

**INFLUENCE OF PROJECT IMPLEMENTATION IN KENYA:
A CASE OF OIL DRILLING, TURKANA COUNTY**

**BY
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**A Research Project Report Submitted in Partial Fulfillment of the Requirements for the
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DECLARATION

This research project report is my original work and has not been presented for a degree award in any other university.

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DEDICATION

I dedicate this research project to my wife Molly Owino and daughters Lucinda and Lenora for the moral support and encouragement during my Masters studies.

Also to my parents Peter and Janet Karewa for their encouragement and belief that motivated me to getting this far with my studies.

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ABBREVIATION AND ACRONYMS

ASAL: Arid and Semi-Arid Land

EARS: East African Rift System

bodp: Barrels of Oil per Day

et al: And Others

FPIC: Free Prior Informed Consent

GNP: Gross National Product

GoK: Government of Kenya

IMF: International Monetary Fund

IOCs: International Oil Companies

NGOs: Non-Governmental Organizations

OECD: Organisation for Economic Co-operation and Development

OPEC: Oil Producing and Exporting Countries

ABSTRACT

Oil has been discovered in the northern part of Kenya and efforts to explore the commercial viability of the oil are currently on going. The oil drilling in Kenya dates back to 1960 when the first oil well was drilled in the Walu area of North Eastern Province. The well was however plugged and abandoned by the oil company BP/Shell. Tullow Oil Company and its partners have succeeded in the first stages of the oil exploration but not without challenges occasioned by various factors. This has seen the oil drilling project temporarily suspended for over two weeks in October 2013 amongst other challenges. This study therefore sought to establish the influence of implementing oil drilling project in Turkana County, Kenya. This was necessitated by the challenges that faced the implementation of drilling projects in the oil industry in other places. The objectives of the study were; to establish how environmental factors influence oil drilling project in Turkana, Kenya, to assess how economic factors influence oil drilling project in Turkana, Kenya, to assess how security factors influence oil drilling project in Turkana, Kenya and to assess how stakeholder involvement influence oil drilling project in Turkana, Kenya. The study adds to the existing body of knowledge on influence of project implementation and may be useful to both the Ministry of Energy and the international oil companies in formulating policies that will seek to mitigate the effects of these factors. In the literature review, relevant studies in the areas were analyzed to identify the knowledge gaps. The literature was then finalized with theoretical framework and the researcher's conceptualization of the study variables. The study was conducted as a cross-sectional survey. The targeted population was the local employees and their representatives from Ngamia Prospect area within the South-Lokichar Basin involved in the oil drilling activities in blocks 10BB and 13T, in Turkana, Kenya. To facilitate analysis, the population was grouped into three categories namely Category A, Category B and Category C which was based on the Local Administrators, Community Representatives and Local employees which was my strata. A sample size of 121 respondents were considered proportionately across all the categories for the purposes of data collection. Stratified random sampling technique was used in this study. Data for this study was collected using questionnaire which was administered by the researcher. Prior to the main research, a pilot study was carried out to pre-test the questionnaire to enhance its validity and reliability. The data was then be collected by the researcher over a period of six weeks. This was done after authority was granted by the administration of the learning institution. All questionnaires were edited and responses coded before data was entered into the computer by the use of the Statistical Program for Social Scientists (SPSS), version 20.0. Cross tabulation was the main method for data analysis. The study found out that no single factor can be considered as the only influential factor in the implementation of the oil drilling project in Tukana, Kenya. It was also noted that the preferences for each of the three categories of respondents were unique. From this research we can with a high degree of certainty conclude that economic factors and stakeholder involvement are the two most influential factors in the implementation of the oil drilling project in Tukana, Kenya with a percentage of 87.5% and 85.1% respectively. The recommendations given by the researcher were that the Kenyan government and stakeholders the oil and gas sector should work together to ensure smooth implementation of the oil and gas projects in the country, the need for information to be made available to all stakeholders and that oil companies must continue to invest more in the community especially on economic empowerment projects in order for the community to appreciate and feel part of the project.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Oil drilling in Kenya dates back to 1960 when the first well Walu-1 was drilled in Block L-3 in the then North Eastern Province. However, the first major oil discovery in Kenya was drilled on Africa Oil/Tullow's block 10BB. In March 2012, Tullow Oil announced that the Ngamia-1 well in the Tertiary Lokichar Basin had flowed at 3200 bopd with the potential to flow at 5400 bopd. This was quickly followed by the South Twiga discovery which flowed at the rate of 2812 bopd from the same formations. More discoveries have since been made in Block 10BB and Block 13T. The implementation of the drilling project in Turkana, Kenya has not been without its fair share of challenges. Most of the challenges have been majorly conflict involving the locals. There have been a lot of excitement and high expectations about the discovery of oil in Kenya. Many people believe that this was to be the beginning of the end to most of the problems ailing the country's economy while others are afraid that the 'oil curse' experienced in most oil producers in Africa has befallen our nation Kenya. A lot of benefits are being anticipated without much thought to the potential risks and problems associated to oil finds in most parts of the world and even regionally in the neighbouring countries of Uganda and South Sudan (<http://www.nationaloil.co.ke/site/3.php?id=1>).

According to Colgan (2013), although the threat of "resource wars" over possession of oil reserves is often exaggerated, the sum total of the political effects generated by the oil industry makes oil a leading cause of war. Between one-quarter and one-half of interstate wars since 1973 have been connected to one or more oil-related causal mechanisms. No other commodity has had such an impact on international security. Globally, the demand for oil was around 75 million bopd in 2000, and the International Energy Agency (IEA) estimates that it may nearly double by 2030 (Shelley, 2005). The factors affecting oil drilling projects are also significant in terms of the effect on the project implementation. According to Merrow, 2011, the performance of the past decade's megaprojects in the upstream oil and gas industry shows a staggering 78 percent rate of failure among such projects. According to Merrow, these projects are geographically scattered throughout the world.

Conflict over the control of valuable oil supplies has been a persistent feature of international affairs since the beginning of the 20th century. Such conflict varies in nature, ranging from

territorial disputes over the possession of oil-laden border areas to dynastic or factional struggles among the leaders of oil-rich countries to major inter-state wars over the control of vital oil zones. As oil becomes more scarce and valuable, the frequency and severity of such conflict is likely to increase. Major wars over oil have been fought every decade or so since World War I and smaller engagements have erupted every few years. Globally, in U.S. public debates about the 1991 and 2003 Iraq wars, both sides focused excessively on the question of whether the United States was fighting for possession of oil reserves; neither sought a broader understanding of how oil shaped the preconditions for war.

In Africa, oil has been discovered mostly in the West Africa and North Africa with countries such as Nigeria, Algeria and Angola being among the world's leading oil producers. In Nigeria, the first oil discovery was made in 1956 in the Niger Delta which is the largest wetland in Africa (Aworawo, 2000). The factors that have affected oil drilling in Nigeria since inception are majorly environmental, economic and security factors. Particularly, exploration had to stop from between 1967 and 1970 at the Niger Delta due to the Nigerian Civil war. Some factors cited as affecting oil project in Nigeria also included political instability, corruption and poor governance (Azaiki, 2003)

Regionally in Uganda oil was discovered in 2006 and up to date, the production is yet to start majorly because of disputes in the production sharing agreements (PSA) between the government and the oil companies. This has seen reduced activities within the oil projects in Uganda. The issues that have arisen in Uganda include environmental issues, land factors, international conflict among other factors (Caxton, 2010). In Kenya, major projects have faced and continue to face a myriad of challenges. The energy projects especially geothermal drilling in Naivasha and Menengai has faced numerous impeding factors that affect the successful implementation of the projects. Olkaria Geothermal Project is located within a National Park and therefore the environmental requirements sometimes impede the drilling of geothermal wells. The local communities demand for employment as well as land factors also play a vital role in the implementation of drilling in Olkaria (KenGen, 2003).

1.2 Statement of the Problem

Oil Drilling is a complex process that involves highly specialized machinery and specialist personnel. Every stage of the drilling process is very critical and therefore time and quality is

very important. The cost of the drilling operation is very significant hence the implementation should be as flawless as possible to save on time and money. Globally most accessible oil has already been exploited. Oil and gas exploration is now probing the Earth's most remote and inhospitable places including national parks such as Virunga National Park in the Congo and even the Arctic. It employs new and often unproven technologies to extract oil and gas from deep within the earth. The challenges facing oil drilling in such places are enormous and this in turn affects the whole project implementation.

In the past a lot of research has been on factors that contributed to projects failing in general. Alajoutsijarvi (1996), focused on the time and cost overruns in the power projects in Kenya and attributed project failure to factors ranging from delayed payments to contractors, client, delay in disbursement of funds by financiers to approval of the project by the technical people. (Sumner, 1999) studied project failure in the context of cost and attributed it to poor communication among the client and the project team members, inadequate financial resources, lack of motivation, tendering methods and poor project definition and project organization, environmental conditions, quality of project management, lack of proper project definition and infrastructure. Arrowsmith (1998) in analyzing project failure factors for Kenya Railways projects, identified poor communication, little experience of the project manager late procurement of equipment, lack of training of project managers and slow project selection methods has being the major causes of project failure. Some research has also been done on geothermal drilling projects in Olkaria, Naivasha

The oil drilling in Kenya has faced challenges in terms of disruptions of drilling operations brought about by various factors. These are further compounded by the fact that oil drilling industry is new in the country and the challenges faced may be unique. This study sought to establish how various the factors influence oil project implementation in Turkana, Kenya.

1.3 Purpose of the Study

The main purpose of this study was to establish how various the factors influence oil project implementation in Turkana, Kenya.

1.4 Objectives of the Study

The objectives of the study were:

1. To establish how environmental factors influence oil drilling project implementation in Turkana, Kenya.
2. To assess how economic factors influence oil drilling project implementation in Turkana, Kenya.
3. To establish the extent to which security factors influence oil drilling project implementation in Turkana, Kenya.
4. To assess how stakeholder involvement influence oil drilling project implementation in Turkana, Kenya.

1.5 Research Questions

This study sought to answer the following questions in as far as oil project in Turkana County is concerned.

1. How do environmental factors influence oil drilling project implementation in Turkana?
2. How do economic factors influence oil drilling project implementation in Turkana?
3. To what extent do security factors influence oil drilling project implementation in Turkana?
4. How does stakeholder involvement influence oil drilling project implementation in Turkana?

