University of Nairobi

CHANGE IN GENDER ROLES AS A FACTOR IN GENDER PARTICIPATION AND EMPOWERMENT IN THE OIL MINING INDUSTRY: A CASE OF LOKICHAR, TURKANA COUNTY, KENYA

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A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE AWARD OF DOCTOR OF PHILOSOPHY IN THE DEPARTMENT OF SOCIOLOGY, SOCIAL WORK AND AFRICAN WOMEN STUDIES, FACULTY OF ARTS AND SOCIAL SCIENCES IN THE UNIVERSITY OF NAIROBI

SEPT, 2023

DECLARATION

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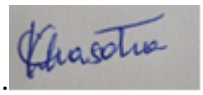
Signature: ……  …….. Date: …23rd Sept 2023……

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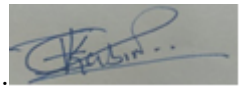
Signature: ……  …… Date: …23rd Sept 2023…….

Dr. Joseph Kabiru

DEDICATION

I dedicate this work to my children and my late husband Geoffrey Nyambane for their continued patience and moral support during the entire process motivating me to complete the entire thesis.

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AA	Affirmative Action
ATM	Automated Teller Machine
CEDAW	Convention on the Elimination of All forms of Discrimination against Women
CGD	Centre for Governance and Development
CLO	Community Liaison Officer
COM	Chamber of Mines
CRS	Corporate Social Responsibility
EI	Extractive Industry
FGD	Focus Group Discussion
GAD	Gender and Development
GDP	Gross Domestic Product
GOK	Government of Kenya
HIV/AIDS	Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome
IFC	International Finance Corporation
KNBS	Kenya National Bureau of Statistics
KII	Key Informant Interview
KPC	Katrim Prima Coal
LAPSSET	Lamu Port South Sudan Ethiopia Transport Corridor
MCA	Member of County Assembly
MDGs	Millennium Development Goals
MP	Member of Parliament
NACOSTI	National Commission for Science Technology and Innovation
NGO	Non-Governmental Organisation
PPE	Personal Protective Equipment
SACCOs	Savings and Credit Cooperative Societies
SDG	Sustainable Development Goal
UNECA	United Nations Economic Commission for Africa
VLO	Village Liaison Officer

ABSTRACT

The descriptive aspect of this study suggests that gender roles in the oil mining industry be revised. Women have the opportunity to be empowered and involved in the production and processing of oil. The main objective of the study was to ascertain how women's empowerment and involvement in Lokichar's oil mining have affected gender roles. The study's sub-objectives were to ascertain whether gender roles had altered as a result of oil mining and whether oil mining enterprises in Lokichar hired men and women equally. The study also examined how oil has impacted the means of sustenance for both men and women in Lokichar and tried to ascertain the extent to which attitudes toward gender equality and women's empowerment have altered as a result of oil mining. The concepts of gender relations, conflict, and innovation dissemination served as the foundation for this study. The target group comprised retirees between the ages of 15 and 64 as well as individuals who were currently working in the oil mining industry. The study employed both qualitative and quantitative data collection techniques. Data was collected from a sample of 300 respondents who were selected through deliberate and systematic random selection methods. To supplement the questionnaires given to the sampled respondents, focus group discussions (FGD) and in-depth interviews were conducted to complete the survey data. The main key informants and focus group members were selected through the use of purposeful sampling, while household interviews with respondents who filled out questionnaires were conducted using systematic random sampling. Cross tabulation was performed on the responses to display the gender-based differences and the Chi-square of association used to test the hypotheses. Significant findings point to a relationship between equitable hiring practices and job possibilities for men and women in Lokichar's mining industry. Furthermore, there was a correlation between involvement in oil mining operations and a change in the means of subsistence. The ultimate determination was that there is no connection between involvement in oil mining activities and equitable job prospects for both genders in the mining industry. The other findings were that local males were more likely to be employed than local women, and that gender roles had changed, with men adopting jobs that were traditionally thought of as men's duties and women taking positions that were thought of as women's. One of the study's primary recommendations is to mainstream gender issues in legislative proposals, laws, and initiatives. The implementation of gender rules in this industry needs to be done with more goodwill, and it needs to be ensured that gender audits and Quality Assurance checks are conducted as necessary. Male participation in all issues of gender equality in the mining industry is more crucial. The results not only supplement the scant data on the Kenyan mining industry, but they also inform stakeholders (such as the government and oil firms) about how to develop and enact gender-sensitive policies that will promote female involvement and empowerment.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Women have historically been involved in the mining industry in many different capacities and throughout numerous countries, despite the fact that they may lag behind men in terms of gender involvement. Geographically, women's involvement in the extractives sector has differed from place to place. Asian women miners have historically performed important roles in Japan and India, claim Lahiri-Dutt and Burke (2011). They present a convincing picture of Asian women's active involvement in mining history while addressing the various difficulties and problems that women have faced and still face.

Women were vital to the growth of Mexico's silver industry in the seventeenth and eighteenth century. in conformity with the evaluation made by Murillo (2013). Her conclusion that "mining towns and other communities that developed in northern Mexico, and in other unsettled areas of Latin America, could not have formed, persisted, or prospered without the presence and labor of women of all ages and ethnicities" (Murillo 2013) demonstrated the importance of their labor to the ancillary economy, even though she was unable to find any evidence that women worked in mines. Murillo strengthens his argument by drawing the conclusion that without the contributions provided by women, the old Mexican silver mining industry would not have been able to survive. Because they are unable to participate directly, women frequently assume complementary positions in the extractive sectors. Lahiri and Murillo gave examples of the value of women in the mining industry, which is predominately male.

According to Sanjay (2010), men in Australia's Bowen Basin coal mining enjoy a competitive advantage over women. According to the study's findings, a variety of factors may have an impact on the lives of women in isolated Australian mining towns. These factors, which prevent individuals from participating in the mining process in Bowen Basin, include the difficult structural and climatic conditions of the mining regions, physical separation from family and friends, a lack of opportunities and resources, and the normal work schedule of mining occupations. For dependent women, they have no option to but adhere to the cultural ethos observed in the mining communities. Additionally, there is strong anecdotal evidence that reveal that within the mining

communities, divorce rates are very high. Conflict of home and work balance together with the cultural expectactions of roles and values deter women from actively participating in the oil mines. This is because women tend to feel that they are failing in their traditional roles as expected by culture when they concentrate on their work in the oil mining industry. In a similar vein, Lahiri-Dutt's (2013) research noted that women were infrequently employed in India's organized mining industry, whether in private or public mines. In the private, small, and unorganized mining sector in India, there were more women working in daily wage jobs like cleaning, stone breaking, and head loading. 30% of the world's mineral reserves, including large oil and gas deposits, are located in Africa, according to Bergman et al. (2017). The time is now for Africa to benefit from these resources for growth and bettering living circumstances. On the other hand, roughly 30% of Africans, mostly women, live in poverty, according to Mususi (2015). Additionally, disadvantaged people, including women, perform the majority of the mining tasks, particularly exploration. Assessing how far along a society is in embracing economic change depends heavily on gender roles. Dlamini (2018) also highlighted the point that men have traditionally been the only ones allowed to perform subterranean digging and excavation labor, despite the fact that women make up just about 11% of the workforce in South Africa. The majority of the work that women conducted in the mining industry was surface labor, which did not involve the use of machinery or heavy equipment. Serving the mine miners, cooking, and light transport work made up the bulk of these duties.

Similar to this, Wasunna (2014) points out that men who usually inherit their families' fortune are granted royalties and compensation. This has hindered women's attempts to control resources and benefits obtained from the extractive industry. Additionally, some cultural ideals devalue women's agency. The current situation of gender equality has gotten worse as a result. Despite acknowledging the utilization of natural resources for national development, the 2014 Mining Bill ignores its gendered elements, notably in respect to resource exploitation and management. Due to their exclusion from this value chain and inability to benefit from the opportunities provided by the oil industry, women are also at a disadvantage (Ndzwayiba, 2017).

Gender disparities in the mining sector are primarily observed at the management and senior management levels. A 2013 research by Women in Mining and PwC, which found that just 5% of the top 500 mining corporations have women on their boards, supports this viewpoint. Due to the education system's entrenched patriarchal mindset, women have been purposefully pushed into other, less "technical" vocations, which has reduced the number of people who can work in mines. Women were discouraged from working in the mining sector and other physically demanding occupations due to rules requiring women to be married to be considered for positions or discharging them from their tasks due to divorce or pregnancies. The study also focused on determining how committed oil mining firms are to advancing gender equity. Only a small number of research on oil mining in Africa are from East and Central Africa, with the majority being from Sub-Saharan Africa. Research on the oil mining sector in Africa is scarce. Women were not allowed to work in South Africa's mining or defense industries until quite recently, in the late 1990s, following the country's independence (Dlamini, 2018).

Legal restrictions had kept women from contemplating careers in mining, but in the last 20 years, policies have allowed more of them to take on leadership positions. For example, section 6 of the Employment Equity Act of 1999, passed by the South African parliament, forbids sexual discrimination against job candidates. The Mineral and Petroleum Resources Development Act of 2002 was designed to impose penalties on companies that failed to reach benchmarks, such as not renewing their mining licenses, as the mining industry increasingly used Affirmative Action to hire women. The gender difference in the oil mining business has widened to an extreme degree, and shifts in this imbalance have been linked to strategies for managing the mining sector. In order to control and monitor the mining industry and ensure gender parity, the governments of South Africa, India, Nigeria, and other well-known mining nations have enacted laws, parliamentary acts, or other frameworks (Nadeau et al., 2013). India made the Mineral Policy available for states to modify to suit their own needs, be they regional or commercial. The Mineral Policy of 2006 not only gave women and other marginalized people full access to the small mining sector, but it also gave fighting illicit mining a higher priority (Lahiri-Dutt, 2018). Techno-economic efficiency has been emphasized at every stage of the oil mining process, from exploration and exploitation to logistics and even marketing, by the mining industries of South Asian countries, especially India.

Including women in the process of improving livelihoods is a step toward communal empowerment. The first step in creating pro-poor components that will succeed at the grassroots level will be to improve procedures like maintaining records and learning more about production relations, as well as to process and monitor the change process using gender-based data collection and analysis (Bahn, 2013).

The Kenyan Mining Bill 2014 lacks gendered elements, particularly on resource extraction and management, even though Article 27 (8) of the Kenyan Constitution, 2010, supports affirmative action and requires the government to pass laws and take other measures to ensure that at least one-third of appointed or elected members are from either gender. Dessler (2005) shares this view as well, believing that in order for Affirmative Action to be effective, steps must be taken to reverse the consequences of earlier prejudice. Affirmative Action, he adds, is a move that will guarantee that more women work in diverse areas, in this case the oil mining industry. Gender politics are equally present in the mining business. According to Chichester et al. (2017), efforts to maximize profitability in the mining business have been hampered by poor governance and high rates of corruption. This has prevented significant sums of money from funding public goods or services. According to a related study by UN Women (2014), the informal market, subpar mineral and market assessments, and corruption cause the African continent to lose between $50 billion and $150 billion annually. Women suffer the consequences of this, which are unfavorable. The advantages of developing social infrastructure like hospitals and schools, urbanization, and industrialization are eliminated, and corruption deepens the gender equality gap while accelerating environmental degradation.

The physical stamina of female employees (or job candidates), the availability of personal protection equipment (PPE), and the design of mining equipment may all have an impact on shifts in gender roles given the influence of oil and other mining operations (Ndzwayiba, 2017). Changes in gender roles are unlikely because of the expertise required in several mining fields, particularly excavation and drilling, which are both extremely risky. According to Botha and Cronjé (2015), women may be afraid of and discouraged from wearing bulky safety boots, gloves, overalls, and dust masks, therefore they choose to work in other mining-related fields. Heavy drilling and

excavation equipment has an impact on equipment design, and its operation does not favor women. They go on to say that the majority of the equipment is made for men to use, which makes it unpleasant for the typical female employee.

The majority of rural Kenyan women are employed in the oil industry, which interferes with their obligations to their families and makes it challenging for them to work in the mining sector. Without a balance between these two, women are forced to take on domestic responsibilities such as home keeping and childrearing, which is what society expects of them. Due to the lack of adequate work policies to support the balance between her career in the oil business and her home responsibilities, women who have given birth are occasionally forced to leave their jobs. For instance, in the rural Kenyan setting, a woman who cannot afford a nanny's services is compelled to care for her infant at home. The situation is different in industrialized nations where there are rules in place to promote an environment that is[1] beneficial for working from home. Next to the office are safe rooms where mothers can leave their small children in the care of a professional nanny, in addition to lactation rooms equipped with everything needed to express extra milk and breastfeed. The mother is able to work comfortably, take care of her responsibilities at work and at home, and pick up her child in the evening. The Centre for Governance and Development (CGD) commissioned a research in 2015 to determine the scope and effects of coal mining in Kitui County's Mui Basin. The study's conclusion that women's engagement in mining operations is restricted by their conventional roles is supported by the fact that both sexes are willing to participate, with women indicating a willingness to participate rate of 43.8% and men of 56.2%. The common perception that men predominate in the mining industry is what motivates this. However, when asked if the extraction phases could offer equal possibilities for both sexes, 50.2% of respondents said they would, while another 48.9% disagreed, demonstrating only minor statistical differences (Omia, 2015). This reflects the overall state of the various mining industries in Africa. It illustrates the necessity for mining corporations to include female participation throughout the entire extraction process in order to achieve economic success. Therefore, finding a balance between one's productive and reproductive functions is difficult.

[1] https://hbr.org/1998/05/the-alternative-place of work-changing- the place-and- the manner -employee-work

In a different defense, Soyapi and Kotzé (2017) claim that when mining is open to both sexes, roles are likely to evolve, with males taking on challenging mining tasks. There are obstacles for women to begin and maintain mining operations. Women who are skilled and ready to work in a demanding atmosphere are needed in the overwhelmingly male-dominated business. When women participate in this industry, they typically hold roles at lower levels. Women who work in mining typically hold low-level roles and deal with similar levels of intense work, familial, and financial constraints. Additionally, because most mining positions demand extensive travel from multiple areas, households are exposed to difficulties managing work-life balance and childcare, which are still traditionally the responsibilities of women (International Finance Corporation (IFC), 2009). According to a 2013 poll by Women in Mining in the UK, women make up the smallest percentage of employees on organization boards in the mining sector than in any other global industry. However, it should be noted that studies on how men's responsibilities have changed in oil mining have been scarce, particularly in East Africa.

In a different argument, Soyapi and Kotzé (2017) indicate that when mining is opened to both genders, then there are expected changes in roles with men taking difficult mining activities. There are barriers to female gender in starting and stabilizing in mining activities. The male-dominated industry needs women who are trained and willing to work in a challenging environment. In cases where women take part in this industry, they usually take lower level positions. Upon participating in mining, women end up taking low-level positions and are equally faced by major workplace, family, and financial pressures. In addition, most of the mining jobs require workers to travel long distances from various locations, which exposes households to challenges for example work-life balance and childcare, that remains to be women roles (International Finance Corporation (IFC), 2009). In 2013, a survey conducted by Women in Mining in the UK, it was established that women record the fewest number of employees in the mining sector at organizations boards than in any industry across the world. It should however be noted that changes in roles for men in oil mining has not attracted many studies especially in East Africa.

Conversely, another dimension in mining sector are the changes in gender roles for men. A study by Lawson and Bentil (2014) points that the gender roles are shifting with more

women taking up positions traditionally perceived as being for men. They opine that this shift has had a positive impact to the Ghanaian economy. The paper examines two affected communities in Asutifi District in Ghana where men have adopted roles traditionally perceived to be for women. There has been an increase in awareness of the roles and the need to embrace any gender in oil mining. Lahiri-Dutt (2015) points that "feminisation of mining" is taking place in many mining zones where men have embraced roles perceived to be of women which is an interesting scenario deviating from what is perceived a male dominated industry. In their investigation of artisanal gold mining in Uganda, Mpagi et al. (2017) discovered that both men and women actively engaged in the primary activity of exploring and excavating for gold. As both men and women labor in the sector without taking gender stereotypes into account, the research makes reference to the disappearing lines on gender roles in mining. A case study of how attitudes have changed and how willing people are to take on any task performed by a person of a different gender is women's engagement in mining. The same views are held by Bashwira et al. (2014), who observe that more women than males have taken traditionally thought of as male jobs in mining. The study was done in Democratic Republic of Congo where men were observed to have taken traditionally women's perceived roles of supplying food to the miners, embracing food service and cleaning, among others. According to opposing perspectives expressed by Soyapi and Kotzé (2017), traditional duties as primary caregivers and the notion that a woman's place is her home are among the issues preventing women from working in the oil mining industry.

