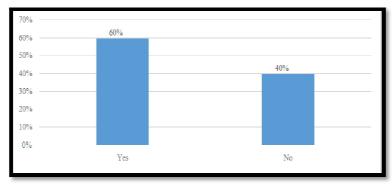


Figure 2: Community Participation

Figure 2 above presents respondent's views on community participation where a majority (55%) indicated that there is sufficient community participation while 45% there is no sufficient community participation. The findings contradict the conclusion made by Imana and Mmbaili(2016), lack of comprehensive solution to natural resource insecurity often leads to cycles of grievances. They also indicated that the recent uproars in Lokichar due to oil matters indicate lack of adequate community participation. The contradictory findings could have arisen from the recent effort by the Government to engage the community following the unrests that resulted from the community's resistance to the EOPS. Community participation in oil exploration and natural resource management is thus crucial to stem resistance to such projects.

## 4.1.2. Security Management Measures Sufficient

Respondents were asked to indicate if security management measures that have been instituted by the county government and national government were instituted sufficient. The respondents were not guided on any specific security measure and they were to respond based on what they thought were the security measures. The findings are shown below;

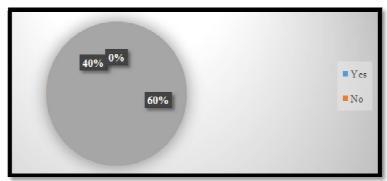


Figure 3: Security Management Measures Sufficient

Majority (60%) of respondents revealed that Security Management Measures sufficient while 40% said No as presented by Figure 3 above. The findings reflect the recent efforts by the government to respond to the concerns of the indigenous people concerning the security implications of oil exploration on their ways of life. This was in an effort to quell the disquiet that had manifested through protests and road blockades at the beginning of the EOPS project.

## 4.1.3. Manifestation of Emerging Security Management Issues

Respondents were asked to confirm whether identified security management issues had manifested as a result of oil exploration in Lokichar. The findings are as presented in Table 1 below:

Emerging Security Management Issue	Yes	No
Human Right Abuses since oil discovery	55%	45%
Civil Society Participation in oil exploration activities	60%	40%
Sufficiency of Resource Management Policies	35%	65%
Indigenous people feel primarily entitled to Oil Benefits	40%	60%
Oil has led to Insecurity incidents	60%	40%

Table 1: Emerging Security Management Issues

Table 1 above show the respondents views on the manifestation of emerging security management issues. The findings show majority (55%, 60%) have agreed that oil discovery has led to human rights abuse and society has participated in oil exploration, 65% of respondents indicated that resource management policies are adequate, 60% revealed that indigenous people feel that they are entitled to oil benefits. Finally, 60% of respondents indicated that oil discovery has led to insecurity in the region. The findings go hand in hand with the conclusion made by Mukutu (2014) who revealed that in developing countries, mineral wealth has usually failed to benefit most people at both national and indigenous levels and instead occasioned socio-economic problems. Tension between indigenous communities and investors and/or governments over perceived lack of indigenous opportunities and negative impacts such as environmental degradation is common.

## 4.1.4. Measure to Curb Insecurity

Respondents were asked to suggest measures to curb negative effects of oil in exploration on economic activities. The responses are as indicated in Figure 4 below:

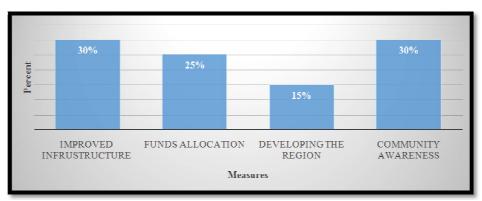


Figure 4: Measure to Curb Negative Security Effects of Oil Exploration on Economic Activities

The Figure 4 above presents respondents' opinion based on measures to curb negative security effects of oil exploration on economic activities. Majority (30%) indicated that community awareness and improved infrastructure plays an essential role in curbing the negative effects of oil exploration while 25% suggested funds allocations and 15% suggested development of the region. Revenue sharing, infrastructural development and community awareness has been a bone of contention between the National government and the Turkana county government and thus featuring high on possible solutions. The Community has been particularly against the oil revenue sharing formula that puts the allocation to the community at 5% and capping it at not more than 1/4 of the annual revenue allocation to the County government by the National Assembly.