1.6 Significance of the Study

This research adds to the existing body of knowledge on the project implementation. It shall hopefully lay the groundwork that will lead to future studies on the oil project implementation in Kenya. The findings of this study may be useful to the Ministry of Energy and Petroleum by enabling them develop policies that will guide future oil projects and also advise oil companies and investors on the need to develop policies geared to mitigating conflict factors.

The finding may also be beneficial to the drilling companies as it will highlight the risk associated with implementing oil projects in Kenya. The finding of this study could also help the IOC identify potential conflict areas and plan on their mitigation. This could lead to unprecedented losses and breach of contractual obligations. The results will enhance participatory and sustainable drilling operations that look into the needs of the community and involves all stakeholders in major decision making.

1.7 Delimitation of Study

On the geographical and content scope, the research focused on the oil exploration project implementation in the Ngamia prospect area within the greater South-Lokichar Basin, Turkana County, where Block 10BB and Block 13T are located. The study focussed on the oil drilling activities between 2013 and 2014 being the period between when the oil exploration activities had picked pace.

1.8 Limitations of the study

The major limitation of the study was paucity of literature on the oil drilling in Kenya since this is an area that has not been significantly researched on in Kenya before with oil having been discovered in Kenya in 2012. This however was overcome by referring to similar studies conducted in other oil producing countries in Africa.

Another limitation to the study was that given the sensitivity of the oil and gas industry sector in the country, the respondents interviewed from the oil company had reservation giving some vital information on rather sensitive questions. This was overcome by informing them on the purpose of the study, assuring them that the information given is strictly confidential and designing the questionnaire such that it is easy to fill. The purpose of the study was clearly explained to the respondents before they filled the questionnaires to remove any doubts and suspicions in their minds.

1.9 Assumptions of the Study

The study made the following assumptions;

1. That those residing in areas away from the oil drilling sites are not affected by the drilling activities and are therefore not considered in the study.
2. The respondents will answer the questions correctly and truthfully.

1.10 Definition of Significant Terms

For the purposes of this study, the following terms are significant:

Block: A geographical unit of division used in the petroleum activities on the continental shelf.

Oil Drilling: the process of boring a hole in the ground from which oil or gas will flow or is pumped

Environment: the surroundings or conditions in which the drilling operations take place.

Project Implementation: the processes that ensure a given project is undertaken within the time scope, on budget, right quality and is sustainable.

Operator: the company that owns the well being drilled and is in-charge of the day to day management of the oil exploration activity.

Stakeholders: persons involved in or are affected by the oil drilling activities in Turkana, Kenya.

Well: A hole drilled to find or delimit a petroleum deposit and/or produce petroleum or water for injection purposes, inject gas, water or another medium, or map or monitor well parameters. A well may consist of one or more well paths and may have one or more terminal points.

1.11 Organization of the study

This research project was organized into five chapters. Chapter one was introduction which comprises background of the study, problem statement, purpose of the study, study objectives, research questions, significance of the study, delimitation and limitations of the study, assumptions of the study and definition of significant terms are discussed. Literature was reviewed in chapter two, while chapter three presented the research methods used in the study. Chapter four contained the data analysis, presentation and interpretation of the data and discussion. Chapter five was the last chapter and had summary of findings, conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents a review of literature on the influence of oil drilling project implementation in Kenya. It also examines existing records on the effects of oil activities on the socio-economic performance of the oil endowed communities. The first section focuses on the theoretical literature on conflict factors on oil drilling while the second section presents the empirical literature of studies that have been carried out in the different parts of the world relating to economic resource conflict. Emphasis is given to economic factors, security factors, land factors, environmental factors and stakeholder involvement. Section three provides an overview of the literature.

The project implementation process is complex, usually requiring simultaneous attention to a wide variety of human, budgetary, and technical variables. As a result, the organizational project managers are faced with a difficult job characterized by role overload, frantic activity, fragmentation, and superficiality. Often typical project managers have responsibilities for successful project outcomes without sufficient power, budget, or people to handle all of the elements essential for project success. In addition, projects are often initiated in the context of a turbulent, unpredictable, and dynamic environment. The project manager requires the necessary tools to help them focus more attention on important areas and set differential priorities across different project elements. As a result project management skills are essential for successful implementation (Slevin and Pinto, 1986).

This chapter examined influence of environmental factors, economic factors, security factors and stakeholders involvement on implementation of oil drilling project in Turkana County. Upon reviewing the literature, the knowledge gaps that exist were identified and formed the basis of my study.

2.2 Concept of Oil Project Implementation

Oil and gas are essential, high-value commodities for both developed and developing countries with diverse uses ranging from electricity generation to operation of machines among other uses. It is for this reason that an abundance of oil and gas resources invariably

raises the hopes and expectations of governments, citizens, local communities, and the petroleum companies that provide the essential services of exploration, extraction, and distribution. Governments hope for large and consistent revenues, citizens expect that their standards of living will be raised, local communities hope to see a quick to poverty, and multinational companies expect high returns on the large-scale investments they are obliged to make. The process from the point a discovery is made to when exploitation begins takes a whole project cycle and enormous resources.

The oil and gas exploration, production life cycle starts with due diligence process which basically involves carrying out an extensive risk-screening process aim at making an investment decision. This is then followed by prequalification where exploration license is applied and the necessary documents submitted to the relevant authorities. Once the license is awarded and the right to explore in a certain area, seismic survey is conducted to develop a picture of the geological structures below the surface. This helps identify the likelihood of an area containing hydrocarbons. The seismic surveys are preceded by a comprehensive environmental assessment. After the seismic survey, site surveys are carried out to gain more detailed information on the area where an exploration well may be drilled, and to confirm that the selected drilling location is ideal and any sensitive environment can be avoided. After gathering enough data on the potential drilling sites, exploration wells are drilled to determine whether oil or gas is present. Exploration drilling is also preceded by an assessment to understand the potential health, safety, environmental, social, security and human rights impacts. If promising amounts of oil and gas are confirmed during exploration drilling, field appraisal is used to establish the size and characteristics of the discovery. If appraisal wells show technically and commercially viable quantities of oil and gas, a development plan is prepared and submitted to the relevant authorities for approval. This includes rigorous assessment of all the potential risks and long-term assessment of environmental and social impacts. Then the production phase which can last many decades follow and finally after hydrocarbons can no longer be extracted safely or economically, the field is decommissioned (Termeer, 2013).

Bommer (2008), in his book *A Primer of Oilwell Drilling* introduces the art and science of drilling oilwells. The purpose of drilling is to make a hole (well) onto the ground to extract oil and gas from the earth. Wells are also drilled to produce water for various uses and

geothermal steam for heating and power generation. Drilling rigs are used for the making the wells and they are large and noisy equipment that operate numerous pieces of enormous equipment. The drill hole is usually less than one foot in diameter and often hundreds of meters below the earth surface. The technical challenge to overcome as wells become deeper and are drilled in increasingly hostile environments are equally enormous. The technology involved in the drilling process includes computer controlled rigs that can be monitored remotely from any part of the world. The drilling process employs specially trained personnel able to undertake the highly specialized drilling projects from the aerial survey to the seismic surveys and exploration drilling.

Various factors come into play in the process and this affects the way the implementation of a particular oil and gas project is done. Environmental concerns to meeting the expectations of the various stakeholders are some critical factors that must be addressed to prevent them from affecting the project implementation. The high cost of implementing an oil project means time is critical to the success of any project to the defined scope (Termeer, 2013).

2.3 Environmental Factors and implementation of oil drilling projects

Environmental factors are external influences on a project that it has limited control over but that must be taken into consideration as part of strategic planning for a project. Identified keys to development include level of labour productivity, technology and education, level of efficiency in the use of labour, presence of capital, infrastructure and availability and richness of natural resources among other things. These components of development target productivity which if not properly managed (especially the available natural resources) will lead to a degenerated environment, unfit for both man and the ecosystem at large, this situation brings into focus the consciousness that development can no more be sustained without conserving the environment and the concept of sustainable development becomes the operational framework (McEachern, 1997).

Besides the indirect social and economic impacts on a given region or sector, disasters can affect employment, the balance of trade, foreign indebtedness, and competition for scarce development investment funds says the effect of natural disasters in disaster prone developing countries tends to cancel out real growth in the countries. Approximately 90% of all natural disasters worldwide occur in developing countries (Long, 1978). Recent Latin American and

Caribbean examples illustrate the magnitude of the problem. Hurricanes struck the Dominican Republic in 1979, they caused an estimated US\$342 million in damage to the agricultural sector. While the information available on the amount of national and international funds committed to reconstruction in response to each disaster is limited, the need to redirect funds to post-disaster work curtailed the availability of funds otherwise targeted for new projects (UNDRO, 1980). IFC requires a hazard assessment for projects involving certain inflammable, explosive, reactive, and toxic materials to determine whether they are present at a site in quantities above a specified threshold level. International Finance Corporation Operational Policies (October 1998 pg.1)

The analysis of several literature shows that oil-bearing areas around the world, especially in developing countries, are facing severe ecological devastation, in other words, that the environmental effect is negative. Most impacts during the exploration phase would be associated with the development of access roads and drilling of the exploratory wells. Activities that may cause environmental impacts during this phase of development include ground clearing, grading, drilling, waste management, vehicular and pedestrian traffic, and construction and installation of facilities. According to Adewuyi, oil spillage is the most common and controversial of all the environmental impacts of oil exploitation (Adewuyi, 2001). Oil spillage occurs during the drilling of oil wells and as a result of oil pipelines leakages and during the loading of oil into the tankers. UNDP (2006), reports that much of the environmental pollution in the oil-bearing areas is the result of oil spillage due, essentially, to accidents based on human error and equipment failure. Orubu et al. (2004), share this view when they reported that massive oil spills occurring in the riverine areas have done untold damage to the aquatic ecosystem, particularly in the mangrove swamp forest zone.

Drill cuttings generated during the drilling process, drilling mud and fluids also possess great environmental hazard. In ANEEJ, 2004 publication, it was noted that major constituents of drill cuttings, such as barite and bentonite clays, when dumped on the ground, prevent local plant growth until natural processes lead to the development of new topsoil. In water, these materials disperse and sink, thereby suffocating local bottom-living plants and animals by burying them.