Several studies around the world have addressed manliness as a normative aspect which focuses on the organisational culture hence naturalizing the distinctive formulation of manliness (Vergara 2004, and 2007; PwC, 2014; IFC, 2009). Thus, women integration into mine site in large-scale mining resulted to major transformations in different structures of the organisation. According to Lahiri-Dutt (2006), occupational segregation is a result of cultural perceptions about male and female occupations, and its effects vary depending on the type of work done and the nation where the oil mines are located. This is the reason why Affirmative Action is geared towards supporting women; for instance, in an examination executed in mining places like Uganda, Mozambique and Tanzania, which disclosed that on average, women, worked 5-8 hours

more in a day than men because of household work (Hinton, 2012). However, a great deal of study has shown how competitive women have been in the mining industry, helping to debunk the myth that mining is a field dominated by men (Mercier & Gier 2006; Lahiri-Dutt & Robinson 2008). However, there is sufficient evidence of male supremacy in the mining business worldwide. Women make up less than 5% of the workforce in the Coltan mines in Uganda (Ngendanzi, 2012). This is a result of social and cultural inequality that implies that women bring bad luck to miners, especially during menstruation.

Most women from mining communities constitute 90 percent of informal employment but do not benefit positively from mining business but get an uneven share of its burden **(**World Bank Group, 2008). In most cases, men take advantage of employment and income with formal rates of employment. Oil companies are impacting on pastoralism in the Turkana County of Kenya due to their intensive activities. The Turkanas now seek employment in the oil industry, business, farming, and charcoal burning, among other alternate fields. Their main sources of income are merry-go-rounds, Saving and Credit Cooperatives (SACCOs), and remittances from friends and relatives. Due to the loss of cattle, both men and women are now involved in a variety of income-generating activities and are leaving the traditional role of pastoralism (Barrow and Mogaka, 2007).

The findings by Omia (2015) discovered existence of a significant gender difference on land compensation, valuation issues, sensitization on how widows/ widowers undertake land succession. Additionally, participants from a female Focus Group Discussion (FGD) in this study explained their reservations on receiving inequitable share in incidences where the husband had died and land was still held jointly by the brothers of the deceased. According to the findings of a different study by Angelani (2012), benefit sharing was assessed in Nguluku, which is in Kwale, through the creation of employment opportunities, educational and training opportunities, health facilities, schools, and infrastructures like roads. According to the study's conclusions, titanium mining did not benefit 42% of respondents, the affected communities, or the project as a whole. Due to the loss of land, schools, hospitals, and water catchment areas, the project also caused substantial losses, especially for women. Additionally detrimental effects of the Nguluku titanium mining operations included soil erosion, noise, vibration, water and air pollution, health issues, and other things. The community was helpless to stop

the harm that was being done to women as a result. This argument was echoed by the Centre for Governance and Development (CGD) (2015) findings that hinted at the reality of gendered challenges in equitable benefit sharing and compensation that have had a significant impact on women and consequently produced a gender bias in community management roles. According to IFC (2020), granting women and men in the mining industry equal opportunity benefits not only families and communities, but also businesses. Even though women make up the majority of laborers and suppliers in an economy, men still dominate the mining sector. Research indicates that when companies recognize the advantages of a more diverse workforce, supply chain, and degree of community involvement, they may increase productivity, reduce expenses, and improve their social license to operate.

Kenya has discovered various minerals. These discoveries led global firms to sign Production sharing contracts (PSC) whereby Kenya government was responsible for exploration of oil. Petroleum (Exploration and Production) Act Cap 308 of Kenyan Laws. The contract for production and sharing of oil consists of the following critical components:

i. Signature Bonus: This consists of one-off fee that is payable to the government by the firm through signing a contract for oil exploration. This highly depends on the specific block area and prior data acquired from the block.
ii. A fee for the surface can be paid and computed based on the contract's surface area when the payment is due.
iii. Work program and expenditure: Contractor makes an assurance of the agreed work and the minimum level of expenditure. Originally, this recorded 15% bank guarantee as well as 85% guarantee from the mother company. However, this has been improved and firms that are newly licensed are expected to offer 50% bank guarantee and another 50% guarantee from the mother company.
iv. Oil cost: Usually this is the negotiated proportion of the cumulative crude that is produced for recouping investment costs that are incurred by the contractor when oil is explored and produced to recoup the costs of investment that are sustained by contractor. It is estimated up to 60% of the cumulative oil that is produced in the field for like 5 years.

v. Oil profits: This is oil that is left after cost of oil is deducted and shared amongst the contractor and the government for instance when the field is small the government will take 50%. Then, when the production increases the proportion of the government might increase to about 78% of the total oil profits.

vi. Profits from windfall: this is when prices from oil are higher than the threshold, the government creams off its contractors and take above the threshold by a margin of 26% of the crude oil prices.

vii. Phases of exploration: There exists three phases of exploration, 2-year each, the initial period, 1st additional phase and 2nd additional phase. For offshore blocks that are ultra-deep, the initial phase is extended to 3 years because of logistical problems found in deep water acreage.

viii. Relinquishment can be described as 25% of an area of the block for each phase. The PSC consists of a license rental fee as well as training fees.

Government has provided 175 special prospecting licenses including ten (10) leases for mining. The government also acknowledges the minerals and sands from Kwale mining project as the most promising for production of rutile, titanium and zircon (GOK, 2013). In 2012, Tullow Company had drilled over 11 wells in County of Turkana with estimated 600 million barrels of crude oil that are recoverable (CORDAID, 2015). Both domestic and national levels, exploration of oil has resulted to huge expectations of increased incomes, job opportunities and growth of business. Oil discovery has resulted to large-scale development of infrastructural plans for example The Lamu Port-South Sudan-Ethiopia Transport Corridor (LAPSSET) as suggested by Kenya government as being part of its plan for development towards the accomplishment of Vision 2030.

In marginalized areas of Northern Kenya particularly the County of Turkana, exploration of oil is also referred to as a potential game-changer that could result to generation of desired revenue so as to ensure basic service delivery. Exploration of oil has also developed anxieties among the local communities due to increasing competition for grazing fields, water, resource distribution, jobs as well as high speculation risks and corruption (CORDAID, 2015). Nonetheless, it is critical to appreciate the disruptions that come with new mining sectors that could result to

changes in gender roles so as to craft strategies that can positively deal with these disruptions.

1.2 Problem Statement

The potential benefits of including women in the value chains for minerals, gas, and oil are enormous, and it takes into consideration challenges that are now ignored by the community. Women and men have diverse requirements and opportunities throughout the cycle of exploration, contracting and licensing, operations and extraction, value addition, tax and royalty collection, revenue distribution, and administration (UN-Women, 2014). According to Women in Mining (2013), the Mining Bill (2014) acknowledges the use of natural resources for national development but ignores the gendered aspects of this use, particularly with regard to resource extraction and management. Men predominate in this industry. In this male-dominated industry, matters like remuneration, decision-making, royalty sharing, and power connections are rarely openly addressed, leaving opportunity for personal interpretation. This affects gender equity, change in livelihoods for both genders and eventually the realization of gender equality. Additionally, there is need to provide a mechanism of sharing of benefits and compensation in a gendered aspect since this is not provided by the Mining Act 1940 nor is there an elaborate way of doing this provided in the Mining Bill 2014. For instance, the Mining Bill 2014 is silent on how the 10% royalty is to be managed by the community in its role in the gender aspect. Lack of direction of gendered aspect has become a major source of conflict in community management role in terms of sharing of benefits and compensation given that Africa is patriarchal by nature.

The majority of the community's power structures are patriarchal. A council of elders made up solely of men, for example, handles land-related disputes and discussions. Youth and women are hardly ever present at these sessions (Omolo, 2014). The ability of chiefs, who are overwhelmingly men, and government officials to make decisions is restricted (FAO, 2017). This directly affects the mining industry, which contributes significantly to global wealth and employs a large proportion of women worldwide. The purpose of the study was to ascertain whether the oil mining businesses promoted gender equity in this regard.

The aspect of gender role in terms of equitable benefit and compensation exists in Kenya but the gendered aspect is not well spelt in existing policies and therefore marginalizing women since our society is patriarchal by nature. Therefore, there is evidence that roles related to community administration, production, and reproduction are changing in the mining business. Marginalized women can attain economic empowerment through enhanced funding, funding for capacity building, funding elimination of discriminatory employment practices, and women's involvement in local decision-making (Eftimie, Heller & Strongman, 2009). Because of the value addition inside the industry, spin-off economies from mining industry activities, and connections to other sectors, it is necessary to give chances for women's economic empowerment (Hinton, Veiga, and Beinhoff, 2003). Women currently suffer from a disadvantage as a result of their absence from this value chain and restricted access to it (Ndzwayiba, 2017). To address their needs and protect their rights, such as access to resources, a lack of political voice, and unequal power relations between the sexes in families and communities, there aren't enough legal frameworks, policies, and programs in patriarchal societies (Hinton, Veiga, & Beinhoff, 2003). This is due to the fact that the existing legal frameworks, regulations, and programs do not address these problems.

The patriarchal effects resulting in male domination has resulted to women not participating in land issues and decision making has left them disadvantaged in terms of accessing opportunities in oil mining in Turkana County. The beliefs and values held by the Turkana community has barred most of women from participating in decision making on community issues like land negotiations and spending of the local resources pushing women to inequality in resource distribution. This is in tandem with what Burrell (2017) articulates in conflict theory where men and women compete for scarce resources. Similar to this, a Macdonalds (2003) study on the consequences of oil production on the community identifies both good and negative effects. This study concentrated on how much gender roles have changed as a result of oil mining in this aspect. Despite the fact that studies have shown that this industry is dominated by men, mining has given women the chance to improve their lifestyles through entrepreneurship growth (Dlamini, 2018).

The experimental stages of the sector are mostly off-limits to women, and finally, from receiving benefits after extraction, according to (Omia, 2015), who asserts that this is because of their marginalisation during the consultation phases, lack of access to training, and other factors and the shift from women attending to traditional roles like caring for the home to taking up productive roles in the oil mining industry though at a minimal rate This perspective is backed up by Jahansson and Ringblom's (2017) gender relations theory, which states that all socially significant activities must take into account how men and women interact and play out their social roles. In order to better understand how oil mining affects both genders' livelihoods, this study tried to look into those changes.

Kenya has had active oil mining for less than seven years; as a result, it has less women working in the mining business than nations like Nigeria and South Africa (Soyapi and Kotzé, 2017). Especially in regards to issues like whether or not women are empowered and whether there is gender parity in the workforce, little research has been done on oil mining in Kenya. The present study draws inspiration from this and attempts to offer some scholarly substance on the subject of gender role adjustments as a means of promoting female empowerment and inclusion following oil mining in Turkana County, Kenya. Since the gendered aspect is absent from the current regulations, there is a knowledge gap that prevents women from being involved and empowered in the region's oil mining process. The study adds to the limited body of research on gender role shifts in the oil mining business by analyzing the degree to which gender equality has altered as a result of the industry.

1.3 Research Questions

The research questions that guided the study were:

i. How much do oil mining firms support gender equality in Lokichar?
ii. How has patriarchy impacted gender equality in Lokichar's oil mining industry?
iii. How has oil mining affected the way men and women in the Lokichar village make a living?
iv. How does local government influence oil mining in Lokichar?

1.4 Objectives of the Study

1.4.1 General Objective

The general objective of this study is to establish the changes in gender roles as a result of gender participation and empowerment in the oil mining in Lokichar in Turkana County.

1.4.2 Specific Objectives

Specifically, this study sought:

i. To determine whether the oil mining companies promote gender equity in Lokichar.
ii. To establish the extent in which gender roles have been transformed as a result of the oil mining.
iii. To investigate the changes oil mining has on livelihood for both genders in Lokichar community.
iv. To determine the extent to which changes in gender equality and ultimately female empowerment have been influenced by oil mining in Turkana County.

1.5 Justification of the Study

The Mining industry in Kenya is vibrant and is growing at a fast rate. It is also evident that the female population is greater than that of males in both Kenya and Turkana (Kenya National Bureau of Statistics, 2009) and to spur economic growth there is need to involve women in this sector. Turkana, being the second largest county in Kenya, with rich oil mines and having a greater level of marginalization in terms of development and women, is an appropriate study site and will provide data is a rich study site and will provide data in mining sites with similar socio economic settings. The studies done on gender under oil mining are limited. It is for this reason that this study is commissioned.

With the encroachment of land and with oil mining activities, grazing land has been reduced forcing the Turkana to change their livelihoods and this has affected their gender roles and empowerment avenues. The study will seek to establish whether there

have been changes in the livelihoods for the locals after the encroachment of their grazing lands by the oil mining companies. The study findings are useful to mining policy makers, scholars, and business stakeholders. The policy makers can use the findings to initiate programs made to strengthen women participation in oil mining and generally empower them. The study is thus justified by the fact that more women need to be involved in mining activities to enhance their empowerment and promote gender equality by the fact that they are the majority.

This research will cover a knowledge gap in academia, add to the sparse data on Kenya's mining industry, and help us understand how we can fully integrate women into the mining industries in addition to adapting to change. The study will inform the government and oil firms who are the stakeholders of this industry, to set policies that can help to deal with challenges that could emanate from mining of oil and also ensure that mining is socially, politically and economically feasible and appropriate. The study will additionally inform extraction companies to adopt policies that are gender sensitive to boost efficiency in the workforce. Through promoting women participation, the study will inform the industry players to initiate gender equality and empowerment measures. Additionally, the study supports key thematic areas of transforming Kenya and achieving equity and national unity. The study shows the level of gender equity in hiring in the Lokichar oil mining industry, and this demands for action from the stakeholders to start projects and programs that support gender equity and equal chances. The social pillar of Kenya's Vision 2030 plan also emphasizes equity in access, participation, and improved livelihoods for all Kenyans while focusing on women and other neglected groups. The study therefore presents findings and recommendations that push main actors in gender equality and empowerment to present approaches that can influence gender equality and empowerment.

In conclusion, there are five reasons why this study on gender in the oil mining business is deemed timely. The first is that it will give women a chance to find jobs. The oil mining business has traditionally been seen as being dominated by men, however as of the most recent census, there are more women than men in Kenya. With the advent of the gender equality great development can be realized by involving women. Additionally, this study is an attempt to examine equity in hiring of both gender and

hence ways of creating more opportunities especially for women. The second reason is that it will increase a nation's GDP, making it an important economic sector that calls for sociological research. It is therefore important to streamline the conflicts that surround women in this industry so that they can be involved and greater GDP realised. This is so that women's participation in the oil, gas, and mineral value chains may take advantage of significant opportunities and aspects that are currently underutilized, according to UN Women (2014). In the domains of exploration, contracting and licensing, operations and extraction, value addition, tax and royalty collection, revenue distribution, and administration, women face a range of opportunities and challenges. The GDP of the nation increases in proportion to the number of participating women.

Third, this research will broaden our understanding of how gender affects the oil mining sector. Kenya has had active oil mining for fewer than seven years, hence it lags behind countries like Nigeria and South Africa in terms of the number of women employed in the mining industry (Soyapi and Kotzé, 2017). In Kenya, oil mining is a recent development that has received little attention. Little has been documented in this domain. This study therefore complements the scope on hiring men and women, gender roles are changing, the oil mining business is changing, and how has this affected gender equality? It is essential that reform be directed towards gender empowerment and ultimately gender equality given the advent of the mining industry and the fact that women play a significant role in realizing progress. By doing so, it will be possible to better align the shifting gender roles with development and increase engagement from both men and women. Embracing the change of gender roles by implementing and improving policies will ensure that the grey areas that lead to marginalisation of any gender are monitored and looked into and eventually realizing gender equality. It is for this reason that the study established the extent to which gender roles been transformed as a result of the oil mining and looks at how the reproductive, productive and community development role has changed over time at the same time looking on whether oil companies practice gender equity in their hiring process.