## 5. Discussion

The study found that there are emerging security issues that have been spurred by oil exploration while others have just been exacerbated by the discovery of oil. Manyindo et al (2015), revealed that community participation is important in ensuring that there is transparency and accountability in the community. While community participation is a crucial ingredient in public administration, resource management and policy formulation, the discovery of oil in Turkana county, and its subsequent management, has highlighted the need to emphasise community participation.

As Imana and Mmbaili (2016) noted, without sufficient information communities tend to resist projects that they perceive to have negative effects on them. Such resistance has been manifested in Lokichar area in the form of protests, oil facilities takeover and destruction, blockade of oil transportation roots etc. Such issues can be avoided through community inclusion in the processes by acceptable representation. The study found that 55% agree that community participation is sufficient. This is due to the reinvigorated efforts by the National government to engage the community at the political leadership of Turkana county following the standoff the greeted the EOPS in mid-2018.

The study found out that more than 50% of respondent stated that oil discovery has led to oil abuse and society has participated in oil exploration. Resource management policies were noted to be inadequate as reported by 65% of the respondents. Also 60% of the respondents revealed that indigenous people feel that they are entitled to oil benefits. All these findings concur with the observation by Mukutu (2014), that indigenous pastoralists communities have already experienced other negative livelihoods impacts, particularly the loss of grazing lands and death of livestock. Oil field has fenced off 50 sq. km of land that the Turkana previously used for grazing and watering livestock. The Turkana are concerned because the perimeter fence separates them from these important natural resources. Furthermore, the community is not aware of resource management policies and thus could not determine their adequacy. This is indicative of lack of public information on the oil exploration processes.

The study found out that 60% of respondents revealed that Security Management Measures sufficient. This has played an imperative role in transparency and satisfaction through wide and representative consultation. This finding goes hand in hand with conclusion made by World Bank (2009) good resource governance throughout the value chain is essential for proper utilization of resources and realisation of benefits. Security management measures helps in implementation of security in the processes of oil exploration, extraction and production. It also helps to ensure security of the facilities through enhance relations with the host community and thus making the threat from the community less imminent. World Bank's conceptualization of the extractive industry value chain as a template for transparency and information disclosure is critical in resource management. With enhanced transparency in the entire process of oil extraction and production, maximum benefits from the resource will be realised and the negative security effects will be reduced to As Low as Reasonably Practical (ALARP).

Community elders also noted that the security situation in the area had grown more precarious since oil discovery. While oil could not be particularly cited as a cause of insecurity, the residents noted that it added to the contributory factors. Of concern was the issue of workers from outside the area who were alleged to be miscreant and contributed to instances of mugging, theft, promiscuity etc. that were hitherto less common in the area. Oil discovery was also linked to increased tension between the county and its neighbours who were seen to lay claim to border areas inside Turkana county where oil has been discovered or where there was potential for oil discovery. Thus, oil discovery exacerbates the existing security situation in the area that has largely been characterised by cattle rustling, proliferation of small arms, highway robberies and occasional revenge raids.

#### 6. Conclusion

Based on the findings, the study concluded that oil exploration has contributed to both positive and negative security effects on socio-economic activities in south Lokichar Basin Turkana County. The oil exploration has affected social activities in the region. From the study, the number youths who have engaged in alcohol and drug abuse due to oil exploration in the region. Moreover, more youths have engaged in early sexual activities which has led to early pregnancy. The study concluded that:

- Oil exploration has affected security of economic activities. Oil exploration has an impact on the economic
  activities, in most areas where oil has been explored has significantly reduced the poverty level. The study also
  concludes that oil exploration great extent affect employment opportunities and infrastructure development. Most
  of the better paying jobs that require advanced skill sets have been allocated to expatriates and individuals from
  outside the oil producing region of South Lokichar basin Turkana county.
- Oil exploration has affected grazing land which have been appropriated to the oil exploration companies. With the arid climatic conditions in the area, this has further limited access to the already scarce pasture in the area. Further allocation of land for exploration and the resultant degradation will further exacerbate the already dire shortage of pasture and water for the predominantly pastoralist community. This is a potential issue of confrontation between the community and the oil companies thus a real threat to the security of the region.
- The existing security measures are not sufficient and thus they need to be reviewed. Outstanding insecurity in the area has not been resolved and the issue oil of oil only adds to it. This has recently been manifested by the protests by residents of Lokichar demanding, as one of the grievances, that the national government address insecurity in the area before the EOPS can commence. It is thus incumbent upon both the National and County governments to reviews measures to curb insecurity in the region. Community participation in oil resource management and improved infrastructure play an essential role in curbing insecurity. It is important for the community enhance community knowledge on security in the region.
- Resource management policies in place are not sufficient. Where the policies have been formulated in form of laws
  and guidelines, they are well known to the community members where oil has been found. While dependence has
  mostly been on the Mining Act of 2016 (Government of Kenya, 2016), this is seen to be to general and does not
  consider the peculiarities of particular minerals and the communities where the resources have been found. For
  instance, where it will be less problematic to allocate land for exploration from a community with advanced
  development and which does not practice pastoralism, this will be a bit problematic in a community in Turkana