The environment in which drilling activity is taking place also influences the dimension the project will take. In 2012, the Royal Dutch Shell was forced to halt drilling activities in the Chukchi Sea at the Arctic because of the ice moving towards the drill ship. The company was forced to stop the drilling activities as a precautionary measure and this in turn affected the implementation of the project in term of disrupting the project timeline, the scope had to be reviewed to factor in the hostile environment and on sustainability, the environmentalists doubted the company's ability and readiness to drill in the Arctic. The challenge of managing an oil spill in the icy Arctic is difficult with the potential environmental impact being huge. The huge capital expenditure running into billions-of-dollars require to exploit the Arctic area coupled with the technical challenge of operating in such a harsh and remote environment as well as legal challenge to the licences on Chukchi Sea, the oil drilling in the Arctic still face a obstacles. The Proposed Action includes drilling, completing, and operating up to 3,100 additional wells on up to 16,200 acres of new disturbance, including the roads, pipelines, and other ancillary facilities needed to support the new wells; minimum well pad (surface disturbance) density of 64 well pads per 640-acre section; bottom hole well density ranging from 1 bottom hole every 5 acres to 1 bottom hole every 40 acres; and 250 wells drilled per year U.S. Department of the Interior (February 2005).

Environmental disaster involving the Royal Dutch Shell in the Gulf of Mexico in 2010 also highlighted the extent at which environmental factors can have on oil drilling projects globally. The explosion and sinking of the Deep water Horizon oil rig that saw oil flow into the sea uncontrollably for 87 days. The environmental impact was huge and the impact on the project was very significant with financial liability to the company exceeding 40 billion dollars covering the federal fines and compensations. The well had to be sealed off after efforts to control the flow failed. The disaster is considered the largest accidental marine oil spill in history of the petroleum industry (<http://en.wikipedia.org/wiki>).

2.4 Economic Factors and implementation of oil drilling project

While looking at the international politics and oil, Bromley et al. (2006), in their papers presented different theoretical perspectives in their study of oil and international politics. Collectively, however, they highlighted two issues. Firstly, the range of approaches taken in this issue to analyse the international politics of oil highlights that the pursuit of sustainable and secure energy supplies is at the heart of world politics, intersecting with just about every

significant contemporary global challenge. That a special edition on the international politics of oil can cover so much ground is an indication of how wide ranging the consequences of on-going hydrocarbon dependence are and the challenges this presents for humanity. Secondly, and perhaps most significantly, it shows how much can be learnt about the changing nature of politics through the study of oil. Because oil represents a crucible for exploring the intersection of political economy, development, foreign policy, and international cooperation, it offers a starting point for asking more profound questions about the changing nature of contemporary world politics and how it should be conceptualised by academia.

In Nigeria's Delta state, youths have been known to demand development levy for the land occupied and employment for community youths from oil companies and other firms. The youths have become a threat to development of oil projects as they have been known to collect tolls from contractors and to vandalize projects executed through non-indigenous contractors. The youths have been known to harass and disrupt operations of several companies to compel employment of community youths (Abubakar 2003).

Defoer and Wayne (2010) defined land ownership which is also known as land tenure, which is particularly common in law systems, as the legal regime in which land is owned by an individual. Secure rights to land can help moderate the impact of food price volatility on poor rural households by influencing food security project implementation. Ministry of Land and natural Resources, Republic of Ghana (May 2011) Difficult accessibility to Land for agricultural, industrial, commercial and residential development purposes due to conflicting and often undocumented claims to ownership, and varied outmoded land disposal procedures.

Saskatchewan Ministry of Environment (2009). The Environmental Assessment Act (Saskatchewan) ("the Act") and related procedures provide for a coordinated review of environmental issues associated with development projects in the province. Many proposals pertaining to all aspects of oil and gas exploration, development and transportation are reviewed each year through the Ministry of Environment's (the Ministry's) environmental review process. Environmental review requires that potential impacts of the project be identified, documented and evaluated and that opportunities to avoid, minimize or eliminate

the adverse effects and enhance the positive effects of a project be recognized during Project planning. In so doing, unnecessary environmental impacts are avoided and proponents may avoid costly delays associated with repairing environmental damage. Careful planning provides a sound basis for sustainable development, particularly in environmentally sensitive areas.

2.5 Security Factors and implementation of oil drilling project

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. However, modern theorists such as Collins (2007), Yergin (1991), and Buzan (1983) see security as multi-disciplinary and from a multi-dimensional 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. Ikporukpo (1983), Ikein (1991) and World Bank Reports (1995) all indicate that oil exploration and production have induced environmental degradations that have had consequences on oil losses, exacerbated poverty, caused occupational dis-orientation, social conflicts, population displacement and violations of human rights amongst indigenes of oil producing communities in the Niger-Delta region and elsewhere in the world.

A study conducted in Nigeria to examine the effects of oil and gas exploration and production in the Niger Delta region suggested that since the underlying issues are neglect, marginalization and the peoples' quest for economic justice, policy makers should improve productive activities and ensure the security and welfare of the citizens. The study also intimated that the negative impacts of the oil and gas exploration and production in the Niger Delta region do not end on the biophysical environment alone but also affect the wellbeing of the people including their security. A very strong indicator of insecurity in the Niger Delta of Nigeria is excessive State violence and spiralling conflicts by the people. This state of violence takes several forms: harassment, arrest and detention of community leaders; abduction and kidnapping of oil workers by restive youths; conflict among communities and direct repression using armed forces and police. Another indicator of insecurity is poverty.

Poverty headcount indicate that over 58% of the population, mainly made up of the Niger Delta people, in the South-South zone of Nigeria are poor. (Chukuezi, 2003)

2.6 Stakeholder Involvement and implementation of oil drilling project

Stakeholders can be defined as any group or individual who can affect or [be] affected by the achievement of an organisation's objectives (Freeman, 1984). This includes people who influence a decision, or can influence it, as well as those affected by it'. Stakeholders might include local community members, non-government organisations, governments, shareholders and employees. Engagement requires an open, active and voluntary approach to dialogue that identifies the current positions of all parties, outlines their objectives and outcomes, and discusses and identifies the processes to best achieve them. The parties to engagement may change over time, but engagement itself is a continual process. A project stakeholder is a person or group of people who have a vested interest in the success of a project and the environment within which the project operates. The implication is that a stakeholder is any individual or group with the power to be a threat or a benefit (Stefan Olander and Anne Ladin, 2005). The demands of the community exert pressure on organizations to develop new methods of working and communicating with stakeholders. A negative perception by stakeholders can severely obstruct a construction project. Inadequate management of the concerns of stakeholders often leads to conflicts and controversies about the implementation of a construction project. To avoid this, project managers should try to acknowledge the concerns of all stakeholders and in a dialogue seek to reconcile conflicting interests (Olander et al. 2005).

According to Morakinyo & Odigha (2009), the oil companies in the Niger Delta went wrong by giving little appreciation to environment and people relationship, management of environmental impacts and they did not also place importance on engaging with local social fabric and building capacity. Many countries (and international law) now require "Free, Prior Informed Consent (FPIC) by indigenous communities likely to be affected by proposed activities on their lands. Leading mining, oil and gas companies (and their investors) now recognize that the responsibilities for community engagement, including FPIC, must be taken seriously. Marakinyo and Odigha concluded that to achieve security and development in the Niger Delta region, there is need to apply a participatory and people centred approach to development which will lead the people out of poverty, neglect, crumbling social

infrastructure and high unemployment. If the existing trend is not reversed, the future will be bleak not only for Nigeria but for an oil hungry world.

Poor stakeholder engagement is cited as an important issue in a large proportion of case studies about the conflicts between local communities and the extractive industry. In a recent study on these conflicts, consultation and communication issues were cited as a proximate or underlying issue for the conflict in 18 out of 25 case studies reviewed (Davis & Franks, 2011). These conflicts are manifested in a variety of manners: submissions by affected communities to governments or directly to the company; administrative proceedings; litigation; publicity campaigns; physical protests; and violence to property or persons (Davis & Franks, 2011)

2.7 Resource Conflict Theory

The research will draw on several documented experiences and theories as foundation stones for organizing ideas on oil project implementation in oil-rich areas. The findings of Resource Conflict theory is closely related to this study and shall form the foundation of the theoretical framework.

In the study of resource and conflict, many scholars and policy makers have taken a keen interest to better understand these two concepts. In these studies and policy discussions, a large number of terms are now in use in an attempt to account for the complicated state of affairs faced by resource-rich countries in the global south: intractable conflicts, new wars, resource wars, complex political emergencies, conflict trap, resource securitization, petro-violence, blood diamonds (Kaldor, 1999; Kaplan, 1994; Nafziger & Auvinen, 1996; Watts, 1999). The consensus built between these different terminologies and theories is that an abundance of natural resources is frequently at the root of violent conflict. As a result general acceptance has been made of the existence of a paradox of plenty (Karl, 1997) i.e. that the vast majority of conflict prone and war ravaged states in the global south, including those recently emerging from violent conflict, are extractive economies who are endowed with strategic natural and mineral resources yet cannot avert declining into debilitating violence and war. For the purposes of this study, I shall look at two resource conflict theories; the 'resource curse' and the 'rentier state' that have been used to discuss the resource conflict in resource abundant and dependent communities.

Resource curse theory

Jeffrey Sachs and Andrew Warner in their paper *Natural Resource Abundance and Economic Growth* (Sachs & Warner, 1995), Auty, 2001 and Karl, 1997 all relate resource abundance and resource dependence to: low levels of human development, corruption, repression, poor economic performance and conflict. Their result is robust even when they try to introduce several control variables like trade openness, investment or institutional quality. This phenomenon is generally called “the curse of natural resources” and since this seminal work, an important number of theoretical and empirical studies have tried to understand why and how natural resources can become a “curse” for a country rather than a “blessing” like it should be if we follow the beliefs of the classic economic theory (if production factors are characterized by diminishing returns, having more natural resources can be a way to enjoy higher growth rates).

Other studies conducted on peace and war reveal that resource abundance present both finance and motivation for armed conflict and therefore produce economic and institutional causes of violence (Ross, 2003; Humphrey, 2005; Fearon, 2005). This is further emphasized by studies conducted by Collier & Hoeffler, (2005) who have produced further evidence that natural-resource dependent countries are more prone to violent conflict than their less natural-resource endowed counterparts.

The resource curse has been associated with the “Dutch Disease”, which is associated with resource booms, accompanied by appreciations of exchange rates, making the non-oil sector less competitive. The “Dutch Disease” is often characterized by real exchange rate appreciation, high labour costs, and the structural imbalances in economic development (Poteete, 2009). Because of currency appreciations, non-oil sectors become less competitive including agriculture and industrialization.