Fourthly, the study makes methodology and theoretical advancements. The mining sector has historically been dominated by males (Women in Mining 2013, for example), but this study compares the perspectives of both sexes to tease out how changing gender

roles may affect women's participation and empowerment in the oil mining sector. This brings a wealth of knowledge on the methodological aspect demonstrating how a sociological study can be done with a gender touch by gathering data from the different gender. The study marries conflict theory, gender relations theory with diffusions for innovation theory explaining how new technology can be embraced in a patriarchal society to bring gender empowerment. Finally, the study will be helpful in developing better policies, and as a result, existing policies that lack gender components will need to be revised. Despite having many mechanisms for gender mainstreaming, it doesn't draw attention to its gendered characteristics, notably in terms of resource management and extraction. In this male-dominated industry, matters like remuneration, decision-making, royalty sharing, and power connections are rarely openly addressed, leaving opportunity for personal interpretation.

1.6 Scope, Assumptions and Limitations of the Study

Lokichar is located 550 kilometers northeast of Nairobi in the Rift Valley, right in the middle of the arid and dusty Turkana basin. Due to the oil mining activity in the vicinity, Lokichar was chosen as the study location. 2,000 individuals were counted in Lokichar on average, according to the 2009 census. The focus was those individuals from the Turkana community living around the oil mining sites. The majority of the individuals chosen in Lokichar who are now employed in the oil sector or have retired after working for an oil company are individuals between the ages of 15 and 64. The primary goal of the study was to determine how gender roles and involvement are evolving as a result of the oil mining in Lokichar, Turkana County.

The study's precise objectives were to determine how much oil mining has altered gender roles and if oil mining companies in Lokichar support gender equity. In addition, the study examined how oil mining in Turkana County has affected gender equality and how it has affected men's and women's livelihoods in the Lokichar village. In the quantitative study, 300 active workers, both male and female, were sampled, ranging in age from 15 to 64. In the qualitative study, 54 respondents were recorded, of which 6 served as key informants and 48 participated in four groups of FGDs.

Women might play a significant role in the value chains for minerals, gas, and oil, and this potential would address challenges that are currently ignored. Women and men

have diverse requirements and opportunities throughout the cycle of exploration, contracting and licensing, operations and extraction, value addition, tax and royalty collection, revenue distribution, and administration (UN-Women, 2014). Since men predominate in this sector, Women in Mining (2013) points out that the Mining Bill of 2014 overlooks the gendered aspects of resource management and extraction even if it acknowledges the use of natural resources for national development. Things like compensation, decision-making, sharing royalties, and power dynamics are not well understood. The study demonstrates the impact of patriarchy, socio-demographic variables, and governance issues on gender empowerment, which finally results in gender equality

The main limitation of this study was that some locals who view oil industries as a threat to their pastoral lifestyle had reservations in participating in the study. According to Omia (2015), these risks come from migrant workers from other regions of the nation as well as mining corporations' propensity to ignore the law requiring gender equity in the workplace and hold the majority of jobs. However, if such cases formed part of the sample, they were appropriately replaced and triangulation was employed to ensure that any unreliable information was verified. The terrain and resource constraints in terms of finance and time in the County was also a challenge as the nearby homesteads supplying labor to the oil mining were widely apart. An underscored assumption was that of change in gender roles and empowerment being as a result of the impact of the oil mining industry since mining industries have encroached on the grazing land of pastoralists which is a big percentage of land.

1.7 Operational Definition of Terms

Affirmative Action: Affirmative Action includes policies, programs and processes that are designed to deal with discrimination against marginalized groups in this case women.

Extractive Industries: The extractive industry comprise any operations to excavate metals and mineral from the earth. Oil and gas extraction are examples of extractive processes.

Gender Empowerment: Measures designed in gendered perspective to increase degree of autonomy and self-determination in the community.

Gender Equality: A state of equal ease to the access of rights, resources, opportunities and protection regardless of gender and including aspects like participation and decision making by various gender.

Gender Equity: Extent to which different gender receive fair treatment in satisfying their needs.

Gender Relations: Ways in which men and women affect each other or relate to each other in performing their roles which are socially determined by culture, religion or socially acceptable way of thinking.

Gender Mainstreaming: Aligning gendered aspects into programs and policies

Gender Roles: Societal norms dictating acceptable form of behaviour that is generally acceptable based on perceived sex in this case relating to productive, reproductive and community management.

Livelihoods: A means of securing necessities in life in this case jobs, salaries, money.

Migrant: a person who frequently relocates, often in search of employment or better working conditions.

Mining Activities: Between the excavation of an underground mining system and the retrieval and distribution of the final product (petroleum) to end users, a number of activities occur, including exploration, contracting, licensing, operations and extraction, value addition, tax and royalty collection, revenue distribution, and management.

Oil Exploration: The process of collecting and interpreting seismic and geographical data of oil and gas on the ground by drilling initial wells and eventually appraisal wells. The process takes two to ten years.

Oil mining: A technique for extracting petroleum that relies on creating an underground mining system.

1.8 Organization of the Chapters

The thesis' introduction is contained in Chapter 1. It provides information on the study's history, motivation, and the issue that this particular study is meant to solve. The chapter further outlines the objectives that the researcher sought to achieve in the study. Additionally, it clarifies the study's scope and constraints and justifies the need for the investigation.

The literature review and theoretical framework are presented in Chapter 2. Generally speaking, this is a survey of the body of research that has been done on gender roles,

involvement, and empowerment in the extractive industry. There is also a summary of the hypotheses that the study was founded on. The study's guiding hypotheses are mentioned. The chapter also provides examples of the conceptual foundation for the research.

The research approach used to carry out the study is described in chapter three. This chapter explains the study population as well as the research design. Operationalization of variables is also done. Furthermore, the sampling process is described and an explanation of how the sample size was determined is provided. The study's data gathering procedures and tools, as well as the data analysis process, are described. The study's observed ethical considerations are also highlighted.

The data and its interpretation are presented in chapter four, which focuses on the research findings. By examining the data, the chapter also aims to determine whether the goals have been met. Along with a summary of oil mining in Turkana, the chapter also examines focus group talks and key informant remarks in the context of qualitative data analysis. The section therefore presents information gathered from the Focus Group Discussion with a mixture of stakeholders including opinion leaders in Turkana, staff at the oil mining fields, and area residents. An analysis of findings from key informants is also presented. In a nutshell, this chapter looks at quantitative and qualitative analysis while at the same time testing the hypothesis and giving relevant explanation to tested hypothesis.

The research findings from chapter four are summarised in chapter five, together with conclusions and suggestions for further research and activities by the targeted stakeholders. The conclusions presented in the summary section are supported by the stated goals and theories. This chapter also examines the objectives and assesses how well the study addressed the research gap.

CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1 Review of Empirical Literature

The literature on the consequences of oil mining on both men and women in Kenya, Africa, and other places is reviewed in this section. The subjects discussed include gender difficulties with oil industry regulation, the Kenyan Mining Bill and Constitution and how they affect oil mining in Kenya (particularly in Turkana), gender inequality in general and across various sectors, as well as in global mining regions, with the study focusing on gender disparities in the Kenyan mining sector. The literature review also covers the ideas and attitudes of Affirmative Action for women. Key theories like the theory of gender relations, conflict theory as applied to gender studies, and the theory of innovation diffusion as applied to mining in the Kenyan mining industry are included in the survey of theoretical literature. The chapter also discusses the conceptual framework and the assumptions used in the investigation.

2.1.1 Gender Issues in Governance of Oil Industries

The governmental, legal, and institutional frameworks for administering this industry know little about the economic empowerment of local people, patriarchy, and women in the extractive industry (Mwabu, 2018). Mwabu says that the involvement of women and their safety in the extractive industry have not yet begun to receive serious consideration by the law. The statement expressed by Mwabus is true, but it is also true that before gender equality in the oil mining business is accomplished, issues with culture and government still need to be addressed. The patriarchal society of Lokichar, like much of Africa, has a big impact on gender equality. Women and men have diverse requirements and opportunities throughout the cycle of exploration, contracting and licensing, operations and extraction, value addition, tax and royalty collection, revenue distribution, and administration (UN-Women, 2014).

To achieve gender mainstreaming, these options and requirements must take gender into account. The 2014 Mining Bill does not particularly address the role that gender plays in resource management and extraction, despite acknowledging the use of natural resources for national development.

Women in Mining (2013) also makes the point that this industry is dominated by men. In this male-dominated industry, matters like remuneration, decision-making, royalty sharing, and power connections are rarely openly addressed, leaving opportunity for personal interpretation. Not only are these issues not gendered in the policies, but there is also a lack of clarity. The Mining Act from 1940, which is still in effect and falls short of appropriately addressing the demands of the developing sector, is repealed by the Mining Bill (2014). It was a former antiquated relic of a long-forgotten era. Additionally, the Bill's main goal is to combine all of the existing mining-related regulations. It also aims to put into practice a variety of Kenyan Constitutional provisions related to resource agreements, environmental protection, and land management. Despite being a fairly good bill, the 2014 Mining Bill lacks gender-specific language. The fact that men and women have diverse needs, challenges, and opportunities along the oil mining value chain must be considered in order to achieve gender mainstreaming and gender equality. These elements include of power dynamics, royalty sharing, decision-making, and compensation. For instance, Mbabazi et al. (2020) note that the proposed formula for sharing the benefits of natural resources calls for 20% of revenue from those resources to be deposited with sovereign wealth funds and the remaining (80%) to be split 60% by 40% to national and county governments, respectively. They point out that the Bill requires that the money received by the local government be distributed to the surrounding areas, but they also point out that this Bill's flaw is that it doesn't outline how the 40% of oil revenue that the county government receives will be distributed to the surrounding areas. Furthermore, it is unclear who will receive this part in the communities even if the transfer is actually performed.

The Bill's definition of "community" is vague and open to personal interpretation. According to Mwabu (2018), a community is defined under the Interpretation section of the Bill as either (a) a group of people who live close to an area where exploration and mining operations take place, or (b) a group of people who may be displaced from territory where such operations are planned. He notes that it is concerning that the definition does not define what "around" or "group" implies or include other communities that might still be impacted by mining operations. Similar to this, he also raises the issue of inadequate measures addressing community consultation with regard

to mining activities. He claims that the Bill is quiet on this issue, despite the fact that consultation with communities should be done in all aspects. The Mining Bill further specifies how communal land may be taken without permission if the Cabinet Secretary deems it to be against the interests of the country. Mwabu adds that the Bill falls short of offering a solution for communities that oppose the use of their land for mining. According to Mwabus, the mining Bill (2014) is a good Bill, but in order to achieve consistency in interpretation, each of its many components needs to be gendered.

Without addressing institutional structures, a discussion on governance challenges is lacking. According to Mbabazi et al. (2020), the following constitutional institutions oversee the extractive sector, which includes the Kenyan oil and gas industry:

- The Inter-Ministerial Committee on the Policy and legislative Framework for Geology, Mining, and Minerals, which executes the policy and legislative frameworks pertaining to the extractive industry. This is where the Mining Bill (2014) and other bills from the Energy Regulatory Committee fit in.
- the National Fossil Fuels Advisory Committee, which issues permits to the oil sector;
- The National Lands Commission, which has the authority to purchase both public and private lands for the exploitation of natural resources;
- The Auditor General, an impartial official who examines and issues reports on financial records of national importance, including those of the national oil corporation, of the courts, of Parliament, and of political parties;
- The Controller of the Budget, an impartial official with the legal authority to permit withdrawals from public funds;
- The legislative branch, represented by the National Assembly and the Senate, which among other things ratifies agreements on the exploitation of natural resources and defends the rights of counties in such matters.
- The judiciary, a constitutional branch of the government that adjudicates particular conflicts arising from the extractive sector;
- The counties having oil and gas discoveries are immediately under county government administration;
- The National Oil Corporation of Kenya, a state-owned company that works with other oil companies on upstream oil and gas projects and, to a certain extent, controls the extractive industry.

2.1.2 Mining Situation in the World and Africa in General

Africa has an abundance of mineral resources. Africa has a huge potential for growth and production, produces over 60 different minerals and metals, and holds over 30% of the world's natural resources (IFC, 2014). The exploitation of a country's natural resources is a crucial phase in its growth and development. The Mining Bill (2014) states that there is a negative impact on society from the mismatch between the management and use of natural resources. The administration of natural riches and the extraction of resources lacks a proper gendered legal framework, programs, and policies, which leaves openings for the exploitation of the underprivileged and those who are unaware of their rights. Women's rights have been significantly impacted by the lack of gender-specific legal framework, particularly in the oil mining industry where their participation in official roles (or employment) inside oil mining businesses is still limited and has a negative effect on their socioeconomic circumstances. This is consistent with the gender relations hypothesis, which holds that all social roles and interactions between men and women are governed by cultural norms and values. Due to their lack of representation in the sector's gendered legal structure and absence of gendered protections in its policies, women working in the mining industry have suffered. Lack of an active political voice, unequal power dynamics between genders in society, and restricted access to resources are other difficulties.

Recently, mineral discoveries have been made in numerous more nations, including Kenya. Kwale Mineral Sands Project, Kenya's first significant mine, started exporting in 2013 (Omia, 2015) opening up new opportunities for economic growth. Despite this, the mining sector still has several issues, with the biggest one being the absence of gender-specific management structures (Maconachie, 2015). Most of the women who work in these places do so as part-time workers or small-scale miners. For instance, women frequently participate in small-scale mining in Kenya in communities like Taita Taveta, Kakamega, and Migori where they manually process their raw materials. As a result, the market value of their items is extremely low.

Women are also less able to push for lower costs. This further hinders their ability to advocate for better treatment from the mining business, along with the taxing home duties and urgent financial needs to support their families. The conflict hypothesis

describes how society is constantly at odds with itself, with men and women competing for few chances and resources. This has an impact on the mining industry's employment prospects, decision-making processes, royalty sharing, and resource allocation. Dlamini (2018) hypothesized that the ergonomic designs of equipment used in the oil mining industry, which led to a progressive shift in gender roles, were to blame for the paucity of female engagement in actual mineral mining. Similar to this, a 2015 study by Botha and Cronjé discovered that utilizing particular vibrating equipment interfered with female workers' menstrual periods. This interference with reproductive health may discourage many women from working in the oil mining industry, which could impede changes in gender roles with regard to women's mining operations. In addition, similar findings from Tanzania were reported by (UN Women, 2016), demonstrating that a number of characteristics, such as physically demanding employment, low levels of technical competence and education among women, and low participation rates for women, and limitations on their participation in certain activities, such as underground mining. Men believed that having women in mines "makes minerals disappear," according to the results of a different study carried out in Ghana, Kenya, and Tanzania. (UN Women, 2015). The scant information from African research reveals the influence of culture, patriarchy, and prejudices in limiting women's participation in the mining sector. This again corresponds well to the Conflict theory, which holds that the strong in society take advantage of the weak.

Women are discouraged from working in the mining business by their obligations, according to Omia's (2015) research. The gender effects of coal mining in Kitui County's Mui Basin were evaluated to aid in gender mainstreaming in the mining industry. Because men predominate in the society and because roles at home and at work conflict, it takes a very long time for women to decide they want to work in this field. Women's participation in the oil mining business is impacted by the fact that they are not only denied access to school. His research indicates that women are noticeably underrepresented in the early stages of the field's study. These kinds of finds are common in the mining sector. All of these barriers have impeded women's participation in the oil industry from progressing. But thanks to the establishment of affirmative action policies and oil company action plans, an increasing number of women are not only obtaining educations but also being awarded scholarships to progress in the mining

industry. Similar to this, other women are encouraging more women to work in the mining sector and bringing attention to the underrepresentation of women in society.