where development is lagging behind, the community is nomadic pastoralists and the climatic conditions are unforgiving. Thus, the Petroleum bill of 2017 (Government of Kenya, 2017) was a good initiative but it has stalled due to contentious articles on oil revenue sharing. While various laws government various aspects of oil exploration in Kenya, these are fragmented and contradictory. Thus, it is high time that such laws are consolidated into a master statute book governing all the aspects of oil exploration in Kenya.

- The Civil Society is not participating sufficiently in the oil exploration activities. This leaves a gap in the advocacy
  for human rights and holding to account relevant authorities. Research in the Niger delta have revealed that
  human rights are particularly endangered in the form of labour exploitation and when communities rise against
  oil companies for environmental pollution and exploitative practices. Thus, Civil society Organisation a critical in
  ensuring in such instances human rights are respected.
- Majority of the indigenous residents of Lokichar do not feel primarily entitled to benefit of oil exploration. They take cognisance of the fact that oil is a National resource and is meant for the development of the nation as a whole and not specifically the area where it is found. However, there is still concern among the residents that the expected developments in infrastructure and social amenities are not being done fast. Some development in the area in terms of improved roads, better school structures, hospitals, water dams etc. will appease the discontent. Managing the expectations of the resident is also important in calibrating those expectations to what is realistic.
- Finally, oil exploration adds to the factors of insecurity in Lokichar. While there have been existing insecurity factors such proliferation of small arms, scarcity of pasture and water, cultural practices that glorifies heroism and cattle rustling, border disputes with neighbouring counties, etc., oil has brought its own security challenges. Some insecurity issues relating to oil exploration include the influx of people from outside Lokichar bringing with them practices such as robbery, prostitution, drug abuse among others. Given that areas where oil has been found lie closer to county border areas, this has led to renewed claims by the neighbours about the extent of their lands before the partition by colonialists; and the agitations to reposes such lands.

#### 7. Recommendations

Based on the findings and conclusions the study recommends the following:

- The government and other stakeholders should come up with measure such as community participation to curb insecurity in the region. Community awareness and improved infrastructure will help in curbing insecurity. Considering the finding of this study the government of Kenya should also endeavour to develop Turkana County as a way to curb insecurity. Otherwise, without development it will be impractical to institute security measures. Development in this case will involve, building good infrastructure, increasing social infrastructure, up lifting citizens' standards of living and promoting other industries to grow for Turkana County to be strong and stable.
- Besides development and community participation in the management of oil exploration, the government should
  enhance security measures in place. The longstanding issues of insecurity in Turkana and its neighbours must be
  resolved so that it does not affect the oil exploration ventures or form part of the grievances against oil
  exploration. In this endeavour, the county government of Turkana must take the lead role in leading the
  community to shun security threatening practices such as cattle rustling. Alternative economic ventures have to
  sought and explored to augment pastoralism and thus reduce the need to measure wealth in terms of livestock.
  The community also needs to be educated on alternative was to settle bride price and to review the exorbitant
  number of animals required for such. This will make marriage affordable and lessen the pressure to steal animals
  as a way to pay dowry.
- The government should undertake a comprehensive environmental survey of the Turkana County, establish the
  causes of ecological and socio-economic change over time, and induce corrective action by encouraging relevant
  stakeholders to address specific environmental and related socio-economic problems identified in the course of
  the survey.
- The study recommends that the government of Kenya address issues related to land, environment degradation, employment and tendering issues, resettlement and disruption of indigenous residents which would contribute to insecurity is not well handled. It is also vital that extant laws relating to mineral exploration and production be strictly adhered to and enforced. Petroleum specific laws should be enacted to address concerns peculiar to the young oil industry in Kenya. Indeed, adhering to international best practices in oil production holds the key to a healthy environment. If not, Turkana County faces security risks, erosion of relationship between people and government and risks on other natural resources like water resources, land management, and biological resources.