Rentier state

Bablawi & Luciani (1990) defined a rentier state as a state where: first, rent situation is predominating. Second, there is a weak domestic productive sector and economy based on one single good. Third, a limited part of the population involved in the generation of rent.

And finally, the state is the biggest recipient of the rent. The definition of the rentier states might seem purely economic but have close ties with the political systems and society.

The concept of rentier state was postulated by Hossein Mahdavy with respect to pre-revolutionary Pahlavi Iran in 1970; the idea that has since been appropriated by community of Middle East specialists in their discussions of Arab World (Yates, 1996). The rentier state is linked to the 'staple thesis' which explains how natural resource endowments shape production relations. The 'staple thesis' demonstrates that backward areas commonly began through the initial stimuli brought by primary product exports in terms of attracting capital and labour and inducing a diversified production structure (Watkins, 1963). The rentier state (Karl, 1997) assumes that rulers assume to 'own' natural resources by assigning to them property rights over the natural resources, and also tend to be predatory as opposed to developmental aims.

Olanya (2012), indicates that the benefit to the rentier state depends on the willingness and ability to tax and also claims participation in the staple's performance. He goes further to say that the ability to tax the enclave is also not a sufficient condition to vigorous economic growth unless it is accompanied by the ability to invest productively and the possibility of any fault investment becomes a leakage to the system. State that only concentrates on how to tax the staple may be very far from making effective contribution to development outcomes. A country may diversify its staples towards agriculture and manufacturing to avoid the "paradox of plenty." It is also argued that the extent to which a country suffers from the "resource curse" depends on its policy choices.

Gary & Karl (2003), indicates that less emphasis on agriculture and industrialization make a country depends on the oil sector as well as reducing their competitiveness. The inadequate institutional arrangements face a wide range of political, economic, and social challenges such as the likelihood of civil wars and social instability as government competes to control power (Collier, 1999).

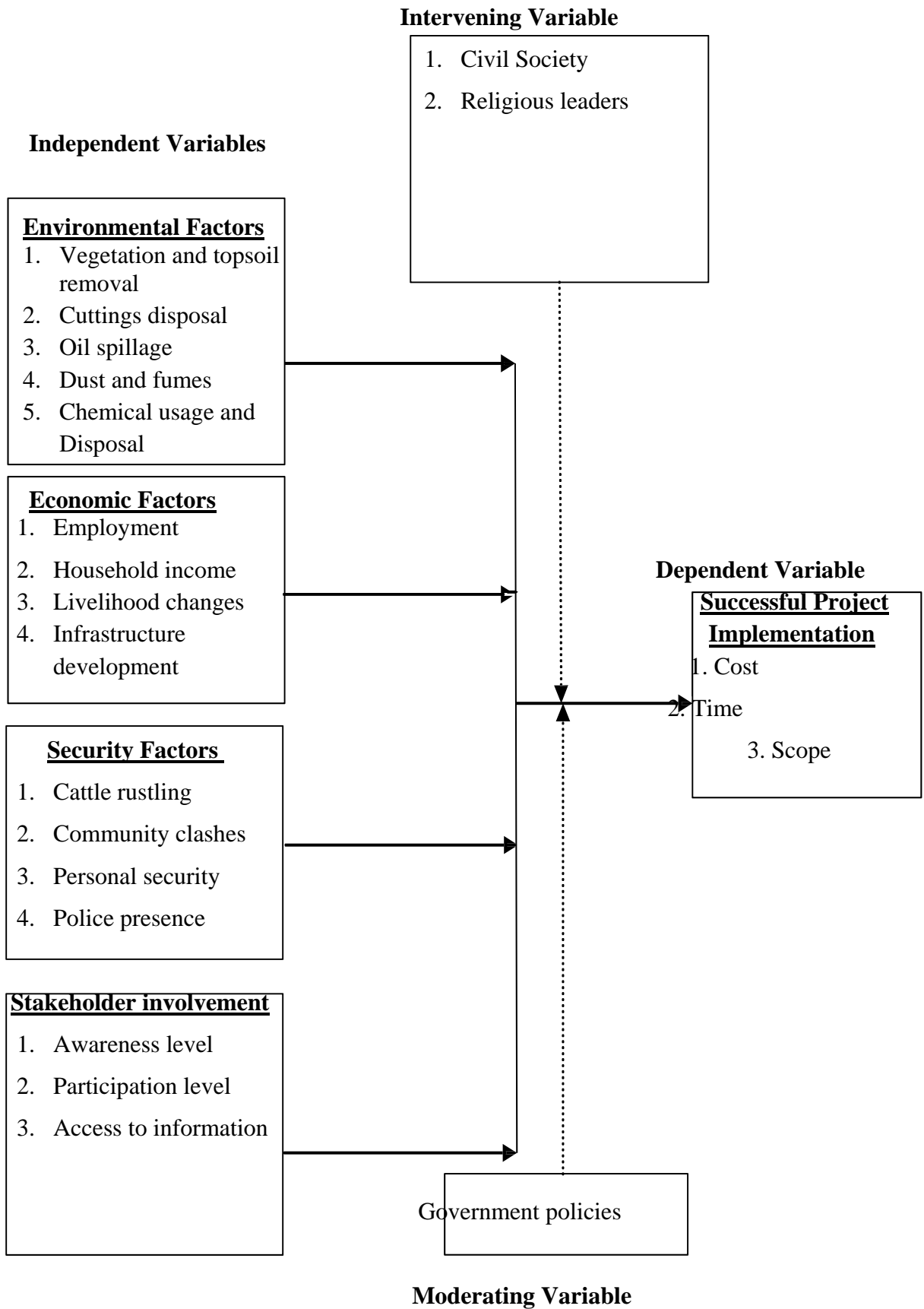
The 'Dutch Disease', being considered as the product of rentier politics undermines the long-term economic performance in resource dependent economies resulting in a 'resource curse'. Institutions and state development during resource boom are locked into development

trajectories (Poteete, 2009). The end result is negative development outcomes such as poor economic performance, growth collapse, and high degree of corruption, ineffective governance and greater political instability.

2.8 Conceptual Framework

The link between various factors and oil project implementation can be conceptualized as a relationship in which a set of underlying factors that determines the implementation of oil project. The final outcome can be modified by factors within the intervening variable and the moderating variable. The following is a conceptual framework useful for understanding the relationship between the dependent and independent variables in this study.

Figure 1: Conceptual Framework



2.9 Explanation of relationships of variables in the Conceptual Framework

Any attempt at assessing the impact of various factors on project implementation, we must recognize the existing government policies as the intervening variables that modify the original relationship between various factors (causal factors) and project implementation (effect). The existing land tenure system, the range of economic activities, environmental safeguard laws, human capital in the community as well as labour laws are some of the intervening variables that influence proper project implementation processes such as project cost, time, quality and sustainability.

The relationship between the various factors under study and the successful implementation is influenced by the existing government policies. Among the government policies that influences the way oil drilling project are affected by the identified factors include on environment policy, security policy. This therefore produces an interaction effect. The government policies therefore becomes the moderating variable in this research since the policies seeks to influence or moderate the relationship of each factor and successful oil drilling project in Tukana, Kenya.

The civil society and religious leaders play a significant role in the relationship between the independent variables and the successful oil drilling implementation as the dependent variable. They may modify the relation by providing a causal link between the two variables. These are the intervening variables and they also explain the relation between independent and dependent variables.

2.10 Knowledge Gaps

After going through the empirical literature, the knowledge gaps that form the basis of this study are given in Table 2.1:

Table 2.1: Summary of Knowledge Gaps

Variable	Author	Year	Finding	Knowledge Gap
Environmental Factor	Adewuyi	2001	Oil spillage is the most common of all environmental impact of oil exploitation.	The study did not consider places where oil has just been discovered and exploration still on going.
Economic Factors	Abubakar	2003	Youths in Niger Delta were known to harass and disrupt operations to demand employment.	The study did not show what the IOC has done to empower the youth.
	Defoer & Wayne	2010	Secure land rights can influence food security project implementation.	The study did not consider community owned land like is the case in Turkana.
Security Factors	Chukuezi	2003	Insecurity is as a result of poverty.	The study did not consider other factors like pre-existence of conflict before oil discovery.
Stakeholder Involvement	Davis & Franks	2011	Consultations and communication are the underlying issues in the oil related conflicts.	The study has not looked at how new oil frontiers engage the stakeholders.

2.11 Summary

This chapter looked at the previous research done on the same area and related area of oil conflict and specifically examined the issue of resource conflict theories. The various research findings were studied, with biasness to resource curse theory and rentier state, and their conclusions and recommendations outlined. The consensus built between these different researches and theories is that an abundance of natural resources is frequently at the root of violent conflict in oil-rich countries.

The variables were then conceptualized into independent, intervening and dependent variables to create the desired relationship. The gaps are identified after going through the empirical literature and presented.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This section delineates the research design, target population, sampling or the respondent of the study, research instruments, methods of data collection, procedures and methods of data analysis techniques used in the study and ethical issues.

3.2 Research Design

The research was conducted as a cross-sectional survey research. Survey is predominantly descriptive; it is for this reason descriptive and survey research are sometimes used interchangeably. According to Mugenda & Mugenda (2003), a survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables. According to Kothari (2004), surveys are only concerned with conditions or relationships that exist, opinions that are held, processes that are going on, effects that are evident or trends that are developing. The method of data collection happens to be either observation or interviews or questionnaire (Kothari, 2004).

Survey research design was chosen for this research study because of the need to determine the current state of the population which respect to the variables. By doing so, this research study built a profile about the factors affecting the successful implementation of oil drilling project in Turkana Kenya.

3.3 Target Population

Mugenda and Mugenda (2003), defines target population as that population the researcher studies, and whose findings are used to generalize to the entire population. The Ngamia prospect area within the South-Lokichar Basin has a population of about 4000 people. For this study, the target population was the local employees and their representatives within block 10BB and 13T in the Ngamia prospect area.

3.4 Sample Size and Sampling Procedure

This section will discuss how the sample size was determined and how the sample was selected.

3.4.1 Sample size

The sample for this study was subjectively selected to maximise generalisation of insights. The minimum sample size (n) required for determining the adequate sample size for the study will be calculated using the formula.

$$n = \frac{NZ^2pq}{\{E^2(N-1)+Z^2pq\}} \quad (\text{Fisher et al, 1990})$$

Where: N = the population size

Z = the value of the standard deviate at the 95% confidence level= (1.96).

p = the proportion of the population (0.5 for this study)

$q = 1-p$

E = level of error allowable at the given level of confidence = 0.05

Therefore,

$$n = \frac{176 \times 1.96^2(0.5 \times 0.5)}{\{0.05^2(4000 - 1) + 1.96^2(0.5 \times 0.5)\}} = \mathbf{121}$$

For this study, a sample size of **121** employees and community representatives was taken to be adequate representation of the population.