Additionally, men and women are exposed to dangerous poisonous substances like mercury during the manual labour required to prepare these raw materials, which has a significant influence on their health. Since sexual exploitation is utilized as a brokering tactic to advance women to higher contracts and competitive pay rates, HIV/AIDS and other STDs are included in these problems. Wasunna (2014) has empathy for patriarchal environments because these women are more likely to experience violence. Since the majority of these women lack knowledge of techniques they could utilize to make the most of the natural resources, their voices are not appreciated. When creating profit-sharing agreements, women are underrepresented. Men are the ones who make the final decisions on all matters and have control over the information that enters their homes. When it comes to pay and the distribution of royalties, women are likewise underpaid. Ndzwayiba (2017) noted that due to the perceived gender inequalities, South Africa's corporate management equality was having trouble hiring women. This idea was reinforced by Dlamini's (2018) research, and it is the main justification for the necessity of gender-specific laws in the mining sector in order to prevent individual interpretation.

Kenya has ratified a number of international agreements, including the Millennium Development Goals (SDGs), the Beijing Declaration and Platform for Action (1995), the Convention on the Rights of the Child, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), and UN Security Council Resolution 1325. Kenya is also patriarchal, like many other nations across the world. In spite of mining, this has continued to discriminate against women in various ways, most notably in the allocation of work prospects (Amutabi & Lutta-Mukhebi, 2001). In Kenya, patriarchy is a cultural phenomenon that has influenced how various genders are viewed in terms of their responsibilities, needs, and opportunities. Stereotyping is a problem that influences how different genders choose their opportunities and what they require.

According to a similar viewpoint, the majority of jobs require the so-called "manly" attributes of physical strength, reason, and mental toughness, including management at top firms, engineering, and law (Ndzwayiba, 2017). Women in the mining industry,

however, face challenges due to a lack of gender-specific legislation that would protect and assist them in enhancing their efficacy. With rules governing the gender ratio in both elective and appointed jobs, Kenya has been at the forefront of the struggle for women's rights. Article 27(8) of Kenya's 2010 constitution states that no elective or appointed body may have more than two-thirds of its members of the same gender. Due to several of these regulations' non-gender-codified components, their implementation has been challenging.

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Despite the implementation of all these restrictions, the working conditions for women employed in the mining industries are concerning. Women's empowerment efforts are hampered by the lack of regulation implementation. The legal and policy structures that enable gender equality are absent from the mining Bill (2014). This according to diffusion for innovations theory boils down to the components of diffusion and innovation theory; communication channel and social systems. To realize gender empowerment these two components have to work hand in hand by ensuring policies that are existing assist the locals and once implemented the community sensitized through communication in order to enjoy the fruits of this innovation (oil mining). In addition to other gender-based initiatives, firms have used women's approval and social license as a litmus test for their employment policies when they have solicited the thoughts and active participation of women. This suggests that when both sexes actively engage with a company's structure, it becomes more appealing. This will have a significant impact on Kenya's economy if applied to the extractive sector (EI).

There aren't many studies on gender and oil mining in Africa, and those that do mostly focus on Sub-Saharan Africa. There haven't been as many research on the impacts of oil mining on men as there have been on the consequences on women. Due to the perception that industries like mining and oil processing are dominated by men, men frequently receive less attention when discussing how gender changes affect them. According to a 2013 World Bank study, men had better access to employment perks while women had to bear expenses including social and familial disruption. The study also noted that by recognizing prejudice and establishing mechanisms to ensure equitable advantages, the sustainability of the oil mining business might be considerably increased. It was also noticed that men primarily benefited from the extractive industries, including oil extraction, while women disproportionately bore the burden of social, environmental, and economic dangers. Including prospects for employment, increased investment, and access to funds, extractive industries offer ways to enhance life. The mining and extractive industries are reportedly hiring more women to drive trucks and operate heavy gear because of their excellent safety records, which lead to less frequent maintenance of the equipment.

One of the remedies to the gender-insensitive mining industry that exists in many countries is gender mainstreaming. This is easily accomplished by making sure that the excellent existing mining policies are gendered in a variety of ways. For example, legislation pertaining to women's employment and the empowerment of minority genders in the mining industry have been implemented in South East Asia (Bahn, 2013). For example, the Government of India's Mineral Policy (2006) recognizes quarries and small mines that are compatible with the social and economic institutions that are in place. It is imperative that any development strategy involving oil mining, quarries, and small mines incorporate the advancement of gender equality. In addition, local women and men should not only be trained and sensitized to earn decent living while in mining industries but also taken through safety precautions. Compared to top-down initiatives like regularizing informal mines, empowering women in the mining industry may result in more noticeable developmental outcomes (Burke et al., 2006).

The success of diffusion innovations theory depends on attitude of the individuals and how they receive the innovation. If they receive it with a positive attitude and are

willing to adopt the innovation (oil mining) positive change and development is eminent.

According to Ward (2011), the provision of equal employment opportunities and the ensuing economic gains from quarries and small mines are proof of the empowerment and enabling of women. The working conditions for women in the mines must be improved, and policies protecting their rights, health, and safety must be put in place. These policies must also guarantee workers' ability to continue working and their financial security into old age. Governments are implementing financial and legal measures to guarantee that individuals have access to reasonably priced, high-quality health care, education, opportunities for a livelihood, and mine security and safety in order to enhance gender empowerment.

Lahiri-Dutt (2018) also drew attention to the gender gap in the underrepresentation of women in the oil mining sector, which he linked to issues like rural poverty, the exploitation of women as a result of patriarchal society, and other issues. According to the study's findings, the financial benefits of oil mining should be distributed more fairly. Among the recommendations made were providing incentives for women to work in the oil mining sector, granting them land ownership and governance rights, and encouraging training programs for women in the fields of social and economic development. It is expected that all of these initiatives will boost the number of women working in the oil mining industry. Therefore, empowering women is likely to secure domestic food security and provide for the security and other necessities for the kids, thereby enhancing the social wellbeing of the neighborhood. The most effective solution appears to be women's economic empowerment in order to achieve gender equitable development in mining areas. This can be achieved by the locals changing their attitudes toward the norms and values through communication on how to better resolve competing roles in society and how various genders interact with one another. This demonstrates the interdependence and connections between the theories of gender relations, conflict, and diffusion of innovation.

Higginson (2014) noted that men typically functioned as obstacles to women entering and establishing themselves in the mining business. This is why it's crucial that males participate in discussions about gender equality. The survey made clear that, even when

promotions were merit-based, men discriminated against women and made fun of them when they were rewarded for having relationships with senior managers. This from the standpoint of conflict theory aids us in understanding how competition over limited resources can negatively impact a community. According to the essay, women were discouraged from working in mining because it was mostly a man's world and because of its masculine nature. This was altered by the 2002 South African Mining Charter, which required mining companies to raise their female quotas from the previous 2% to 10%. Prior to the 1990s, South Africa was one of many countries in the world that prohibited women from working in underground jobs.

By encouraging more women to work, the establishment of scholarships for female mining students boosted representation. The scholarship issue takes time to really show its effects because recipients would need to get experience working in mines after receiving their degrees in order to be qualified for managerial jobs. In the mining industry, women usually perform support roles like food and housing while staying away from traditionally male-dominated roles in the mining industry (Higginson, 2014). This means that men have acted as obstacles to women's incorporation into the mining industry; this is also the case in the Turkana oil mines.

The African continent is a significant producer of gold, oil, diamonds, copper, cobalt, chromium, manganese, platinum, and bauxite, according to UNECA (2011). It has also seen an increase in large-scale, capital-intensive production. Kenya has a lot of potential in the extractive industry and oil extraction. It is for this reason that Africa can fully realise its economic development by involving women in the mining sector which will speed up the growth of its GDP. This is because we have a higher population of women than men worldwide, thus involving them in mining activities will boost a countries GDP.

2.1.3 Value Chains in Mining Industries and Gender Imbalances

The production stages for oil and gas extraction include feasibility, exploration, construction, operation, and closure, according to Gajigo et al. (2012). The first stage of exploration is typically carried out by smaller organizations (Companies), in contrast to the subsequent stages, and is governed by a three-year exploration license. The majority of foreign businesses entering this market are from the US, UK, and China. After

exploration, larger mining firms begin operations. The availability of the deposit for commercial exploration is assessed during the feasibility phase. The business applies for a mining license if it is determined that the deposit is adequate for this use. A mining license in Africa can be renewed after its first 23-year term expires. The government issues mining permits, and the application process normally takes 24 to 36 months. Mineral reserves, as well as the general price and those in the authors' data set, are among the factors that affect the mine life, or the duration of the production phase. An average mine has a production life of ten years before reclamation may start.

Due to the capital intensity, which is offering several opportunities, a number of foreign companies are investing in the mining sector. Gender equality will be ensured, and the economic development of a nation will be accelerated, by involving women in this male-dominated sector at every level of production. The stages of mining production involve procedures, as was already stated. This is what businesses like Tullow have done in Turkana. Positive action policies will make it possible for gender equality and development to advance significantly. In order to dispel the myth that men dominate the mining industry and to empower and entice many women to work in this field in order to promote economic development and fulfill the Sustainable Development Goals, it is past time for Africa to consider including women in every stage of production. Sanjay (2010) in his study observed that the employers were employing locals disproportionally as the mining industry was predominantly masculine. Other value chain professions included sales persons who were mostly women making 76.3% (n=1,217) against 23.7% (n=378) of men in the mining industry. In the mining business, most men chose to work in roles viewed as masculine, while most women opted to fill positions viewed as feminine. Thus, it was believed that the mining industry in numerous nations reflected the conventional roles for both men and women. Women have always been active participants in the mining industry, however Fouda (2011) found that their contributions have been minimised. However, he notes that women's participation seems to have been constantly overlooked as the industry remains dominated by the males. A similar argument is advanced by Mishra et.al (2012) who argue that gender mainstreaming across value chain in this sector is the best way forward because it will yield benefits not only to the workers but also to the communities where the mines are located. Fouda

continues to note that it is important to involve women across different value chains of oil as a product.

Women have been at the receiving end of the risks that come from the extractive industry such as social, economic, and environmental (World Bank, 2013). Davidson & Haan (2011) hold that value chains in the extractive industry have important opportunities that could be crucial to realizing gender equality and eventually the economic growth of Africa. However, this is only feasible if there are sufficient gendered legal frameworks, policies, and programs that account for and uphold women's rights and ensure that their needs and opportunities are successfully protected. In addition, there is a need to address the disparity in power between the sexes, lack of political voice, and restricted access to resources for women. Working with and investing in women makes sound commercial sense, as Heller (2013) argues. She adds that many businesses have discovered that women personnel have excellent safety records and require less equipment upkeep. As such, these companies give women a chance to even drive trucks and operate machinery. Musisi (2015) argues progress has been made in other sectors that replicating this in the extractive industry would hasten Africa's pace towards realizing its development goals.

According to Lahiri-Dutt's (2015) analysis, the bulk of livelihoods based on minerals result directly from the ongoing practice of artisanal mining. The industry has also benefited from the increasing modernization of exploration and exploitation of equipment that increasingly allows women to participate in oil mining processes. Lahiri-Dutt (2015) observed that 67.3% of males as compared 29.4% of females were employed full time in mining at the Bowen Basin region. He further stated that that most of the women labour force at 26.3% compared to 5.8% of men who were employed part-time at the mines. Sanjay (2010) also found that most of women at 32.1% and 8.9% for men were described as not in labour force highlighting the situation that works against women empowerment (Sanjay, 2010) and further observed that labour force participation was leaning towards male dominance.

According to Mishra et al. (2012), supporting women's development and assuring their involvement in the socioeconomic advancement of their communities will go a long way toward encouraging not just their own growth but also the socioeconomic

advancement of many families and the society at large. This is a major factor in why it was found that most women in Bowe Basin, a mining town, worked in "accommodation and food services" rather than actual mining, where just 9.5% of women were employed compared to 47.8% of men. The idea of investing in women was greatly embraced and additionally the findings in their study found out that most women served in the supporting services to mining including 4% in administrative and support services where men only made 1.6% of workforce. Another support services was “education and training” in the mining sector where 14.2% were women as compared to 1.8% men (Sanjay, 2010). Supporting services like retail trade for the miners were mostly associated with 16.3% for women as compared to 4.6% for men, strengthening the observation that most of women were giving support to the main mining industry which was dominated by men. All these writers reflect the various gender imbalances of gender across various value chains.

2.1.4 Traditional Gender Roles and Relations in oil mining sector

According to Fiona (2011), pastoral men and women in Turkana typically belong to a social class known as a clan. Although the role of women may be perceived as one of servitude, exclusion, and powerlessness, the clan offers advantages including social security. A Turkana woman is probably dependent on the males in the family, she continues, and all property belongs to the clan. She also notes that women had trouble getting information because they didn't actively participate in the mining industry and other socioeconomic pursuits that were thought to be reserved for men. While males took part of the animals for migration, women were left to care for dwellings and household animals. She comes to the conclusion that there were various power dynamics between wives and their husbands in polygamous families.

She however mentions that currently there are changes in livelihood to supplement pastoralism including employment, trading goods, sale of natural resources and tourism due to encroachment of land used for grazing. Bruggeman (1994) suggests that in the past men used to herd livestock and women had household roles and childcare. Flintonn (2011) supports the notion that with commercial investment, grazing land is gradually reduced making pastoralists in Turkana and other arid areas to seek alternative livelihoods.

Similarly, Sanjay (2010) found that traditional roles changed differently for different social groups. His study identified issues related to prior socialization, backgrounds and levels of education that influenced efficiency of women and men mine workers. In a study in the Australian mines, it was felt that harshness of the mining environment coupled with isolation of the immigrant Asian workers in remote mining towns further exacerbated their loneliness and home-sick feelings for their familiar culture, loved ones, religious rituals and language. Asian women who were married to the Australian mine workers had challenges in acclimatizing to the environment and thus not being able to effectively adapt new mining roles completely different from their previous ones. The traditional gender roles for immigrant workers is thus a possible barrier to inclusion in oil mining jobs for immigrant women and men alike.

Immigrant women, as opposed to immigrant men, were more likely to lack strong emotional ties as they trusted and depended on links with their friends and relatives at hometowns as the main source of support. Berik (2017) showed that long working hours of males in mining industry was linked to overloading of the domestic roles to their female counterparts. Women with young children were particularly overworked while their male partners were engaged in long working hours in mining sector. An article by Abdel-Magied (2015) on the equality of women in oil rigs pointed that there were changing roles for both men and women. The study pointed out that the roles of men as breadwinners has gradually changed with women becoming breadwinners as well as homemakers. Men whose wives/partners work in oil mining while they were jobless considerably turned into homemakers, leading to change of the traditional gender roles. He further noted that men were likely as women to be influenced by oil mining to change their roles and participation in gender activities. It is thus evident from the above studies that the harsh environment of the oil mining sector made it difficult for women to balance their traditional roles as home keepers and at the same time work at the oil mining sector. Additionally, gender relations were not easy to maintain as one gender has to work extra hard to fill in the gap of the other missing gender.

2.1.5 Gender Inequality Across Different Sectors

According to Wekwete (2014), the majority of women work in the unpaid, unregulated informal sector and are involved in childcare, where their efforts are both invisible and

unremunerated. Women's rates of labor force participation are lower than those of their male counterparts. While it is true that women make significant contribution to the nation's economy irrespective of their labor force contribution, gender inequality remains a major problem. Women are limited to access production resources such as agricultural inputs, lands, finance, equipment, and markets for their products. By taking the role of childcare and other domestic chores, they end up spending more time at home than men. This is a characteristic of many African countries. Wekwete summarises her paper by suggesting projects identified to ensure the economic empowerment of women to include revising regulations to increase the participation of women in the labor market, policy reforms on legislations that hinder females empowerment, skills training, use of technology in accessing markets, fostering partnerships through provision of funds to women, welfare fund and cash transfers, improvement of infrastructural services like electricity and water, and publicly or subsidized child care together with skill training.

Mbugua (2004) additionally unearthed that policies concerning gender imbalance were not implemented and organisational policies were found to restrain women progression to the top leadership. Organisational culture, politics, stereotyping and male chauvinism were also pointed out as key hindrances towards women top leadership. Other factors were limited access to education and discrimination in appointments. The limited access to education and discrimination was associated with denial of equal leadership positions among women**.** The survey also showed that men predominate at the highest levels of management. The study, however, did not address how gender division of labour has transformed as a result of technology. This study exploited the extent to which gender roles have been transformed as a result of oil mining industry.