## 8. References

- i. MacNeish, J. A. (2010). Rethinking resource conflict. Background Paper. World Development report 2011.
- ii. Auty, R. M. (1993). Sustaining Development in Mineral Economies: The Resource Curse Thesis. London: Routledge.
- iii. (1994a). Industrial Policy Reform in Six Large and Newly Industrializing Countries: The Resource Curse Thesis. World Development, 22 (1). Pp 11-26.
- iv. (2001). Resource Abundance and Economic Development, World Institute for Development EconomicsResearch (Oxford University Press).

- v. Blattman, C., Hwang, J. and Williamson J. (2007). Winners and losers in the commodity lottery: The impact of terms of trade growth and volatility in the Periphery 1870-1939, Journal of Development Economics (Elsevier), vol. 82(1), pages 156-179, January. NBER WP 10600.
- vi. Bogdanor (2010). What is a conflict Interest? Journal of Peace Research Vol 7. No 3. Pp 197-217.
- vii. Brunnschweiler, C. N. (2008). Cursing the blessings? Natural resource abundance, institutions, and economic growth. World Development, 36(3), 399-419.
- viii. Bybee, D. A. (2013). Production of Oil in Turkana County. Retrieved from https://www.ida.org/upload/africawatch/africawatch-vol2.pdfon march 2<sup>nd</sup>, 2017.
- ix. Collier, P., A. Hoeffler and M. Söderbom (2008), "Post -Conflict Risks", Journal of Peace Research 45(4): 461-478.
- x. Collier, P. (2007). The Bottom Billion: Why the Poorest Countries are failing and what can be done about it. Oxford: Oxford University Press.
- xi. (2011), Catching Up: What LDCs can do, and how others can help, Commonwealth Secretariat, London.
- xii. Donald, J. (2010). Security and Emancipation. Review of International Studies. Journal of International Studies 17(4): 319.
- xiii. Elbadawi, I. A., & Soto, R. (2015). Resource Rents, Institutions, and Violent Civil Conflicts, Defence and Peace Economics, 26 (1), 89-113.
- xiv. Fearon, J. D. (2010). Ethnicity, Insurgency, and Civil War. American Political Science Review, 97.1: 75-90. (2016, May 13). Mining Act 2016. Retrieved April 20, 2018, from www.kenyalaw.org: http://kenyalaw.org/kl/fileadmin/pdfdownloads/Acts/MiningAct\_No12of2016.pdf
- xv. (2017). Petroleum(Eploration, Development and Production) Bill 2017. Retrieved May 25, 2017, from www.kenyalw.org:http://kenyalaw.org/kl/fileadmin/pdfdownloads/bills/2017/Petroleum\_Exploration\_Develop mentandProductionBill\_2017.pdf
- xvi. International Crisis Group (2008). Oil and Gas Exploration Companies in Kenya. African Report No. 137. Retrieved from www.ihrb.org on April 18th, 2017.
- xvii. IEBC (2017). Registered voters per polling centre. Available at www.iebc.or.ke retrieved on July 24th, 2017.
- xviii. Imana, D.K. &Mmbaili, O.S. (2016). Envisioning Incentives for Community Participation in Natural Resources Management: A Case Study of Northwest Kenya. Journal of Community Positive Practices, XVI (1) 2016, 3-18.
- xix. Jacob, J. (2004). Measuring Success in Communities: Understanding the Community Capital. International Journal of Community Development and Research Vol 8.
- xx. Johannes, E.M., C. Zulu, L. C., & Kalipeni, E. (2015). Oil Discovery in Turkana County, Kenya: A Source of Conflict or Development? African Geographical Review, 34(2), 142 164.
- xxi. Kamiar, M. (2010). Institutions and the Volatility Curse. Faculty of Economics, University of Cambridge. Working Paper Version CWPE 1145.
- xxii. Karl, T. L., 2007. Oil-led development: social, political, and economic consequences. Encyclopaedia of energy, 4, 661-672.