3.4.2 Sampling Procedure

The research used stratified random sampling to select the samples. The selection of participants depended on their position in the community, hence their ability to provide valuable information to the research study. From the information available from the one of the oil drilling companies, the population distributions in Ngamia prospect area for the categories were as follows:

Local Administrators (Category A)	8
Community Representatives (Category B)	8
Local Employees (Category C)	160

Considering proportionate sampling it follows that:

Category A will have a sample size of $(8/176) \times 121 = 6$

Category B will have a sample size of $(8/176) \times 121 = 6$

Category C will have a sample size of $(160/176) \times 121 = 109$

For each stratum, random sampling was used to identify the respondents.

3.5 Data Collection Instrument

Data for the study was collected over a period of six weeks by use of questionnaires which were administered by the researcher. The questionnaires are prepared and structured to meet the information needs.

3.5.1 Pilot test of the instrument

The questionnaires were pre-tested using staff at one of the IOC as test sample to ensure they are free from ambiguity and that the data generated is meaningfully analyzed in relation to the stated research questions and hypotheses. After piloting, adjustments were made in order to address the areas of concern.

3.5.2 Validity of the Instrument

The validity of the instruments was tested by a review of the Questionnaires by the researcher's Project Supervisor to ensure that all that was to be measured was captured in the questionnaire and what was not important in the study was excluded.

3.5.3 Reliability of the Instrument

The consistency of the scores obtained in the study was ensured by comparing the response of various respondents on specific issues on the questionnaire. This was achieved by ensuring the external sources of variation while administering the questionnaire are minimized. The IOC staffs who were helping in administering the questionnaires were the same with no variation from group to group. The test-retest method was used in trying to establish the reliability of the data collected by implementing measurement instrument (questionnaire) at two separate times for each subject. The correlation between the two separate measurements was then computed with an assumption that there was no change in the underlying condition between test 1 and test 2.

3.6 Data Collection procedure

Data was collected by the researcher over a period of six weeks by the use of questionnaires which were administered by the researcher. The procedure started by securing a Permit from the National Council for Science and Technology then visiting the samples to book an appointment. All these were after authority was given authority was granted by the administration of the University. The researcher first read the letter of transmittal to the sampled respondents and clarified all the concerns of the respondents before they filled the questionnaires. Preliminary notification was given to the respondents and detailed account of why the information was sort was given to them to avoid any misconceptions which might have compromised the findings. Assurance of confidentiality of information was also given to the respondents. After returning of the questionnaires, the respondents were collectively sent a note of appreciation including the ones who did not respond through their representatives.

3.7 Data Analysis Techniques

All questionnaires were edited and responses coded. I employed inductive codes in this research study by developing the codes by directly examining the data. According to Charmaz, researchers use codes to pull together and categorize a series of otherwise discrete events, statements, and observations which they identify in the data (Charmaz, 1983: 112). Coding also helped to provide the insights that lead to understanding these themes and subtexts.

Cross tabulation was the main method used for analyzing the quantitative data. The qualitative data was coded and used inform the quantitative data. After analysis, data was summarized and presented in form of frequency tables and percentages. Insights and ideas were also gathered from the qualitative data for better understanding of the problem and will help design and guide future studies. Inferences were made from these and will be used for guiding future research and will not be conclusive themselves

3.8 Ethical Consideration

During the research and while administering the questionnaires, the procedures respected the privacy of the respondents, ensured confidentiality of any information they provided for the purposes of the research, maximized benefits and minimized any risks both to the researcher and the respondents. The research was based upon three ethical principles of beneficence,

respect and justice. The consent of the respondents was crucial to the success of the research and relevant information was provided to all potential respondents prior to administering the research instrument.

3.9 Operational definition of variables

Table 3.2 shows exactly how the concept was measured and specifies procedures and operations necessary to measure a concept. It also describes how various variables, indicators, were measured and what was used to get the results and the method used to analyse the data.

Table 3.1: Operationalization table

Objective/Research Questions	Type of Variable	Indicators	Measurement Scale	Data Collection Method	Instrument/Data collection tools	Data Analysis Technique
To establish how environmental destruction influence successful project implementation in Turkana.	Environmental destruction- Independent variable	<ul style="list-style-type: none"> • Vegetation and topsoil removal • Cuttings disposal • Oil spillage • Dust and fumes • Chemical usage and disposal 	Ordinal	Administering questionnaires	Questionnaires	Frequencies and percentages
To assess how economic factors influence successful project implementation in Turkana.	Economic Factors- Independent variable	<ul style="list-style-type: none"> • Livelihood changes • House hold income • Employment • Food security • Infrastructure development 	Ordinal	Administering questionnaires	Questionnaires	Frequencies and percentages
To establish the extent to which security factors influence successful project implementation in Turkana.	Security- Independent variable	<ul style="list-style-type: none"> • Cattle rustling • Community clashes • Police presence • Personal security 	Ordinal	Administering questionnaires	Questionnaires	Frequencies and percentages
To assess how stakeholder involvement influence successful project implementation in Turkana.	Stakeholder involvement- Independent variable	<ul style="list-style-type: none"> • Level of awareness • Level of participation • Access to information 	Ordinal	Administering questionnaires	Questionnaires	Frequencies and percentages
To establish to what extent has the oil drilling project has been successful	Successful project implementation- Dependent variable	<ul style="list-style-type: none"> • Project cost • Time • Scope 	Ratio	Administering questionnaires	Questionnaires	Frequencies and percentages

CHAPTER FOUR

DATA ANALYSIS, PRESENTATIONS AND INTERPRETATIONS

4.1 Introduction

This chapter presents the research findings on influence of project implementation: A Case oil drilling in Turkana Kenya. It begins with a summary of the gender, category represented, age, marital status and level of education of the respondents for the three samples namely Category A, Category B and Category C. This is followed by tabulation and interpretation of results as per the objectives of the study for the above mentioned samples: influence of environmental factors on oil drilling project in Turkana, Kenya; influence of economic factors on oil drilling project in Turkana, Kenya; influence of security factors on oil drilling project in Turkana, Kenya; influence of stakeholder involvement on oil drilling project in Turkana, Kenya and to influence of land factors on oil drilling project in Turkana, Kenya. The chapter concludes by cross tabulation of results on interrelations between the factors and project implementation.

4.2 Questionnaire return rate

The researcher administered 121 questionnaires to the respondents. However, 105 questionnaires were returned giving a response rate of 86.8%. This response was excellent and representative of the population and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and above is excellent.

4.3 Demographic characteristics of the respondents

This study sought to establish the demographic characteristics of the respondents. The responses were arranged in the three strata, Category A, Category B and Category C.

The demographics considered included gender, age, marital status and education level.

4.3.1 Gender of respondents

This study sought to establish the gender distribution of the respondents. The results are given in Table 4.1.

Table 4.1: Gender Distribution

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Male	3	75	3	75	70	72.2
Female	1	25	1	25	27	27.8
Total	4	100	4	100	97	100

Majority of the respondents were male with Category A having 75%, Category B 75% and Category C 72.2%.

4.3.2 Age distribution of respondents

This study sought to establish the age distribution of the respondents. The results are given in Table 4.2.

Table 4.2: Age (Years) of respondents

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
20 and below	0	0	0	0	5	5.1
21-30	0	0	1	25	75	77.3
31-40	0	0	0	0	15	15.5
41-50	2	50	2	50	2	2.1
Over 50 years	2	50	1	25	0	0
Total	4	100	4	100	97	100

A high number of the respondents were aged between 21 – 30 years with Category A having 0%, Category B 25% and Category C 77.3%.

4.3.3 Marital Status of respondents

This study sought to establish the marital status of the respondents. The results are given in Table 4.3.

Table 4.3: Marital Status of the Respondents

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Single	0	0	1	25	26	26.8
Married	3	75	2	50	67	69.1
Widowed	1	25	1	25	4	4.1
Separated/Divorced	0	0	0	0	0	0
Total	4	100	4	100	97	100

Majority of the respondents were married with Category A having 75%, Category B 50% and Category C 69.1%.

4.3.4 Level of education of respondents

This study sought to establish the level of education of the respondents. The results are given in Table 4.4.

Table 4.4: Level of Education of Respondents

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Masters	1	25	0	0	1	1
Undergraduate	1	25	2	50	5	5.2
Diploma	1	25	1	25	27	27.8
High School	1	25	1	25	64	66
Total	4	100	4	100	97	100

A high number of the respondents had High School qualifications Category A having 25%, Category B 25% and Category C 66%.

4.4 Environmental Factors and Implementation of Oil Drilling Project

The study sought to establish the influence of environmental factors on implementation of oil drilling project in Turkana County by ranking them as very high, high, low and very low. The environmental factors investigated were vegetation removal; cutting disposal; oil spillage; dust and fume and chemical usage and disposals. The results are as below:

4.4.1 Vegetation and topsoil removal

This study sought to establish the influence of vegetation removal on the oil project implementation in Turkana, Kenya. The results are given in Table 4.5.

Table 4.5 Vegetation and topsoil removal

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	2	50	3	75	80	82.4
High	1	25	1	25	9	9.3
Low	1	25	0	0	5	5.2
Very low	0	0	0	0	3	3.1
Total	4	100	4	100	97	100

Majority of the respondents considered the oil spillage to be having very high influence in the implementation of the oil drilling project in Turkana with Category A having 50%, Category B 75% and Category C 82.4%.

4.4.2 Cuttings disposal

This study sought to establish the influence of cutting disposal on the oil project implementation in Turkana, Kenya. The results are given in Table 4.6.

Table 4.6: Cutting disposal

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	0	0	0	0	2	2.1
High	1	25	0	0	26	26.8
Low	2	50	2	50	61	62.8
Very low	1	25	2	50	10	10.3
Total	4	100	4	100	97	100

A high number of the respondents considered the cutting disposal to be having low influence in the implementation of the oil drilling project in Turkana with Category A having 50%, Category B 50% and Category C 62.8%.

4.4.3 Oil spillage

This study sought to establish the influence of oil spillage on the oil project implementation in Turkana, Kenya. The results are given in Table 4.7.