Otieno-Omutoko and Mwaura (2008) conducted a survey on gender policy as a management strategy in education and found that gender differences among employees and students increased at a higher levels of management. Key challenges involving gender policies in higher education were failure to have political will, failure to have sex-disaggregated data, limited human and financial resources for capacity building, restrictive policy-making tradition and failure to have gender experts to give sustenance to the process. This current study will examine why it has been challenging to

implement gender policies in the mining industry by focusing on gender participation and empowerment. All these studies showed that women were marginalised no matter what sector they were in.

2.1.6 Gender inequality in the Mining Industry

A number of studies have looked at the variables affecting women's labor force participation in order to investigate gender equality around the globe. Dayioglu and Kirdar (2010) found that global criteria influencing a woman's membership in the labor force included age, location, education level, and number of children. Lahiri-Dutt (2006) noted that depending on the type of work being done and the country in which it is being done, cultural values have an impact on occupational segregation. His research indicated that more than half of the female workers at one Indonesian mining site, Katrim Prima Coal (KPC), possessed formal jobs, while a small number of female operators drove heavy machinery and vehicles both during the day and at night. His studies also revealed that as mechanical methods for extracting coal from shallow shafts were phased out, women in Indian collieries moved from being "gin girls" to working underground. Up until the early 1990s, women's main job was to help their male counterparts cut coal. Although women are taken into consideration for jobs in the mining business, this figure has been falling globally. Heavy machinery was used by female miners in industrialized nations. However, in mining offices and research organizations, women favored "white collar" occupations in India (Lahiri-Dutt, 2000). This shows that different genders were assigned to different professions in the mining industry and that culture had a significant impact on the kind of jobs that various genders ultimately accepted.

Otieno (2006) showed that geography (rural versus urban) and age were the primary influences on female labor force participation. She also noted that younger women were more physically capable of working in oil mines than elderly women. Yakubu (2010) discovered that education was a key labor market predictor in his investigation of the factors influencing female labor force participation. The young women's challenges in mining were probably going to overwhelm them and lead them to give up or decide not to continue. Second, divorced women and those with partners who were not yet married

had higher chances of finding employment than their married counterparts. Additionally, there was a strong possibility that older women would join in the labor market. This is pertinent to the study because it illustrates the extent to which demographic considerations play a significant role in determining how different genders engage in various mining sector enterprises.

The Mui Basin in Kenya has extensive coal reserves that have the potential for large-scale mining as well as the introduction of other development projects that might advance development and increase employment possibilities, according to a CGD (2015) report on coal mining in the region. The majority of participants, 89.2%, said they were unaware of any consultations and did not take part in any. 11.8% more respondents mentioned that they attended regional gatherings hosted by civil society organizations (CSOs). Additionally, this data showed that males contributed significantly more to the project consultation than women (23.69% vs. 76.29% for men). According to FGDs and key informants, male participation in consultations was skewed because of how men regarded their role as family heads who attended village meetings (Amutabi & Lutta-Mukhebi, 2001). It was further discovered that men made important decisions while women, including widows, were largely disregarded. This is relevant to the study because it illustrates how deeply ingrained patriarchy is in African society as a whole. The responsibilities that women play in the mining sector are impacted by patriarchy. Many significant mining-related issues, such as community ownership, land loss and compensation, disruption of local livelihoods, and potential for resettlement in the event of physical displacement, were generally unknown to the majority of women. Women's incapacity to obtain information is a significant barrier to employment with oil mining companies. Women are more likely to actively seek employment and, as a result, get hired if they are aware of the career options in the oil mining business (Yakubu, 2010).

Heemskerk's (2003) investigation into the Surinam gold mines revealed that the women in charge of running mining operations also cooked and cleaned the camps. For years, women participated in all aspects of artisanal mining, including planning, washing, and sorting the ore. Although this is positive, the fact that women are working in low-quality jobs makes it remain demeaning. This, however, cannot be contrasted with African

nations where the roles of women are set by their husbands. Additionally, compared to Kenya, where the mining Bill does not explicitly address the gendered aspects of the policy, these regions have more developed women's rights. Only the 2010 Kenyan Constitution makes reference to this, and most businesses tend to say rather than do.

Food security was negatively impacted by the loss of agriculturally productive land as a result of land allocation for industrial extractive operations (Bacheva et al., 2006). In the context of development and peacebuilding, women were exposed to toxins and wastewater from mining (Asia Pacific Forum on Women, Law and Development, 2009). Women were not allowed to work in the mines in Burkina Faso. The gender gap between laborers, miners, ore purchasers, and gold merchants was particularly noticeable in the mining camps. Girls and women used metal pestles and mortars to smash smaller ore pieces while boys and adults used hammers to break ore. However, occasionally men got involved in these pursuits as well. Males were the owners of the mechanical mills used to process ore, while females were responsible for cooking and brewing beer (Werthmann, 2009). Women were responsible for loading and transporting materials in Ghanaian gold mines.

The diversity of locals and migrants is not the only aspect of the mining sector that is impacted; the workplace environment, safety, technical advancements, work organization, and labor markets are also affected. The mining industry should concentrate on sustainability issues in terms of gender, diversity, and working conditions. The repercussions of mining are not the same for men and women in indigenous civilisations because of their distinct gender roles, claims Lahiri-Dutt (2012). Women are more likely than men to encounter the challenges and negative effects of mining. Women have occasionally been forced to engage in the unorganised economy, presumably as sex workers, after losing their jobs and a portion of their financial independence. Rarely do Indian women who mine have a legal claim to their land, especially those who live in villages. The adult man is often treated as the head of the household during the compensation procedure, and women's concerns and interests are typically disregarded.

A 2010 study by Lozeva and Marinova found that mining has a detrimental effect on communities in Australia. Numerous variables, including those related to the labor market, culture, and education at the local, regional, and national levels as well as within

the mining industry itself, contribute to the exceptionally low percentage of women employed in the mining sector.

Kemp et al. (2010) contend that mining companies need to address gender concerns at the mining sites. Mining companies commonly incorporate gender concerns into community relations as a response to the heavily male-dominated mining industry. More girls from mining regions are anticipated to select technical and industry programs in upper secondary school as a result of evolving perspectives and possibilities made available to them. Additionally, it entails a shift in the way women and work are perceived in the local culture, freeing them from outdated notions of femininity and masculinity. Programmes aimed at the local populace should alter their cultural perspectives on women and labour while also releasing them from sexist and patriarchal stereotypes. According to Lahiri-Dutt (2012), large-scale, capital-intensive mining as well as small-scale, artisanal mining accelerate societal changes that are more harmful to women than to men in developing countries.

According to a study on the Swedish mining sector by Abrahamsson et al. (2014), the industry's traditional perception of male domination had not changed. Approximately 90–95% of workers in blue-collar jobs were men, according to the study. Among other mining nations, South Africa, Nigeria, Indonesia, and India experienced the same issue. The 2013 study by Andersson et al., which asserted that women made up just 10–20% of mining workers overall and that between 5% and 10% of women were directly involved in mining activities, supported the findings. While focusing on Australia, Bryant and Jaworski (2011) pointed out that the bulk of the workforce was made up of immigrants, there were few women, and locals were not working in the mining industry.

According to Lahiri-Dutt's (2012) study, there are protective laws that forbid women from working at night or in deep mines. This had a part in the low number of female coal miners. One of the interconnected reasons behind the low participation of women in mining was the idea of accounting for women's responsibilities as mothers and housewives. Other factors that contributed to the decline in the number of women in the workforce included the marginalization of gender issues, the disrespect that trade unions and mining companies showed for the needs and interests of women, and technological advancements that prohibited women from working underground or at night

(Andersson, 2012). In addition, before this was thought to be exclusively the domain of men, women used to labor in the physically demanding jobs, including those above and underground mines. Pre-industrial mining was considered a seasonal job that was frequently done in conjunction with other regular economic pursuits, such as farming. Indigenous Indian villages frequently experienced the same phenomena of families working together in nearby mines (Lahiri-Dutt, 2012). In Indian families, men were primarily responsible for excavating the mineral ores, while women were responsible for carting them and processing them to obtain the fine minerals. During the 1900s, there was a decline in the number of female workers in Sweden's mining industry. Women's presence in Swedish mines fell from 15-20% in 1850 to 1% in the 1950s, indicating a shift toward more masculine mining practices. Women were inspected in terms of morality and their preservation of family and motherhood as part of the process of masculinity, which led to many women being dissuaded from working in mines (Lahiri-Dutt, 2013). The study also made clear that the decision to replace Indian women mining workers with primarily male employees was related to issues of race, class, and power. Women were made invisible and their contributions undervalued in mining narratives offered by the mining sector and trade unions. It is clear that complicated historical societal processes and dominant ideas of masculinity and femininity influence mining, rather than mining as a whole being defined by its nature. The masculinization of society is one facet of the historical notion that women working in mines are to blame for mishaps and fatalities (Andersson, 2012).

The majority of women working in India's mining industry hold menial lower rank occupations like sweeping, cleaning, or office attendants, according to a different study by Abrahamsson (2009). One of the gender inequities that hinder women economically was also highlighted by the study's finding that males, not women, owned mines or owned land. According to the Lahiri-Dutt (2013) study, men received more safety measures than women, which raised their standards of safety in comparison to women. In India and other developing nations, contractors who didn't care about the safety of the women employees employed and assigned roles to the majority of the women. Women were often exploited sexually, worked longer hours than men, were often exposed to cyanide and mercury, and had less alternatives for childcare and leave benefits. Because they are not provided with an environment that is sufficiently safe for them to operate in, Indonesian women who work as miners are more susceptible to accidents. There are

cases where many mining companies neglect to provide childcare for nursing mothers. It has been observed that because the mining industry is not hospitable to women, many women leave their jobs after a few years in order to pursue other interests.

Men have been able to work in the oil mining regions for a lot longer than women since they are provided with safety gear and are accustomed to doing so in difficult situations. In remote mining sites without toilets, where women suffered because there were no female washrooms, it was also discovered that men had better amenities than women. Men, on the other hand, could use the restroom anywhere. When mining facilities were far away, women and children were the most impacted. Andersson (2012) also pointed out that the majority of Indian women employed in the mining sector were rarely promoted to highly trained positions or to better-paying underground occupations. The gender segregation roles in the mining industry were further aggravated by the fact that women were not given promotions but rather given specific "women jobs" in the mines. In Sweden, where women and men were given various tasks, the same gender segregation of labor that existed in India was also felt. He said, "The majority of women work in occupations and tasks unrelated to primary production, the rock, or the ore face."

Women have historically been discouraged from working in labor-intensive or deep-mine procedures because of the male gender. Men's sexist speech contributed to the mistreatment of women, according to a case study of the mines in Australia and India. Saunders and Easteal (2011) state that women face overt antagonism, sexual harassment, sexism, and obstruction to advancement. Furthermore, the male miners openly resisted discussions on gender equality, requests for services that would help women at work, and the distribution of safety gloves. The male coworkers discussed and used derogatory language that was sexually explicit toward the female employees. According to Lahiri-Dutt (2013), some practical jokes put women physically in danger. For instance, some men dumped ore in risky locations, endangering the safety of the women operating loaders and other equipment. Some men dumped ores in dangerous locations and failed to warn their female coworkers about the dangers they might encounter at the mines or on the dumping sites. Men were seen carrying out the operations to dissuade women from working in the mines. When the majority of women

abandoned their mining occupations within the first three years of their employment, the impact of the males' actions became apparent.

Men also used openly showing pornography as a means of excluding or excluding women from their daily encounters. Male employees' actions may have discouraged women from working in mines and rural locations (Abrahamsson, 2009). The fact that every woman hired there was required to have a male companion there at first made the male miners' employees laugh. Saunders and Easteal (2013) state that the decline in the number of female miners in Emsite from 28% in 1984 to 4% in 2000 can be attributed to men's ongoing prejudice. The corporation and its male counterparts created a tough work atmosphere, which contributed to the decline in the number of women. Because of male superiority, when a man retired, died, or lost his work, women—including their wives, daughters, and other female relatives—refused to take over. Saunders and Eastel (2013), Lahiri-Dutt (2012, 2013), Andersson (2012), and Saunders and Eastel (2013) have all documented similarly harmful encouragements of men against women. All three research concurred that male group-offending behaviors and sexist work environments were more likely to affect female miners. In addition to the harsh working circumstances brought on by the environment and the mining company, women had to cope with hurdles erected by men to keep them out of the mining industry. The overwhelming body of evidence indicates that there is a gender disparity in the mining industry, with a tendency toward male dominance.

2.1.7 Changes in livelihoods for both genders due to oil mining

Research has shown that, although men make up the majority of those working in the oil mining industry, the industry has an impact on the livelihoods of both locals and other participants. In addition to bettering economic and employment opportunities, oil mining poses challenges for the community. Research on gender and mining, according to Lahiri-Dutt and Mahy (2016), has repeatedly demonstrated the harm that mining causes to women's livelihoods and overall well-being. Women are compelled to hunt for employment in demeaning social positions like prostitution since there are insufficient economic opportunities in the mining industry. The loss of agricultural land and other forms of income for those whose primary sources of income are farming and fishing, as well as the diminished ability of women to work on the remaining land because of male

absenteeism, are usually the subjects of these studies. According to research by Mayes and Pini (2010), women are usually more adversely affected than men by environmental harm.

According to studies, women are frequently left out of negotiations between a mining corporation and a community that could be to their advantage. Because of presumptions regarding land ownership, the identification of the family head, and the distribution of household resources, it is challenging for women with limited political clout to have an impact on how mine operations operate, and frequently only men get paid. Loss or alteration of traditional culture, particularly when it emphasizes women's productive work and status as homemakers, frequently has a negative impact on women (Mayes & Pini, 2010). Other factors that have been shown to have been indirectly related to mining include an increase in male drinking, short-lived marriages and partnerships, more prostitution, domestic violence, sexual harrasment of women and the spread of STDs.

The study by Lahiri-Dutt and Mahy (2016) and Mahy (2012) further pointed out that the general impact for both men and women (youths included) were that there was an increase (influx) of immigrants who positively influenced the socioeconomic status of the locals in the mining towns. The resultant urbanization led to opening of more businesses and empowering of women who were likely to start small businesses to serve the mining community. Another change of livelihood was felt when higher living standards were realized through construction of roads, health centers, schools and other other social amenities (Mayes & Pini, 2010). The residents in mining towns experienced a change in their standard of living as a result of increased work opportunities and easier access to training. The effects on the change of livelihoods for both men and women were not equal with some gender experiencing greater effects than the others in different areas. According to Omia (2015), the majority of the negative consequences were experienced by women, whereas individuals with higher education, stronger economic standing, and sufficient experience were the ones who saw favorable changes as a result of oil mining. Further, it was believed that there were more jobs in the mines, catering enterprises, and other economic opportunities for women specifically. The young ladies in particular profited, which changed their economic situation.

Some of the identified negative influences on livelihoods as explained by Ahmad and Lahiri-Dutt (2007) were that there were decreased opportunities arising from land-based livelihoods. The negativity also impacted on women with increased burdens compromising their productivity since most of their land was converted to mining. In their 2015 study, Lahiri-Dutt and Mahy identified additional detrimental consequences of urban regions where organized crime was increasing as a result of the effects of the immigrant inflow in mining towns. Urban regions experienced an upsurge in crime and violence as a result of the overall economic structure changes, as well as gender-based violence, alcoholism, a breakdown in family stability, and outbursts of rage on the streets. It was also felt that young people were hard hit when their expectations were not met in terms of getting employment opportunities and income resulting into the young men opting for crimes, brothels and drugs as solace. It was thus observed that both positive and negative effects were felt on a limited number of women and men, with women experiencing impact from their direct involvement in oil mining and also indirectly from the male members of the family/community working in the oil industry (Bryant & Jaworski, 2012).

Research from Australia and North America has examined the ways in which the mining industry has negatively impacted indigenous people and limited their ability to lead traditional lives (O'Faircheallaigh 2013). Negotiating land use and inclusive hiring practices have been the subject of certain research. Most studies on mining, indigenous people and CSR (Corporate social responsibility) focus on the context of the indigenous people granting consent on the use of land, prior and informed consent to the new projects that can disrupt their living patterns, and as required by international law (Ward, 2011). There have been no published studies on the aspects of mining industry, CSR and the local people of Turkana and thus such publications are required to point out whether the land acquisition was in accordance to the international law or not. Studies on social inclusion in mining in Turkana of Kenya in the context of granting oil exploration and exploitation also needed to be performed. Persson (2013) pointed out that in many cases, the indigenous people are excluded from recruitment into the mining companies.