- xxiii. Kothari, C. R. (2009). Research Methodology, Methods & Techniques (3<sup>rd</sup> Ed). New Delphi: International P. Limited.
- xxiv. Kothari, C.R. & Garg, G. (2014). Research Methodology (3<sup>rd</sup> Ed). New Age International Publishers, New Delhi.
- xxv. Kumar, R. (2014). Research Methodology. A step-by-step Guide for Beginners (4thed). London: Sage Publishers.
- xxvi. Le Billon, P., & El Khatib, F. (2017). From free oil to 'freedom oil': Terrorism, war and US geopolitics in the Persian Gulf. Geopolitics, 9, 109–137.
- xxvii. Lei, Y. (2013). Do Giant Oilfield Discoveries Fuel Internal Armed Conflicts? CEP Discussion Paper No 1089, December. Retrieved from http://personal.lse.ac.uk/michaels/Lei\_Michaels\_Oil\_conflict.pdf on February 1st, 2017.
- xxviii. Lynch, D. (2010). Problems of Oil and Gas Exploration on the Russian Economy. Security brief Report 2010.
- xxix. Magstadt, M. (2006). Understanding Politics, Ideas, Institutions and Issues. Thomson Higher Education Political Science 10<sup>th</sup> ed. Wadsworth, Belmont.
- xxx. Manyindo J, Laura Smith, Jami Dixon, Ivan AmanigaRuhanga and James Van Alstine (2015). Resource governance dynamics: The challenge of 'new oil' in Uganda. Sustainability Research Institute, School of Earth and Environment; University of Leeds.
- xxxi. Mugenda, O. and Mugenda, A. G. (2009). Research Methods: Quantitative and Qualitative Approaches (2<sup>nd</sup> ed.). Nairobi: ACTS.
- xxxii. Mukutu, A. K. (2014). Ungoverned Space and the Oil Find in Turkana, Kenya. The Round Table, 103(5), 497-515.
- xxxiii. Okuthe, I. K. (2015). Environmental and Social challenges of oil and gas exploration in Kenya. International Journal of Innovation and Scientific Research, ISSN 2351-8014, Vol. 17 No. 1 Aug. 2015, pp. 164-174.
- xxxiv. Onyango, D.O. (2013). Climate Change and Conflict: A Case Study of Darfur Conflict. Unpublished Thesis; University of Nairobi.
- xxxv. Orodho, J. A. (2009). Techniques of writing research proposals and reports in education and social sciences. Nairobi. Kanezja publishers.
- xxxvi. Pkalya, R., Adan, M. and Masinde, I. (2003), Conflict in Northern Kenya: A Focus on the Internally Displaced Conflict Victims in Northern Kenya, DTP Martin Karimi, Nairobi.
- xxxvii. Ross, Michael, L. (2012). The oil Curse. How Petroleum wealth shapes the Development of Nation. Princeton N.I. Princeton University Press.

- xxxviii. Sachs J. and A. Warner (1995). Natural Resource Abundance and Economic Growth. Development Discussion Paper No, 517a, Harvard Institute.
- xxxix. Sarraf M. and Jiwanji, M. (2007). Beating the Resource Curse: A Case Study of Botswana. World Bank Environmental Department.
  - xl. Schlee, J.S. (2014). Petroleum (Drilling and Production) Regulations. Kenya Constitution. L.N. 69 of 2010.
  - Sekaran, N. V. (2013). Research Methods for Business (6th Ed). Chennai, India John Willey and Sons
  - xlii. Stevens, P., Lahn, G., & Kooroshy, J. (2015). Energy, Environment and Resources: The Resource Curse Revisited. The Royal Institute of International Affairs. London: Catham House.
  - xliii. Torvik, R. (2009). Why do some resource-abundant countries succeed while others do not? Oxford Review of Economic Policy, 25(2), 241-256.
  - xliv. Turkana Baseline Report (2015). Oil Exploration in Kenya: Success Requires Consultation.
  - xlv. UNDP. (2011). Nigerian Human Development Report. United Nations Development Programme. Lagos: UNDP.
  - xlvi. World Bank, (2009). World development Report 2009: Reshaping Economic Geography. World Bank.