Table 4.7: Oil Spillage

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	2	50	3	75	67	69.1
High	1	25	1	25	19	19.6
Low	1	0	0	0	11	11.3
Very low	0	0	0	0	0	0
Total	4	100	4	100	97	100

Majority of the respondents considered the oil spillage to be having very high influence in the implementation of the oil drilling project in Turkana with Category A having 50%, Category B 75% and Category C 69.1%.

4.4.4 Dust and Fumes

This study sought to establish the influence of dust and fumes on the oil project implementation in Turkana, Kenya. The results are given in Table 4.8.

Table 4.8: Dust and Fumes

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	3	75	2	50	71	73.3
High	1	25	2	25	15	15.4
Low	0	0	0	0	8	8.2
Very low	0	0	0	0	3	3.1
Total	4	100	4	100	97	100

Majority of the respondents considered the dust and fumes to be having very high influence in the implementation of the oil drilling project in Turkana with Category A having 50%, Category B 50% and Category C 73.3%.

4.4.5 Chemical usage and disposals

This study sought to establish the influence of chemical usage and disposal on the oil project implementation in Turkana, Kenya. The results are given in Table 4.9.

Table 4.9: Chemical usage and disposals

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	1	25	2	50	36	37.1
High	2	50	2	50	41	42.3
Low	1	25	0	0	15	15.5
Very low	0	0	0	0	5	5.1
Total	4	100	4	100	97	100

Majority of the respondents considered chemical usage and disposal to be having high influence in the implementation of the oil drilling project in Turkana with Category A having 50%, Category B 50% and Category C 42.3%.

4.5 Economic Factors and Implementation of Oil Drilling Project

The study sought to establish the influence of economic factors on implementation of oil drilling project in Turkana County by ranking them as very high, high, low and very low. The economic factors investigated were employment; household income; livelihood changes and infrastructure development. The results are as below:

4.5.1 Employment

This study sought to establish the influence of employment on the oil project implementation in Turkana, Kenya. The results are given in Table 4.10.

Table 4.10: Employment

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	4	100	3	75	85	87.6
High	0	0	1	25	10	10.3
Low	0	0	0	0	2	2.1
Very low	0	0	0	0	0	0
Total	4	100	4	100	97	100

Majority of the respondents considered employment to be having very high influence in the implementation of the oil drilling project in Turkana with Category A having 100%, Category B 75% and Category C 87.6%.

4.5.2 Household income

This study sought to establish the influence of household income on the oil project implementation in Turkana, Kenya. The results are given in Table 4.11.

Table 4.11: Household income

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	1	25	2	50	57	58.8
High	2	50	1	25	30	30.9
Low	1	25	1	25	8	8.2
Very low	0	0	0	0	2	2.1
Total	4	100	4	100	97	100

Majority of the respondents considered household income as having high influence in the implementation of the oil drilling project in Turkana with Category A having 25%, Category B 50% and Category C 58.8%.

4.5.3 Livelihood changes

This study sought to establish the influence of livelihood changes on the oil project implementation in Turkana, Kenya. The results are given in Table 4.12.

Table 4.12: Household income

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	0	0	0	0	23	23.7
High	2	50	2	50	48	49.5
Low	1	25	2	50	21	21.7
Very low	1	25	0	0	5	5.1
Total	4	100	4	100	97	100

A high number of the respondents considered livelihood changes as having high influence in the implementation of the oil drilling project in Turkana with Category A having 50%, Category B 50% and Category C 49.5%.

4.5.4 Infrastructure development

This study sought to establish the influence of infrastructure development on the oil project implementation in Turkana, Kenya. The results are given in Table 4.13.

Table 4.13: Infrastructure development

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	3	75	4	100	56	57.7
High	1	25	0	0	38	39.2
Low	0	0	0	0	3	3.1
Very low	0	0	0	0	0	0
Total	4	100	4	100	97	100

Majority of the respondents considered infrastructure development as having very high influence in the implementation of the oil drilling project in Turkana with Category A having 75%, Category B 100% and Category C 57.7%.

4.6 Security Factors and Implementation of Oil Drilling Project

The study sought to establish the influence of security factors on implementation of oil drilling project in Turkana County by ranking them as very high, high, low and very low. The security factors investigated were cattle rustling; police presence; community clashes and personal security. The results are as below:

4.6.1 Cattle rustling

This study sought to establish the influence of cattle rustling on the oil project implementation in Turkana, Kenya. The results are given in Table 4.14.

Table 4.14: Cattle rustling

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	2	50	4	100	50	51.5
High	2	50	0	0	29	29.9
Low	0	0	0	0	15	15.5
Very low	0	0	0	0	3	3.1
Total	4	100	4	100	97	100

Majority of the respondents considered cattle rustling as having very high influence in the implementation of the oil drilling project in Turkana with Category A having 50%, Category B 100% and Category C 51.5%.

4.6.2 Police presence

This study sought to establish the influence of police presence on the oil project implementation in Turkana, Kenya. The results are given in Table 4.15.

Table 4.15: Police presence

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	0	0	0	0	24	24.7
High	2	50	1	25	26	26.8
Low	2	50	2	50	30	30.9
Very low	0	0	1	25	17	17.6
Total	4	100	4	100	97	100

An average of the respondents considered police presence as having low influence in the implementation of the oil drilling project in Turkana with Category A having 50%, Category B 50% and Category C 30.9%.

4.6.3 Community clashes

This study sought to establish the influence of community clashes on the oil project implementation in Turkana, Kenya. The results are given in Table 4.16.

Table 4.16: Community clashes

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	3	75	3	75	59	60.8
High	1	25	1	25	28	28.9
Low	0	0	0	0	10	10.3
Very low	0	0	0	0	0	0
Total	4	100	4	100	97	100

Majority of the respondents considered community clashes as having very high influence in the implementation of the oil drilling project in Turkana with Category A having 75%, Category B 75% and Category C 60.8%.

4.6.4 Personal security

This study sought to establish the influence of personal security on the oil project implementation in Turkana, Kenya. The results are given in Table 4.17.

Table 4.17: Personal security

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	2	50	2	50	49	50.5
High	2	50	2	50	21	21.7
Low	0	0	0	0	23	23.7
Very low	0	0	0	0	4	4.1
Total	4	100	4	100	97	100

An average number of the respondents considered personal security as having very high influence in the implementation of the oil drilling project in Turkana with Category A having 50%, Category B 50% and Category C 50.5%.

4.7 Stakeholder involvement and Implementation of Oil Drilling Project

4.7.1 Respondents opinion on Stakeholder involvement

Respondents were asked whether or not they believed the relevant stakeholders have been adequately involved in the implementation of the oil drilling project.

Table 4.18: Stakeholder involvement

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Yes	1	25	0	0	12	12.4
No	3	75	4	100	87	87.6
Total	4	100	4	100	97	100

Majority of the respondents believed that the stakeholders have not been adequately involved in the implementation of the oil drilling project in Turkana with Category A having 75%, Category B 100% and Category C 87.6%.

The study also sought to assess the influence of stakeholder involvement on implementation of oil drilling project in Turkana County by ranking them as very high, high, low and very low. The aspects of stakeholder involvement investigated were awareness level; participation level and access to information. The results are as below:

4.7.2 Awareness level

This study sought to establish the influence of stakeholders' awareness level on the oil project implementation in Turkana, Kenya. The results are given in Table 4.19.

Table 4.19: Awareness level

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Freq	Percent	Freq
Very high	3	75	3	75	69	71.1
High	1	25	1	25	23	23.7
Low	0	0	0	0	5	5.2
Very low	0	0	0	0	0	0
Total	4	100	4	100	97	100

Majority of the respondents considered awareness level as having very high influence in the implementation of the oil drilling project in Turkana with Category A having 75%, Category B 75% and Category C 71.1%.

4.7.3 Participation level

This study sought to establish the influence of stakeholders' participation level on the oil project implementation in Turkana, Kenya. The results are given in Table 4.20.

Table 4.20: Participation level

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	3	75	4	100	78	80.4
High	1	25	0	0	9	9.3
Low	0	0	0	0	8	8.2
Very low	0	0	0	0	2	2.1
Total	4	100	4	100	97	100

Majority of the respondents considered participation level as having very high influence in the implementation of the oil drilling project in Turkana with Category A having 75%, Category B 100% and Category C 80.4%.

4.7.4 Access to information

This study sought to establish the influence of stakeholders' access to information on the oil project implementation in Turkana, Kenya. The results are given in Table 4.21.

Table 4.21: Access to information

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Very high	4	100	3	75	53	54.6
High	0	0	1	25	33	34.0
Low	0	0	0	0	8	8.2
Very low	0	0	0	0	5	5.2
Total	4	100	4	100	97	100

Majority of the respondents considered access to information as having very high influence in the implementation of the oil drilling project in Turkana with Category A having 100%, Category B 75% and Category C 54.6%.

4.8 Successful oil project implementation in Turkana

Respondents were asked to state whether they believe the oil drilling project will be successfully implemented. This was to establish their knowledge of the project performance objectives. The aspects of project implementation investigated were project time, project cost and project scope. The results are as below:

4.8.1 Project cost

This study sought to establish the respondents' opinion on the project cost aspect of the oil drilling project in Turkana, Kenya. The researcher sought to establish whether the respondents opinion of the likelihood of the project being successfully implemented within budget. The results are given in Table 4.22.

Table 4.22: Project cost

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Freq	Percent	Freq
Yes	2	50	3	75	70	72.2
No	1	25	1	25	21	21.6
Not sure	1	25	0	0	6	6.2
Total	4	100	4	100	97	100

Majority of the respondents believed that the oil drilling project in Turkana will be implemented within budget with Category A having 50%, Category B 75% and Category C 71.1%.

4.8.2 Project time

This study sought to establish the respondents' opinion on the project duration aspect of the oil project in Turkana, Kenya. The results are given in Table 4.23.

Table 4.23: Project time

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Yes	2	50	2	50	54	55.6
No	1	25	1	25	15	15.5
Not sure	1	25	1	25	28	28.9
Total	4	100	4	100	97	100

Majority of the respondents believed that the oil drilling project in Turkana will be implemented on time with Category A having 50%, Category B 50% and Category C 55.6%.

4.8.3 Project scope

This study sought to establish the respondents' opinion on the project scope aspect of the oil project in Turkana, Kenya. The results are given in Table 4.24.