Morrison et al. (2012) asserted that mining processes resulted to attractive housing opportunities and built environment. Mining industry requires new workers with needs

for temporary or permanent housing. Petrova and Marinova (2013) pointed out that housing played a great role in changing the socioeconomic levels of the locals. There were also observed changes due to lack of housing solutions associated which led to higher housing prices. The higher prices of commodities and housing during mining boom led to many migrants not being able to get proper housing forcing some members to move out of the mining towns. A study by Petkova-Timmer et al (2009) indicated that more men than women lived in Australian mining communities but with demographics likely to change as time moved. Women were also identified to be the likely group to leave the mining community for other opportunities elsewhere. The higher income among the locals then led to investments in both public and private non-industrial sectors. Rauhut and Littke (2014) further examined the effects of the rural community movements and the effects on the income to the families of the mining community, concluding that migration of workers into the mining area led to increase in incomes. Their study in Indonesia found that the negative effects were felt by the locals and resulted to increase in the cost of living for the locals, the loss of agricultural land and resources, which further deteriorated the status of women's contribution to the family income, and the dependence on male relatives, which reduced the work options for women in the mines (Lahiri-Dutt & Mahy, 2015). The majority of the impacted families in the mining areas received no compensation, which put their ability to make a living from agriculture at risk.

2.1.8 General Changes Due to Mining Activities and Changes in Gender Roles

Studies have conclusively shown that shifting gender roles are influenced by mining operations. These changes in gender roles can either be influenced positively or negatively.

2.1.8.1 Positive Changes Due to Mining Activities and Changes in Gender Roles

Lahiri-Dutt and Mahy (2015) described the Indonesian region of Sangatta as a sparsely populated, "completely undeveloped zone". For the oil exploration corporations, the only ways to reach to the area were via boat or helicopter.

Due to a major influx of migrants looking for work, which signaled the beginning of urbanization, the area underwent tremendous transformation. The case study of the area of Sangatta in Indonesia shows that majority of the occupants of the local mining towns

are migrants or children of migrants. The migrants had strong family ties as those who first reported to the mining area went to invite their relatives or neighbors to take up new roles in the mining areas (Owen, 2013). The area expanded as a result of mining activities, becoming a district with government offices and drawing several construction projects. Some changes included creation of new administrative zones where villagers were able to build new houses for their families and rentals. Men and women worked in the mines and women mostly changing their traditional roles to being providers in the homes. Men who were staying alone had to adopt to doing roles primarily thought to be woman's roles as they worked in the mines.

It was found that many of the women who were married to men working in the mines opted to be housewives despite most of them previously having worked at the factory. The study further noted that even women from affluent families as soon as they located to the mining town were likely to be housewives. Interestingly, the single women interviewed expressed some degree of freedom in terms of financial decisions and social undertakings (Lahiri-Dutt & Mahy, 2015). These women were able to provide for themselves since they were economically empowered. Many of the women in the mining towns attributed their economic success to the mining activities in the local mine towns (Bryant & Jaworski, 2012). One cited reason was the level of education that allowed women to remain as housewives or at home serving domestic chores. Lack of capital made women not to engage in businesses. Another interesting part of the gender empowerment was that women were not likely to participate in demonstrations to demand for their rights of inclusion in employment among others.

Employment across the chain of oil mining is considered critical for the locals who seek to boost their economic status and benefit from their resource. In this case, some changes the locals expect include employment to the locals and provision of infrastructure like roads, schools as well as clean water facilities (Bryant & Jaworski, 2012). The community development projects should also involve the community, the leaders and all the people, both men and women. Women frequently are excluded from the consultation or compensation processes, which prevents them from participating in community development (Ahmad & Lahiri-Dutt, 2007). The study by Lahiri-Dutt and Mahy (2015) highlighted the fact that, aside from resettling and rehabilitating the

impacted families and homes, the mining firm had not yet made a concerted attempt to restore lost revenues or livelihoods.

Lahiri-Dutt and Mahy (2015) opined that most of women operating in the mines were offering services that supported the processes of mining to the local mining towns. It was identified that some of the women were employed as truck drivers for the mining company while most of others were housewives who did not earn any income. Numerous studies have identified a number of economic repercussions, such as rising living expenses that result in changes to product prices (Bryant & Jaworski, 2012). If the locals raise the amount of money they make from mining activities, their purchasing power may also increase. Similar to foreigners, locals will have less purchasing power and a higher cost of living if they are not employed to supplement their income.

The overall benefits of mining are mostly related to a strong economy and a high standard of living; however, an individual's capacity to take advantage of many of these opportunities depends on their relative position in their family and community. Women are more disadvantaged than men in this power equilibrium, which is related to the ways in which power dynamics are reconfigured within families and communities. Men typically have access to formal employment options, whereas women must make due with some amount of informal economic activity if they are fortunate enough to have any. According to Reeson et al. (2012), women who were more educated, exposed to the outside world, and had the possibility to start their own business performed better than those who lacked these qualities. Other key auxiliary features that serve to separate the "winners and losers" among women include the size of the family, the number of children, and the family's support system for allowing the woman to work outside the home. Women from immigrant communities usually take advantage of economic opportunities, especially jobs and businesses, but they also may not have access to neighborhood support systems. More migrant women have made it through in emerging economies despite coming from extremely low-income families.

Some of the anticipated changes from oil mining are the changes in safety and health of the workers as well as the locals in the mining areas. Shooks (2014) observed that safety training for mine workers was important due to increase in the number of accidents experienced. Basic safety courses are recommended for the mine workers with frequent

information sessions with the community to further ensure information is shared, and action taken. A large portion of the GDP of many resource-rich developing countries comes from mining, which also helps the government create jobs and raise money through taxes. Additionally, sustainable mining offers the potential to deliver quantifiable, long-term benefits to the local community (IFC, 2022).

2.1.8. 2 Negative Changes Due to Mining Activities and Changes in Gender Roles

Cases of people not being compensated for their land were many with demonstrations against the oil miners. The oil mining company maintained the residents' hopes for wonderful things like road construction, medical facilities, and other projects related to development (Buxton, 2012). Vibrations and movement of equipment was also mentioned as a major distractor to the residents. Women were termed as most disadvantaged in terms of transport to the mining areas as they had to wait for minibuses that delayed causing poor working relations at the workplace. Women were also noted to take most of their times away from mining tending to children and their husbands. However, the cost of living hit most women as compared to men as Lahiri-Dutt and Mahy (2015) reported. Despite the taking care of the children and husbands, it was felt that women were cheated on by their highly paid (waged) husbands, who liked having prostitutes or having younger girlfriends. The effect of cheating husbands was economically-threatening the housewives.

Oil and other natural resource mining activities resulted in the appreciation of surrounding land parcels. When land values increased, the issue of compensation become a hot topical debate. In developing nations like Nigeria, South Africa, and Indonesia among others, land compensation is still a major problem in mining areas. There has been a significant rise in the cost of land. Many fields were left fallow during or after excavation as workers preferred to use their pay in the mine. The effect was preference of construction projects like housing estate or other structures easily to bring money faster as opposed to agricultural activity like farming. Ahmad and Lahiri-Dutt (2007) pointed that many locals of the mining towns in most cases demand to be included in the whole mining process.

In most societies, women are the primary keepers of ancient traditions, therefore sudden changes like those brought on by mining are likely to disfavor them (Nygren, 2013). The large scale mining impacted on the community more so on their livelihoods and living conditions. With increased urbanization there was need to search for food. Healthcare needs also increased across the family where women needed to take care of children when they fell ill due to exposure from contaminated water and exposure to dust. Water and sanitation situation changed for the worst, for instance where women fetch water, the water was contaminated leading to need for purification, another expense to be met by women (Nygren, 2013). When women are unemployed, the income from their partners was limited and thus access to better life become relatively hard. New migrants face the challenge of acclimatizing to the new area where women have to get new places to settle and acquaint with the environment. New power structures emerge with some few women heading houses and more men having positive changes in their income. Family lifestyle changes with changing gender roles.

Men reaped the most of the economic benefits from the mining industry, but they also experienced the majority of the negative social effects, such as spending money on drugs, alcoholism, prostitution, and other girlfriends or wives (Stenbacka, 2011). Men also had disrupted family life due to commitments in the mines and long working hours. Similarly, he notes that some of the families were likely to break up when the man choose to marry a second wife while working at the mines, a case that happens when the family and the wife is far away from the mining towns. Men were also associated with more cash spending, which led to more cash circulation the local areas. Regular income enables locals to plan and invest in projects that were likely to change the livelihoods of the community.

On the environmental aspects, loss of agricultural land was cited as a major negative effect for the local farming community (Bryant & Jaworski, 2012). The loss of land led to loss of agricultural livelihoods from farming activities, be it livestock keeping or farming. When the population increased, the quality of water continued to poor. Ground water became contaminated with mineral activities further compromising the health of the locals. The study pointed out some social influences including household disruptions from the blasting vibrations (in case of deep excavations), long working hours for the males (husbands) in the mining region affecting the family bonding (Nygren, 2013). He

goes on to say that the'shifting power equations' within families and communities are responsible for the harmful effects of mining on gender. These are usually specific to an individual or group and include things like growing living expenses, less opportunities for women to work in the mine directly, leaving them dependent on their male family members, the effects of the environment (dust and water), the loss of resources and agricultural land, the inability to provide compensation to ensure sustainable alternative livelihoods, and the lack of influence that women have in local decision-making. Many women felt the need for legal counsel because they were aware of their weak negotiating position. It has been observed that many non-governmental organizations (NGOs) preferred to work out on the mining towns to boost the impact to the locals through empowering women, educating them on their rights, and ensuring they participate in mining activity, whether direct or indirect.

The youths (both women and men) had also special effect from mining. A study by Lahiri-Dutt and Mahy (2015) pointed that young people were also influenced by how opportunities for employment and business arose from the mining towns. Lack of economic opportunities for the young people led to increase in depression rates and higher likelihoods of resulting to drug abuse and alcoholism. It was also felt that illegal activities, drugs and gambling were as a result of unemployed young people, with most affected being young men. The youths in urban areas were likely to have better opportunities in acquiring new skills and experience to work in mining sector. Mining operations were likely to destroy vital elements of culture that young men need to keep intact, leading to threatening of the cultural identity of young men. The youths were also likely to face serious conflict between trying to keep their traditional ways of life and modern ways of life.

Exposure to dust particles, noise, pollution and other forms of contaminations (including exposure to heavy and poisonous metals) led to increase in likelihoods of morbidities and to some extent, higher mortalities (Nadeau et al., 2013). Instances of accidents and incidents result to lost time at the workplace as well as possible mortalities. Sick leaves, accidents, numbers and rates of occupational diseases are linked with decreased income among the family members and the breadwinners (Johansson, 2010). Such incidents are also resulted to changes in roles as men or women might not be able to execute their daily chores or roles. The study by Lahiri-Dutt (2015) indicated that young people in

mining areas need empowerment programs and efficient communication to uplift them. The profits and dividends from mining are frequently disproportionately male-dominated, which contributes to the existing gender disparity in political, economic, and social dominance.

2.1.9 Ways in Which Mining Leads to Women Empowerment and Gender Equality

By establishing long-lasting policies and programmes that support minorities and women in mining towns and areas, governments have made a huge investment in improving the lives of the locals. According to the Chamber of Mines' (CoM) 2017 factsheet, the local mining sector in South Africa employed 57,800 women as of 2017, an increase from the 11400 women who worked there in 2002. There are currently significantly more female employees there. The results demonstrate the significant progress made in eradicating gender inequity and increasing gender diversity in women's representation. In general, the proportion of women has risen from "extreme minority" to above the 10% threshold initially proposed by the 2006 Mineral Policy. There are now 13% more women employed in South Africa's mining sector than there were when the Mining Chambers first set their original aim.

Women's representation proponents contend that gender diversity reform should not suffice until the goal 50% female representation is attained. The potential for neglecting and compromising other diversity demands is a major obstacle to boosting gender diversity to 50% women representation (Ely & Meyerson, 2010). Women's needs must be taken into consideration at all levels, from entry to professional, from operator positions to technical specialist positions. For instance, South Africa's advancements in gender diversity in the mining industry are among the best in the world, with programs promoting women's empowerment, hiring practices, and financial incentives for higher education all important factors in moving women up the corporate ladder in the mining industry. About 21.4% of the boards of the top 500 mining corporations and roughly 23.8% of the boards of the top 100 publicly traded mining companies are made up of women from South Africa (Ahmad & Lahiri-Dutt, 2007). Thanks to grants for women's education, more women are pursuing careers in mining technology, and the sector employs a sizable number of female graduates annually.

Women need to be given the authority to decide strategically and to have more influence over the resources in their homes and communities. In their 2015 study, Lahiri-Dutt and Mahy argued that women ought to have more power over decision-making. The local traditions are likely to act as barriers when oil mining companies try to address concerns with women's empowerment. Given that local or indigenous populations and those who depend on the ecosystem may find it difficult to examine and execute issues like gender equity, the oil mining business must offer a platform and a structure for women empowerment efforts. Studies have also shown that local communities can be resistant to using techniques like gender sensitization seminars and workshops to address these issues (Laplonge, 2014). The community was said to become more accepting of both men and women working in mines through "gender role plays" in training sessions, as well as by giving women leadership and strong communication skills.

Women are marginalised by the "masculinity" stereotype that the mining industry actively pushes. Mining businesses, according to Ely & Meyerson (2010), have been making an effort to foster a competitive climate where women feel appreciated and welcomed as the male counterpart. The mining industry, where women are tolerated in a variety of roles, including exploitation, management, and logistics, is likewise presenting a picture of gender tolerance. Businesses are realising the importance they play in families and communities by providing maternity leave to women so they may take care of children and family matters. Gender and Development (GAD) has been added as a subject or course, and gender sensitisation programmes are implemented for all employees to ensure that gender equity is widely understood and that gender equity is put into practise by the oil mining companies in order to further promote gender equity in the mining industry.

To ensure gender diversity and mainstreaming in the oil firms, they further state that gender specialists are hired in these divisions. Aspects of mechanization are associated with certain negative consequences, such as job losses, where it is sometimes stated that women are more prone to abandon their careers because of restrictions like childcare obligations. Campaigns for gender empowerment in the industry have a special emphasis on concerns like safety and the security of female employees because women in physically demanding jobs, like mining, are frequently the objects of sexual

harassment. Another area of concern for gender mainstreaming in the Kenyan mining sector is the patriarchal culture and beliefs, along with gender-based attitudes, that prohibit women from working in the oil mining industry (Ahmad & Lahiri-Dutt, 2007). Campaigns to recognize, value, and create a comfortable environment for women due to their roles as primary caregivers for their children while juggling work-related obligations are some of the strategies suggested to boost gender empowerment.

Male involvement in projects to enhance work-life balance for primary caregivers is welcomed, as are activities designed to benefit both genders in this role. For instance, Li et al. (2011) noted that over the past few decades, working conditions for miners have drastically changed, moving from physically demanding manual labor to less physically demanding work dependent on high-tech machinery and equipment, sometimes even in the comfort of offices-like settings in control rooms above ground (Elgstrand & Vingrd, 2013). These working conditions are safer in addition to having substantially cleaner underground air, more PPE, technology protections, and safety training. It would be beneficial to do studies on factors such as radiation, chemicals, gases, ventilation, heavy lifting, noise, vibrations, darkness, working hours, illumination, musculoskeletal workload, information or alert systems, and interactions between humans and machines.