Table 4.24: Project scope

	CATEGORY A		CATEGORY B		CATEGORY C	
	Freq	Percent	Freq	Percent	Freq	Percent
Yes	1	25	0	0	13	13.4
No	1	25	1	25	27	27.8
Not sure	2	50	3	75	57	58.8
Total	4	100	4	100	97	100

Majority of the respondents are not sure whether the oil drilling project in Turkana will be implemented if full scope with Category A having 50%, Category B 75% and Category C 58.8%.

CHAPTER FIVE

SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter, a summary of the findings of the study are presented and conclusions made from them. Recommendations based on the study findings and conclusions are also made. Finally, suggestions for further research are made.

5.2 Summary of findings

The study targeted a sample of 121 respondents out of which 105 filled and returned the questionnaires giving a response of 86.8%. The males made the majority of the respondents at 72.4% and the females at 27.6%. In terms of the age distribution, 34.1% of the respondents were aged between 21-30 years of which 77.3% were category C. 34% of the respondents were aged between 41-50 years of which 50% were category A and another 50% category B. 25% of the respondents were aged 50 years and over, 5.2% aged between 31-40 years with the remaining 1.7% aged 20 years and below. The level of education of the respondents was also considered in this study where 38.7% had a high school certificates followed by those who had undergraduate degrees at 26.7%. 25.9% of the respondents had diploma level education with only 8.7% having masters' degree. For the marital status, 64.7% of the respondents were married, 18% widowed and 17.3% single. None of the respondents were separated or divorced.

From this study it was found that the vegetation and topsoil removal had the greatest influence on the implementation of the oil drilling project in Turkana, Kenya among the environmental factors analyzed at 69.1%. However, for the individual categories, dust and fumes was most influential for Category A (75%), oil spillage was most influential for Category B (75%) whereas vegetation and top soil removal was most influential for Category C (82.4%). This was followed by oil spillage at 64.7% in that the respondents considered oil spillage to be very sensitive environmental concern that can adversely affect the implantation of the oil drilling project. Chemical usage and deposition was considered as having least influence at 47.4%.

As regards influence of the economic factors, the study found that employment had the greatest influence on the implementation of the oil drilling project in Turkana, Kenya at 87.5%. For the individual categories, category A and category C considered employment as most influential at 100% and 87.6% respectively whereas category B considered infrastructure development as most influential at 100%. This was followed by infrastructure development 77.6%. Household income was considered least influential at 44.6%.

When asked about the influence of security factors on the implementation of oil drilling project in Turkana, Kenya, community clashes was ranked as the most influential at 70.3%. For the individual categories, category B and category C considered community clashes as most influential at 75% and 60.8% respectively whereas category A considered cattle rustling as most influential at 100%. This was followed by cattle rustling at 67.2%. Police presence was considered least important factor at 43.6%.

When asked about the influence of stakeholder involvement on the implementation of oil drilling project in Turkana, Kenya, participation level was ranked as the most influential at 85.1%. This was true for all categories. This was followed by access to information at 76.5%. Awareness level was considered least important factor at 77.7%. Majority of the respondent, at 87.5%, believed the various stakeholders have not been adequately involved.

Generally, most respondents believed that the oil drilling project will be implanted on schedule and within budget at 51.9% and 65.4% respectively. However majority, at 61.3%, were not sure about the scope of the project being attained. The respondents were also asked what other factor they considered key when it comes to the implementation of the oil drilling project in Turkana, Kenya. Majority at 70.5% noted project sustainability as being a key factor when considering successful project implementation.

5.3 Discussions

5.3.1 Influence of environmental factors on implementation of oil drilling project

It emerged that for the entire environmental factor there were disparities in the percentages. For instance whereas oil spillage was rated at 50% in Category A, it was rated at 75% in Category B. This contrast with the UNDP (2006) reports that much of the environmental

pollution in the oil-bearing areas is the result of oil spillage due, essentially, to accidents based on human error and equipment. In Nigeria, oil spillage is also the most common and controversial of all the environmental impacts of oil exploitation (Adewuyi, 2001). This contrast can be attributed to the fact that oil drilling in Kenya is still at the exploration and appraisal stages while oil spillage is mostly experienced during production and transportation in oil pipelines. Both studies however oil drilling projects (both exploration and development) pose enormous environmental concerns that if not addressed can significantly influence the implementation of the respective projects.

In general vegetation and topsoil removal was considered as the most influential environmental indicator that affects the oil drilling project in Turkana, Kenya. This was followed by oil spillage, dust and fumes, cutting disposals and finally chemical usage in that order.

5.3.2 Influence of economic factors on implementation of oil drilling project

Employment was considered as the most influential factor in this category while the household income was the least influential. This compares to other studies done in other places. In Delta state, youths have been known to demand development levy for the land occupied and employment for community youths from oil companies and other firms. The youths have been known to harass and disrupt operations of several companies to compel employment of community youths (Abubakar 2003).

Oil finds in any country is associated with a lot of expectations from the indigenous community. Turkana has been marginalized for long with perennial clashes for water and pastures with the neighbouring communities. Most community members, at 38.7% of the respondents, only have high school education as the highest qualification and most have not had any formal employment. This is the reason other factors such as infrastructure development at 77.6%, livelihood changes at 49.8% and household income at 44.6% all come behind employment at 87.5% as the most influential economic factor which can and will influence the implementation of oil drilling project.

5.3.3 Influence of security factors on implementation of oil drilling project

Community clashes were considered as the most influential factor followed by cattle rustling, personal security and finally police presence in that order. Marginalization of

Turkana and other Northern parts of Kenya has seen rise in armed locals who have been engaging in banditry and other crimes. Cattle rustling at 67.2% was the second most influential security factor cited by the respondents and is what contributes to the community clashes which was cited as the most influential security factor to affect the implementation of oil drilling project.

A study conducted in Nigeria to examine the effects of oil and gas exploration and production in the Niger Delta region suggested that since the underlying issues are neglect, marginalization and the peoples' quest for economic justice, policy makers should improve productive activities and ensure the security and welfare of the citizens. The study also intimated that the negative impacts of the oil and gas exploration and production in the Niger Delta region do not end on the biophysical environment alone but also affect the wellbeing of the people including their security. A very strong indicator of insecurity in the Niger Delta of Nigeria is excessive State violence and spiralling conflicts by the people. This state of violence takes several forms: harassment, arrest and detention of community leaders; abduction and kidnapping of oil workers by restive youths; conflict among communities and direct repression using armed forces and police. Another indicator of insecurity is poverty. Poverty headcount indicate that over 58% of the population, mainly made up of the Niger Delta people, in the South-South zone of Nigeria are poor. (Chukuezi, 2003)

This compares with the findings of this research where in general community clashes and cattle rustling were of great importance. This can be attributed to changing economic fortunes of the communities where cattle rearing are becoming less attractive and demand for the cattle still remains high.

5.3.4 Influence of stakeholder involvement on implementation of oil drilling project

87.6% of the respondents suggested that the stakeholders have not adequately involved in the implementation of the oil drilling project in Turkana, Kenya. Participation levels at 85.1% emerged as the top factor that influences oil project implementation. The participation according to the respondents includes attending strategic meetings, meeting with IOC executives, taking up managerial jobs among others. Most of the respondents pointed out that they have been left out of crucial stages of the project that could have taken care of some of

their concerns. Other factors under stakeholder involvements considered by the study were access to information and awareness level with 76.5% and 73.7% respectively of the responses.

Similar studies have been conducted by Shift, an independent non-profit centre for business and human rights practice, and a paper on Stakeholder Engagement and the Extractive Industry under the OECD Guidelines for Multinational Enterprises published. The OECD guidelines indicate “local communities” as groups that are potentially affected by a company’s operations. Workers can also be affected stakeholders. Management of expectations is crucial in stakeholder engagement. Poor stakeholder engagement is cited as an important issue in a large proportion of case studies about the conflicts between local communities and the extractive industry. In a recent study on these conflicts, consultation and communication issues were cited as a proximate or underlying issue for the conflict in 18 out of 25 case studies reviewed. (Davis & Franks, 2011).

These studies compares with the findings of this research that stakeholder engagement is an important issue that must be addressed by the IOC to avert the conflicts between local communities and the extractive industry thereby affecting the oil drilling process.

5.4 Conclusions

From this study we can conclude that no single factor can be considered as the only important factor that influences the implementation of oil drilling project in Turkana, Kenya. We can also conclude that the preferences for each Category of respondents are unique but economic factors and stakeholder involvement can with a high degree of certainty be considered as factors that are most influential because all the categories considered them as the two most important factors.

5.5 Recommendations of the study

The following recommendations were put forward based on the findings of this study.

- i. The Kenyan government and stakeholders in the oil and gas sector should work together to ensure smooth implementation of the oil and gas projects in the country.

- ii. There is need for information to be made available to all stakeholders and any decisions made that impact on the community must involve all relevant stakeholders.
- iii. The oil companies must continue to invest more in the community especially on economic empowerment projects in order for the community to appreciate and feel part of the of the project.

5.5.1 Suggestions for further studies

The following suggestions are made for further studies:

1. Further research needs to be carried out to establish the extent to which each factor affects the oil drilling project in Turkana and also in other oil bearing regions in Kenya.
2. More studies needs to be conducted in other oil bearing regions in Kenya.

5.6 Contribution to the body of knowledge

The study adds to the existing body of knowledge on influence of project implementation and may be useful to both the Ministry of Energy and the oil companies in formulating policies that will seek to mitigate the effects of these factors.