According to Grane et al. (2012), the workplace environment for mine workers appears to have distinct effects on the two genders. Cliff (2012) noted that enhanced working conditions, like clean subterranean air, technology protections, superior safety instruction, and superior personal protective equipment, were linked to better performance (and fewer accidents). The effects of ergonomics and human factors on the mining sector were investigated by Lynas and Horberry in a 2011 study. When developing new technologies, human factors and ergonomics should be taken into consideration to guarantee that miners have a comfortable working environment. In contrast to remote control personnel, who were perceived as weaker and more feminine, underground miners, particularly those who performed more manual labor, felt themselves as legitimate miners (Olofsson, 2010). They believed that the remote control operators were frail and beneath women, the subterranean workers referred to them as "velour-miners" (Andersson, 2012). He goes on to say that new technology and equipment brought about by automation, computerization, and robotization frequently go through a phase of "feminization" in mining subcontractor workplaces where women

find it easy and fun to work with. The overall reluctance of workers to adopt new technologies or management ideas is not exclusive to the mining sector.

2.2 Review of Theoretical Literature

This part examines the guiding theories for the investigation, which include the theories of gender relations, conflict, and dissemination of innovations. The three hypotheses that relate to the study are discussed.

2.2.1 Gender Relations Theory

According to this idea, all social interactions and activities must take into account how men and women engage in society (Johansson & Ringblom, 2017). According to the theory, norms and values have a significant impact in how society defines gender roles. According to the notion, a role is the expected conduct associated with a particular status. They also point out that roles should be consistent with social norms, which are accepted guidelines for how people should behave in different situations. Social norms set forth obligations and liberties, allowing for some degree of role flexibility for individuals. However, during periods of fast social change, acceptable roles are frequently in flux, leading to uncertainty regarding what constitutes suitable behavior. Because new norms haven't been established but old ones could alter, people might feel anomie or normlessness. Freedom of action is jeopardized by rigorously prescribed normative behavioral roles. Stereotypes, which are oversimplified ideas that people with similar statuses share similar traits, are linked to the growth of this form of description. For instance, women are more likely than males to have positions both within and outside the family that are associated with minimal influence, low status, and small pay or no compensation (Dominelli, 2017).

Gender relations theorists claim that women have only been capable of performing domestic and reproductive tasks that are undervalued, citing Dominelli (2017) and Messerschmidt et al. (2018) as examples. This thesis explores how social roles persist even when they are proven to be unhealthy for both men and women's health. It also explains why there are discernible inequalities between men and women's patterns of work in society, as well as how these jobs are related to social standing and rewards. The gender relations theory has been helpful in illuminating societal norms and

behaviors related to the gendered division of labor (Booth & Erskine, 2016). The argument explains why men are more prevalent than women in extractive industries, including the production of oil. The roles in the domestic domain are historically assigned to women and girls.

The core assumptions of the theory explain the roles, traditions, and practices that prioritize men over women (Heilman, Manzi, & Braun, 2015). The theory clarifies the societal obstacles that have kept women and girls from being acknowledged as important contributors to the extractive industries. The hypothesis is crucial for describing the difficulties faced by female oil extraction employees (Banerjee & Connell, 2018). Given aspects such as community sensitization, this theory explains how male domination can be loosened to accommodate aspects like education and training for women hence ensuring that there is women participation and empowerment in the same community.

2.2.2 Conflict Theory

Conflict theory's development is credited with inspiring thinkers like Thomas Hobbes and Machiavelli to convey a pessimistic picture of humanity. The method disproves the functionalist view, which contends that societies and organizations operate like bodily organs with each party playing a distinct role (Jenkins, 2017). The conflict hypothesis is based on two hypotheses: radical and moderate. The former claims that social change is caused by society's ongoing struggle, whilst the latter maintains that conflict and custom are inextricably linked. The pyramid structure, according to Haslam and Tanimoune (2016), best exemplifies the conflict theory. The domination of the elites by the broader masses is explained by the pyramid structure.

The main social institutions, traditions, and laws in the society are intended to promote the elite, who are regarded as superior by the community. The conflict theory, according to Burrell (2017), presupposes that social interactions are impacted by society's constant competition for limited resources. The theory also makes the supposition that structural disparities in power and reward have an impact on social structures in society. According to Evans and Aceves (2016), the conflict theory is also based on the notion that social class conflicts in society result from competing interests of diverse parties. The conflict theory also asserts that while conflict can bring cultures together, it can also put an end to them. Because of the impact of European sociologists like Karl Marx,

academics like Ralf Dahrendorf also make a substantial contribution to the conflict theory (Dahrendorf, 2007). He contends that if a balance between the consensus required to maintain the status quo and the coercion required to maintain the consensus cannot be struck, power battles will frequently occur. Men and women will be constantly competing with one another for roles, resources, and decision-making in this environment. Community awareness is crucial for educating people about the necessity of women's empowerment in a patriarchal culture. Conflict theory has also been used to explain non-economic disputes in places like Turkana County and the oppression of women by men.

The idea is useful in understanding conflicts over gender roles as well as those between men and women who are vying for the few available jobs. The theory also covers the difficulties each gender faces at home and at work and further aids in our understanding of the tensions that have developed and resulted in changes to gender roles. There have been impasses as the Turkana people tries to accept this new concept and asserts their claims to ownership and compensation of the oil resource. This would have a substantial future impact on the work policies in the oil mining business.

2.2.3 Diffusion of Innovations Theory

Diffusion, according to Evans and Aceves (2016), is the progressive dissemination of innovations to the social system's participants through predetermined pathways. It is evident from the term that social systems, communication channels, and invention are the primary factors in the dissemination of innovation. Innovation, according to Jewkes et al. (2015), is a concept that is regarded as novel by the individual or institution that is adopting it. The author goes on to say that even though innovation may have been created years ago, adopting members still view it as a novel concept. The steps of the innovation process, which comprise information, persuasion, and choice, determine the degree to which innovation is viewed as novel (Messerschmidt & Tomsen, 2018).

Diffusion, according to Rogers (2003), is a form of communication that involves two parties, means of communication, and innovation. How well innovations spread depends on how much institutions change people's attitudes. Brisman, South, and White (2016) state that the majority of behavioral researches neglect the temporal component of innovation spread. The author goes on to say that the adoption rate, spread of innovation, and categorization of adopters all have a temporal component (Brisman,

South, & White, 2016). The strength of research is demonstrated by the inclusion of time in the transmission of innovation. It is essential to consider the social system when examining the diffusion of innovations because social structures have an impact on it. Rogers (2003:24) describes the structure as "the patterned arrangements of the units in a system". He claims that the ability to innovate, which is influenced by the social structure in which a person lives, is the main criterion for identifying adopters. Dahrendorf (2007) asserts the outcome of this diffusion is that individuals inside a social system take up a new concept, way of behaving, or item in this case, oil mining. He goes on to say that adoption simply refers to doing something different from what one did previously, in Turkana's instance, the aspect of producing oil. A person's readiness to accept an idea, behavior, or product is based on how unique or creative it seems to them. Dissemination is made feasible by this. Adoption of a novel idea, procedure, or product—also referred to as "innovation"—does not take place quickly in social systems; rather, it is a process in which certain people are more likely to accept the innovation than others.

This is accurate; the recent introduction of oil mining is a fresh phenomenon, and the people of Lokichar live according to unique cultural and ethical norms. Depending on their culture and the concepts that are communicated through communication channels, the social systems in this region may accept or reject the acceptance of the innovation. If the people in the area wish to accept change and ideas like gender equality in the oil mining industry, then time is an important aspect that depends on the communication channel and cultural norms in the process of embracing this innovation. In order to inform and educate the public about gender equality issues like Affirmative Action, civil society organizations step in. This communication helps to transform social systems and hastens the adoption of this new idea. If this invention is well received quickly and features like the implementation of gender policies in companies and households are well received and adopted, gender equality will be appreciated. This claim is relevant to the Turkana setting because the Turkana people, who were originally pastoralists, have seen a substantial change in their way of life as a result of the introduction of the oil sector. The social structures of Lokichar have been impacted by industrialization and urbanization, which has accelerated the community's adoption of oil mining as a new technique.

2.3 Hypotheses

2.3.1 H_0: Equal hiring does not equate to equal employment opportunities for men and women in the mining industry.

H_1: Equal hiring and equal employment opportunities for men and women in mining activities are related.

2.3.2 H_0: There is no connection between participation in oil mining activities and a change in means of subsistence.

H_1: Participation in oil mining activities and changes in means of subsistence are related.

2.3.3 H_0: Equal employment opportunities for men and women in mining do not correlate with participation in oil mining operations.

H_1: Equal employment opportunities for men and women in oil mining operations are correlated with participation in oil mining activities.

2.4 Conceptual Framework

Gender participation and empowerment tend to attract various views in oil mining. The mining sector has been predominantly been a male-dominated area in spite of promotion of gender equality. Positive steps have been made to align women into this sector. However, many females are still reluctant to take up mining jobs. The industry has the fewest female directors, per Price-Waterhouse Coopers and Women in Mining (UK) (2013). South Africa is one of the top nations for women's employment, especially when it comes to chances in the mining and mineral industries.

However, several reasons for the low numbers of women registered in mining sector including patriarchy, governance factors and barriers arising from socio-demographic characteristics (like gender, age and education) have been put forward as revealed in the conceptual framework. (See figure 2.1 below).

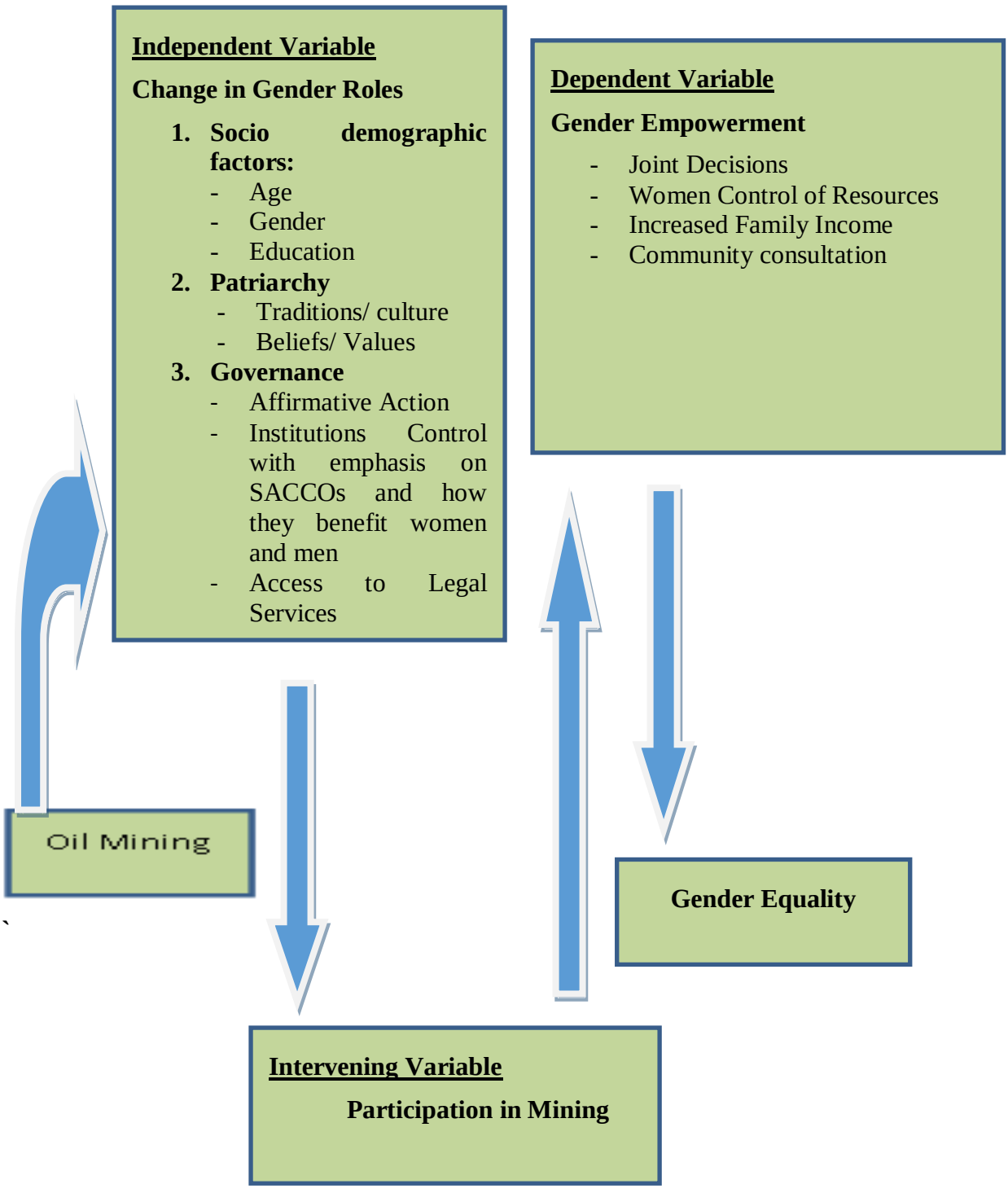

Figure 2.1: Conceptual Framework

The sociodemographic variables of residents' gender, age, and level of education have an impact on the involvement of both men and women in oil mining. Higher educated locals are probably going to work in the oil mining industry as part of Affirmative

Action. There is little chance that the locals will find employment if they lack education. Since most participants in the oil mining industry are healthy individuals who can handle the demands of the job, age is also a key predictor of employment in the industry. Aged persons face challenges where they cannot operate the oil rigs and other heavy machinery thus compromising their health. Studies have shown that more males are employed in oil mining as compared to female in oil mining industry due to the nature of the industry that requires masculinity characteristics. Studies by Urwin (2016) show that more women are currently starting to take up oil mining jobs as compared to the past in the once predominantly men industry.

Patriarchal factors are linked to low numbers of women in oil mining industry include prevailing traditions, beliefs and values emanating from the society. Traditions for instance on the nature of jobs women are likely to pick and execute inform whether women or men would seek jobs in oil mining. Traditions also include the decisions on the gender roles and their execution. Where the traditions dictate that some roles are better performed by men, women tend to try and execute jobs designed for men. Beliefs enshrined in the community also influence the people and the roles they are likely to perform in employment. Values enshrined in the work done by different genders and different ages also influence the nature of roles people are likely to perform in oil mining.

Governance factors associated with changes in participation of women in oil mining include Affirmative Action, access to legal services, and institutional controls that demand that women should be under some form of organization, either in a SACCO or in a women group to champion their rights. Affirmative Action is geared towards ensuring balance between the two genders in employment positions from the top to the bottom levels. Institutional controls like having women groups to champion for their rights in employment in mining industry are recommended including the two third gender rule on all positions in government and other private positions for employment is also advocated for in promoting women's rights. When women access legal services, they are likely be informed and make decisions that empower them to achieve better positions in organizations. Legal services also ensure women and men alike participate through enforcing the requisite government regulations to ensure women, and men are employed in oil mining companies.

Gender roles in mining are associated with the form of participation likely to entice or encourage women to be active in participation. Gender roles are influenced by governance factor, patriarchy, and socio-demographic factors surrounding employment in oil industry. Gender roles determine what men or women are likely to engage in for ensuring adequate participation in oil mining, where some women might get opportunities that are meant for men and men getting opportunities that are set for women. Both participation in mining and segregation of the gender roles influence the level of gender empowerment where couple (men and women) are able to make joint decisions, work in oil mining thus increasing their incomes and women having higher control of resources.

Previously, women were not allowed to enjoy work-life balance due to industry constraints on the basis of flexibility, site work and juggling child care. Such problems arise despite the respective gender of the worker but naturally majority of the women assume the functions of a primary caregiver. In addition, some communities have a belief that women cannot undertake certain roles. Governance issues are also a factor to be considered for example legal issues on Land and Property rights. As explained by Nayak and Mishra (2005), women, in particular those staying in villages lack legal rights over land and few own title deeds. Compensation is a process that assumes the adult male is the head of household and fails to take into account women needs and requirements. Socio and demographic factors are age and education.