REFERNCES

- Abubakar, S. (2003). Will Danjuma Committee Report aid Warri Crisis. Daily Independent, 30 September, 2003. Lagos.
- Achu, N. & Mdlongwa, T. (2012). The Heglig Oil Conflict: An Exercise of Sovereignty or an Act of Aggression, *African Institute of South Africa (AISA)*, 1(1), 3-4.
- Adewuyi, A. (2001). The Implications of Crude Oil Exploitation and Export on the environment and level of Economic Growth and Development in Nigeria. *A Paper Presented at Nigerian Economic Society Annual Conference*. 119-145.
- Addison, T., P. Billon, L., & Murshed, S. M., (2003). Conflict in Africa: The cost of Peaceful Behaviour. *Journal of African Economics*, 11(3), 365-86
- African Network for Environment and Economic Justice - ANEEJ. (2004). *Oil of Poverty in Niger Delta*. Benin City: Author
- Auty, R. M. (2001) *Reforming Resource-Abundant Transition Economies: Kazakhstan and Uzbekistan*, in *Resource Abundance and Economic Development*. Oxford: Oxford University Press, 260-276
- Aworawo (2000). "The Impact of Environmental Degradation of the Rural Economy of the Niger Delta" in Osuntokun and Akinjide (eds.) *Environmental problems of the Niger Delta*. Lagos: Friedrich Ebert Foundation
- Azaiki, S. (2003). *Inequities in Nigerian Politics*. Yenagoa: Treasure Communications Resource Limited
- Beblawi, H. A., & Luciani, G. (1990). The Rentier State in the Arab World, in Luciani, G., *The Arab State*, London, Routledge.
- Boulding, K. E. (1989). *Three Faces of Power*. Newbury Park, California: Sage Publications.
- British Council. (2011). *Conflict Mapping: An insider's perspective*. Nairobi: Author

- Bromeley et al. (2006). *The International Politics of Oil*. Oxford, UK: St Anthony's international Review, St. Anthony's College.
- Brown R. B. (2006). *Doing Your Dissertation in Business and Management: The Reality of Research and Writing*. Washington, DC: Sage Publications
- Buzan, B. (1983). *People, States and Fear: The National Security Problem in International Relations*. London: Harvester Wheatsheaf.
- Caxton, E. (2010). *Oil Conflict-Livelihood Nexus: A Case of Amuru District, Uganda*. Florida, USA: Boca Raton.
- Charmaz, K. (1983). *The grounded theory method: An explication and interpretation, in Contemporary field Research*: Boston: Little, Brown and Company.
- Colgan, J. D. (2013). *Petro-Aggression: When Oil Causes War*. New York: Cambridge University Press.
- Collier, P. (1999). On the Economic Consequences of Civil War, *Oxford Economic Papers*, (51), 168-83.
- Collier, P. & Hoeffler, A. (2005). Resource Rents, Governance, and Conflict, *Journal of Conflict Resolution* 49(4): 625–33
- Collins, A. R. (2007). *Contemporary Security Studies*, Oxford: Oxford University Press.
- Davis, R., & Franks, M. D. (2011). *The cost of conflict with local communities in the extractive industry*. Chile: SRMining2011
- EIA. (2006, March). Nigeria country analysis brief. Retrieved from <http://www.eia.doe.gov/emeu/cabs/Nigeria/Full.html>

Fearon, J. D. (2005). Primary Commodities Exploits and Civil War. *Journal of Conflict Resolution*, 49(4): 483-507.

Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman Publishing

Gary, I., & Karl, T. L. (2003). *Bottom of the Barrel: Africa's Oil boom and the poor*. Baltimore: Catholics Relief Services.

Mohamud, A. & Ruto, P. (2006). *Conflict Management in Kenya: Towards Policy and Strategy Formulation*. Nairobi: Practical Action.

http://en.wikipedia.org/wiki/Turkan_County (Accessed on 28th May 2014)

Humphrey, M. (2005). Natural resources, conflict, and conflict resolution: Uncovering the mechanism. *Journal of Conflict Resolution*, 49 (4): 508-37.

Ikein, A. (1991). *The Impact of Oil on a Developing Country: The Case of Nigeria*. Ibadan, Nigeria: Evans Brothers Press.

Ikelegbe, A. (2005). The economy of conflict in the oil rich Niger delta region of Nigeria. *Nordic Journal of African Studies*, 14(2), 208-234.

Ikporukpo, O. (1983). Petroleum Exploitation and the Socio-economic Environmental Justice in Nigeria, *Journal of Space and Policy*, 8 (3).

Kaldor, M. (1999). *New Wars: Organized Violence in a Global Era*. Cambridge: Polity Press.

Kamp, M. (2012). Oil production in a social market economy – Perspectives for Uganda, *Konrad Adenauer Stiftung Publication*, 11-15.

Kaplan, R. (1994, February). The Coming Anarchy. *Atlantic Monthly*, p. 6.

- Karl, T. L. (1997). *The Paradox of Plenty: Oil Booms and Petro-States*, Berkeley, Los Angeles and London: California: California University Press
- Kenya Electricity Generating Company Ltd - (KenGen), (2003); Olkarai II Geothermal Power Project: Environmental Reports
- Kothari, C. R. (2004). *Research methodology. Methods and techniques*. New Delhi: New Age International (P) Limited Publishers.
- Magstadt, M. (2006). *Understanding Politics, Ideas, Institutions and Issues*. USA: Thomas Wadsworth.
- Merrow, E.W. (2011). *Industrial Megaprojects: Concepts, Strategies, and Practices for Success*. New Jersey, USA: John Wiley & Sons.
- Morakinyo T. and Odigha O. (2009). *The Niger Delta and oil exploration, Nigeria: lessons learned*. Lagos: Ecosystem Market Place.
- Mugenda, O. M. & Mugenda, A. G. (2003). *Research methods. Quantitative and qualitative approaches*. Nairobi: Acts Press.
- Nafzinger, W., & Auvinen, J. (1996). Economic Development, Inequality, War and State Violence, *World Development*, 30, pp. 11.
- National Oil Corporation of Kenya (NOCK). (2015). *Oil and Gas Exploration*. Retrieved from <http://www.nationaloil.co.ke/site/3.php?id=1>
- Olanya, D. R. (2012). Resource curse, Staple Thesis and Rentier Politics in Africa,
- Orubu, C., Odusola, A., & Ehwarieme, W. (2004). The Nigerian Oil Industry: Environmental Diseconomies, Management Strategies and the Need for Community Involvement, *Humanities and Ecological*, 16 (3), 203 – 214.

- Poteete, A.R. (2009). Is Development Path Dependent or Political? Reinterpretation on of Mineral-Dependent Development in Botswana. *Journal of Development Studies*, 45(4), 544-571.
- Ross M. I. (2003). Oil, Drugs and Diamonds, The varying role of National Reserves and Civil War. In *The Political Economy of Armed Conflict: Beyond Greed and Grievance*. In B. Karen & J. Sherman (Eds.), Boulder, Co: Lynne Reiner (pp. 47-60).
- Sachs, J. D. & Warner A.M. (1995). Natural Resource Abundance and Economic Growth, Discussion Paper 517a. Harvard Institute of International Development: Cambridge, MA
- Slevin, D. P. and Pinto, J. K. (1986). The Project Implementation Profile: New Tool for Project Managers. *Project Management Journal*, Vol. 18, pp. 57-71.
- Shelley T. (2005). *Oil: Politics, Poverty and the Planet*: London: Zed Books Ltd, 2005
- Termeer, C. (2013). *Oil and gas exploration and drilling operations*. Texas: Chris Termeer Publishing.
- UNDP, (2006). Niger Delta Human Development Report Garki, Abuja: Author.
- Watkins, M. (1963). A Staple theory of Growth. *Canadian journal of Economics and Political Science*, 29(2), 141-158.
- Watts, M. (1999). *Curse of the Black Gold: 50 years of Oil in the Niger Delta*. Brooklyn, Powerhouse Books.
- World Bank Reports (1995). *Defining and Environmental Strategy for the Niger-Delta 1 (2)* Washington, DC: Author.
- Yates, D. A. (1996). *The Rentier State in Africa: Oil rent dependency and neo-colonialism in the Republic of Gabon*. Eritrea: Trenton NJ African World Press, Inc.

Yergin, D. (1991). *The Prize: The Epic Quest for Oil, Money, and Power*. New York: Simon & Schuster, Inc.

APPENDICES

Appendix I: Letter of transmittal

Nickson Owiti Karewa,

P O Box 29615 – 00100,

Nairobi, KENYA

10th May 2015.

TO WHOM IT MAY CONCERN

Dear Sir/Madam

RE: REQUEST FOR PARTICIPATION IN A RESEARCH STUDY

I am a Postgraduate student at the University of Nairobi, pursuing a Master's degree in project Planning and Management. As partial fulfillment for the degree I am conducting a research study on "Influence of Project Implementation in Kenya: A case of Oil Drilling in Turkana County".

Therefore I would appreciate if you could spare a few minutes of your time to answer the following questions in regard to the Influence of oil drilling project implementation in Turkana, Kenya. All the information provided will be purely used for academic purposes and your identity will be treated with utmost confidentiality.

Your assistance will be highly appreciated and thank you in advance.

Yours faithfully,

Nickson Karewa

L50/62484/2013

Appendix II: Questionnaire on Influence of Project Implementation.

IMPORTANT NOTE:

Information provided through the questionnaire will be treated with confidentiality and will be exclusively for academic purpose. All answers will be considered right.

INSTRUCTION:

- i. Do not write your name on the questionnaire.
- ii. Please read each question carefully.
- iii. Kindly answer all the questions by ticking or filling in the spaces provided.

SECTION ONE: BACKGROUND INFORMATION

1. Gender: Male Female

2. Category Represented:
i) Local Administrators ii) Community Representative iii) Employees

3. Age: i) 20 years and below ii) 21- 30years ii) 31-40 years
iii) 41 – 50years iv) Over 51 years

4. Marital Status:
i) Single ii) Married iii) Widowed iv) Separated

5. Level of Education
i) Masters ii) Undergraduate iii) Diploma iv) High School
iii) other please specify? _____

SECTION TWO: FACTORS AFFECTING OIL PROJECT IMPLEMENTATION

Please mark with a Tick in the applicable box with regard to the Influence of oil drilling project implementation.

A. Environmental Factors

1. How would you rate the effect of the following environmental factors on project implementation? Please Tick

	Very Low	Low	High	Very High
Vegetation and topsoil removal				
Cuttings disposal				
Oil Spillage				
Dust and fumes				
Chemical usage and disposals				

B. Economic Factors

1. In your opinion, how would you rate the impact on the livelihoods of communities as a consequence of the Project implementation in as far as the following are concerned? Please Tick

	Very Low	Low	High	Very High
Employment				
Household Income				
Livelihood changes				
Infrastructure development				

C. Security Factors

1. How would you rate the effect of the following security issues on project implementation? Please Tick

	Very Low	Low	High	Very High
Cattle rustling				
Community clashes				
Police presence				
Personal security				

D. Stakeholder Involvement

1. In your opinion, do you believe that the various stakeholders have been adequately involved in the project? Please tick one box

YES NO

2. If No how would you rate stakeholder involvement in the following aspects of the project? Please Tick

	Very Low	Low	High	Very High
Awareness level				
Participation level				
Access to information				

E. Successful Project Implementation

1. Do you believe that the project will be implemented in:

	Yes	No
i. Time		
ii. Cost/Budget		
iii. Within set scope		

2. What other factor do you consider important in the oil drilling project implementation?

Thank you very much for your time and participation!

Appendix III: Map Showing Oil Blocks