Lack of women empowerment both at schools/colleges and at workplace continues to pose a challenge to women in the mining industry as the skills of the job seeker are likely to be considered hence giving their male counterparts a higher chance of employment and engagement. Each of the independent variables (socio-demographic factors, patriarchal aspects, and governance factors) if improved well can increase female gender roles in oil mining which in turn increase gender participation and ultimately promoting gender empowerment among the oil mining community in Lokichar, Turkana County. The socio demographic factors were measured by age, education and marital status, patriarchy was measured by traditional believes and values while governance was measured by Affirmative Action, institutional control with emphasis on SACCOs and how they benefit women and men and access to legal services. Similarly, gender empowerment for women in Lokichar in Turkana County

was measured by the ability of women to contribute to joint decisions, women having control of resources, changes in family income as a result of working women, and increased community consultation. Perceived threats like pollution of air, encroachment of land, interference with water bodies, societal vices like commercial sex and alcoholism, jobs being taken by foreigners and benefits like job creation, industrialisation, urbanisation, and building of social amenities need to be evenly distributed across gender to realise gender equality. When the benefits are equally spread across the gender and there is gender empowerment.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

The methodological approach is introduced in this chapter. The study's design, the target population, the sample's intended use, data collection and validation methods, analysis and observation units, data analysis, fieldwork experiences, and ethical considerations are all described. In this chapter, variables are operationalized. We used both quantitative and qualitative research. According to Morse and Chung (2003), combining qualitative and quantitative methodologies makes the study more objective and embraces holism.

3.2 Study Site

The study was conducted in Turkana County by the researcher. Loima, Kibish, Southern Turkana, Central Turkana, Eastern Turkana, and Western Turkana are the seven sub-counties that make up the county. In Turkana, 5–10% of people identify as religious, whereas over 95% of people follow traditional beliefs (GOK, 2009). Turkana County is predicted to have 855,399 residents (52.03% female and 47.97% male). In particular, the Lokichar location—which is situated in the Turkana South Sub-county—was the site of the study. Lokichar lies 550 kilometers northeast of Nairobi in the Rift Valley, in the center of the arid and dusty Turkana valley. The research location of Lokichar was chosen due to the presence of oil mining operations in the vicinity. There are thought to be 2,000 people living in Lokichar (Turkana County Government, 2016). Go over Appendix IV.

3.3 Research Design

In this study, descriptive research was used. According to Kothari (2011), descriptive research is the kind that explains a phenomenon in the field of investigation. It explains what is happening together with what has happened. In this study, this design presents how the gender aspect has been in the oil mining industry and how it is changing and elucidates what needs to be done to improve the current and future in this industry in terms of gender.

3.4 Unit of Analysis and Unit of Observation

The study's focus, according to Singleton et al. (1988), is the unit of analysis. The oil mining industry served as the study's analytical unit. Aspects of gender role transition that support gender participation and empowerment were examined. Contrarily, the individual or thing from whom data is gathered is the unit of observation (Babbie, 2010). The active labor force, defined in this study as persons between the ages of 15 and 64, or those who have retired from the oil business, was the unit of observation. This was specifically mentioned in the questionnaire as a selection criterion. A kid under the age of 13 cannot be employed in any capacity, as stated in Section 56 of the Employment Act. However, it considers people between the ages of 16 and 18 as employable and permits the employment of kids between the ages of 13 and 16 for light work. The requirements for this occupation are not explicitly stated in the Act. The International Labour Standards on Child Labor's 1973 Minimum Age Convention states that the usual age requirement for employment or entrance is 15 years old (13 years old for light work), and 18 years old for hazardous job. Due to the presence of migrant workers, the study's minimum age was set at fifteen years old.

3.5 Target Population

All of the components from which the researcher hopes to draw conclusions are included in the population (Cooper & Shindler, 2005). The community residing around the oil industry was targeted, specifically the active labor force aged 15 to 64. A rough estimate of 2,000 people live in Lokichar (Turkana County Government, 2016). A total of 1350 persons, both men and women, make up the active labor force, which makes up about 67.5% of the population (GOK, 2009).

3.6 Sample and Sampling Technique

1350 persons living in Lokichar who were employed were chosen as a representative sample. With a 95% confidence level, the study uses the procedure below to calculate the sample size (Creative Research Systems, 2012).

$$Sample\ Size = \frac{\frac{Z^2\ X\ P(1-P)}{e^2}}{1+\left(\frac{Z^2\ X\ P(1-P)}{e^2 N}\right)}$$

N = population size

e = Margin of error (percentage in decimal form)

z = z-score

The Z-score (Z) used was 1.96, with a margin of error (e) of 0.05. Distribution (P) was 0.5, and the population size represented by N. Given the Population size (N) as 1350, the sample size is computed as;

$$n = \frac{1.96^2 * 0.5(1-0.5)/0.05^2}{1+((1.96^2 * 0.5(1-0.5))/(0.05^2 * 1350))}$$

n=300

300 persons made up the study's sample size. The primary respondents for the survey's interviewing were chosen using systematic random sampling in the study. A list of the 1350 inhabitants of the homes was created. The number of people in the labor force, 1350, was calculated using the estimate of 67.5% of the adult population in Lokichar who are employed (Turkana County Government, 2016). The sampling interval determined by the systematic random sampling technique employed in this study is equal to the total sample size plus the population at large. This meant that 1350/300=4.5 would be the sampling interval for the research. There were 1350 adults in the Lokichar region, ranging in age from 15 to 64, for each family. Given the expected selection interval of 4.5, a range of four (4) possible responders was selected from the adult labor force population of 1350. The systematic sample of 300 respondents required the selection of a relatively central position in Lokichar, from which residences could be marked out radially in the four directions of the compass. The Lokichar Mixed Primary School was ultimately chosen as the primary center. Following the selection of every fourth household from the Lokichar mixed Primary School, the adult household member was identified and questioned. The houses were oriented according to the compass's north, south, east, and west directions.

The interviewer went on to the next home if a household was sampled and no one was home or the residents declined to take part in the survey. It's also vital to remember that each home only had one eligible respondent who works or has worked in the oil mining business. In the event that two or more household members qualified to be interviewed, the choice fell on the one who had a longer duration of work than the others in the oil industry. It is important to note that this sampling procedure ensured an equal probability of household members of both genders being selected. In addition, this process was used in selecting the households in the entire area of Lokichar. Since a sample of 300 respondents needed to be gathered, the researcher made sure that 75 respondents were selected from each of the four directions in the Lokichar area.

3.7 Methods and Tools for Data Collection Methods

3.7.1 Methods of Data Collection

For the study, both qualitative and quantitative data were gathered. Surveys were utilized to collect quantitative data, while focused group discussions and key informant interviews were employed to obtain qualitative data. Both closed-ended and open-ended questions were included in the survey procedure's questionnaire. The study's target group consisted of people who were working age (15–64) or retired from oil mining companies within the same age range. The study conducted six (6) key informant interviews due to costs implications to provide first-hand information from persons who dealt with gender issues from different sectors affected by the oil industry. The study expected that a minimum of six key informants (Appendix VI) would be satisfactory in providing the required information. Interviews were conducted with a retired bishop who serves as the chair of the local development committee, a pastor from a nearby church, the acting area chief (a member of the Order of the Golden Warrior), a human resource specialist employed in the oil mining sector, a woman aspiring to be a member of parliament, and a hospital administrator who is also a businesswoman.

Focus groups offer a setting for education, the development of trust and problem-solving abilities, and ultimately give local residents a voice in strategic community planning and development. For this study, Four Focus Group Discussions (FGD) were done in a bid to bring the group dynamics of understanding the changes of the gender roles and empowerment brought by the oil industry. The type of participant for the Focused group interviews was based on homogeneity in characteristics. The target

population was the active labour force 15 to 64 years or those that had retired from the oil mining industry and therefore four groups were incorporated into this four FGDs.

Cross tabulation was used to construct a two by two table. This was done with just one variable in mind. Bivariate variables were subjected to the chi square test of association for inferential analysis. You can use the Chi-Square Test of Relationship to determine if categorical variables are independent or connected. The Chi-Square Test of Association is another name for this nonparametric test. The association between the variables looked at in the hypothesis using the chi square test of independence was also shown using Cramer's V test. A contingency table is used to assess the test's data. A contingency table, sometimes called a two-way table, cross-tabulation, or crosstab, is a structure where data is arranged according to two categories. Whereas the categories for the first variable are displayed in rows, the categories for the second variable are displayed in columns. At least two groups must be created for each variable. Each cell displays the total number of cases for a given set of categories. The alpha levels () and degrees of freedom (number of categories minus one) are two crucial pieces of information for the Chi-square. P-values that are little and less than 5% (0.05) usually signify a substantial difference between the two variables. The null hypothesis, which maintains that the population proportions in each group are compatible with the data supplied in each category, was either rejected or failed to be rejected using the p-value. The null hypothesis is rejected and the variables under investigation are associated if the p-value, which is established by the alpha values, is less than or equal to alpha (P-value). If the p-value is higher than the alpha value (0.05), the null hypothesis is not rejected (P-value >). To ascertain whether the observed data in this case differed statistically from the expected values, the chi square test of association was employed. Cramer's V states that a strong correlation is defined as V>0.5, a medium link is defined as V [0.4, 0.5], and a weak association is defined as V [0.1, to 0.3].

3.7.2 Tools for Data Collection

3.7.2.1 Questionnaire

As the main method for gathering data, the researcher used structured questionnaires (Appendix I). Kothari (2004) asserts that questionnaires capture information in an organized way. They are less expensive and simpler to use. The primary theme areas

that correspond to the specific study objectives were used to create and organize the questionnaire. The respondents were given a total of 300 questionnaires.

3.7.2.2 Key Informant Interview Guide

Interview guide was employed (Appendix III) to capture information on the oil industry and changes in gender and participation issues within the community as a result of the **oil industry.**

3.7.2.3 Focus Group Discussion Guide

Focus Group Discussions are facilitated in a controlled setting using a FGD guide (Appendix II). An eighth annex Four distinct age and gender groups were used with the Focus Group Guide in order to collect a range of opinions. These included young girls between the ages of 15 and 35, boys between the ages of 36 and 64, and male adolescents between the ages of 15 and 35. The focus group consisted of twelve participants because it can be difficult to manage larger gatherings.

3.8 Data Analysis

The Statistical Package for Social Sciences was used to evaluate both bivariate and univariate variables while examining quantitative data. The data were processed using statistical software, and the conclusions were then provided in a tabular manner after being interpreted through analysis. We used the bivariate and univariate levels of analysis. A tabulation was displayed to show how the various categories compared to one another. One variable at a time was examined at the univariate level to reveal characteristics of the variable under investigation (Babbie, 2010). The operationalization of the variables is depicted in table 2.1 below. Two variables (X, Y) are studied at the bivariate level to determine their empirical relationship (Singleton et al., 1988). The Chi Square test of association was performed after cross tabulation.

It was decided whether to translate qualitative data into written texts in order to assess its applicability, relevance, and usefulness in addressing the study issues. This was done by collecting notes and evaluating them for significance and completeness. Bogdan and Biklen's (1998) constant comparative methods were used for the data analysis for this investigation. The formal analysis started early in the research process, during the data collection phase. A deeper knowledge of the issues at hand was made possible by the use of qualitative data, which was crucial in capturing processes that quantitative tools

might not have been able to effectively address. Through KIIs and FGDs, qualitative data was collected, categorized by related themes, and subjected to content and thematic analysis. According to Kabiru (2018), during the study, participants' perspectives on changes in gender roles in the oil mining industry were disclosed through anecdotes and first-person narratives that were collected together.

Table 2.1 Operationalization of Variables and Hypothesis

Question/Variable	Choice options	Type of analysis
What gender is the respondent?	1= Male,2= Female	Cross tabulations/Proportions, Chi square test of association
How old is the Respondent?	1=Under 18,2=Between 18 - 21,3=Over 21	Cross tabulations/Proportions
Marital Status	1=Married 2=Single 3=Widowed,4= Separated/ divorced	Cross tabulations/Proportions
Level of Education	1= Never attended school 2=Primary school,3= Secondary school 4= College	Cross tabulations/Proportions
What are the traditional roles of men in this society?	Open ended	Cross tabulations/Proportions
What are the traditional roles of women in this society?	Open ended	Cross tabulations/Proportions
Have you been directly involved in any oil mining activities	1 = Directly involved 2=Not directly involved	Cross tabulations/Proportions, Chi square test of association
If yes in 10, what activities are you involved in?	Open ended	Cross tabulations/Proportions
For how long have you been involved in oil mining activities (in Years)	1= 1 Year 2=2Years,3= 3 years,4=4and above	Cross tabulations/Proportions
Other than mining activities indicate any other source of livelihood in your family?	1= Business,2=Teacher 3= Civil Servant 4=Factory worker 5=Other(specify)	Cross tabulations/Proportions
In which are men usually employed in the in oil mining activitie in this area?	1=Director 2=Management,3=Skilled ,4=Semi-Skilled,5=Unskilled	Cross tabulations/Proportions
In which are aare women usually employed in the in oil mining activities in this area?	1=Director,2=Management,3=Skilled,4=Semi-Skilled,5=Unskilled	Cross tabulations/Proportions
Who are the dominant mine workers by gender and origin in this area?	1= MaleLocal 2=FemaleLocal,3= MaleMigrant,4= FemaleMigrant	Cross tabulations/Proportions
Give reason(s) for the response in 16 above	Open ended	Cross tabulations/Proportions
Are men and women given equal opportunity to work in mining activities	1 = Equal opportunity,2= Unequal opportunity	Cross tabulations/Proportions, Chi square test of association
Give reasons for the above response	Open ended	Cross tabulations/Proportions
List the special conditions in place For men to be offered employment.	Open ended	Cross tabulations/Proportions
List the special conditions in place for women to be offered employment	Open ended	Cross tabulations/Proportions
What are the issues that were introduced by mining operations in this area?	1=Displacement 2=loss of land 3=Loss of livelihood 4=Degradation of the environment,5=Availability of formal employment to community members 6=Influx of transient labor,7=Health hazards 8=Changing livehoods 9=Limited access to water food and firewood 10=Immorality,sexually transmitted diseases	Cross tabulations/Proportions
Who will be affected more by the above issues	1= Male,2= Female	Cross tabulations/Proportions
What roles of men have come up with the coming of oil industry?	Open ended	Cross tabulations/Proportions
What roles of women have come up with the coming of oil industry?	Open ended	Cross tabulations/Proportions

Who negotiated for compensation for the loss of land?	Open ended	Cross tabulations/Proportions
Do you think it was the appropriate way to carry out negotiations for compensation?	1 = Yes, 2= No	Cross tabulations/Proportions
Give reasons for your response above	Open ended	Cross tabulations/Proportions
Who received the money for compensation?	Open ended	Cross tabulations/Proportions
Do you feel this was the right person to receive the money	1 = Yes, 2= No	Cross tabulations/Proportions
Give reasons for your response above	Open ended	Cross tabulations/Proportions
Will the above person share the compensation fairly/equitably among all male and female members of the family?	1 = Yes, 2= No	Cross tabulations/Proportions
Has oil mining changed the traditional livelihoods of men?	1 = Livelihoods changed, 2= Livelihoods not changed	Cross tabulations/Proportions, Chi square test of association
Has oil mining changed the traditional livelihoods of women?	1 = Yes, 2= No	Cross tabulations/Proportions
Are you aware of any law or policy that deals with gender in the oil mining sector in the Kenya?	1 = Yes, 2= No	Cross tabulations/Proportions
Do you think the law is being upheld in this area?	1 = Yes, 2= No	Cross tabulations/Proportions
Are you aware that no person shall discriminate against an employee or any person seeking employment on basis of gender	1 = Yes, 2= No	Cross tabulations/Proportions
Are there organizations in this area that empower women on their rights with regards to activities resulting from oil activities?	1 = Yes, 2= No	Cross tabulations/Proportions
Do men and women have avenues to seek for legal redress in case of any gender related injustice	1 = Yes, 2= No	Cross tabulations/Proportions
40. Affirmative Action is a Kenyan Government effort to support Affirmative Action Policies and gender equality?	1=Strongly Disagree 2=Disagree 3=Uncertain, 4= Agree, 5=Strongly Agree	Cross tabulations/Proportions
41. Affirmative Action is an ambitious attempt to correct past discrimination in gender?	1=Strongly Disagree, 2=Disagree 3=Uncertain, 4=Agree 5= Strongly Agree	Cross tabulations/Proportions
42. Affirmative Action promotes diversity?	1=Strongly Disagree 2=Disagree 3= Uncertain, 4= Agree, 5= Strongly Agree	Cross tabulations/Proportions
43. Affirmative Action motivates women to look for job opportunities in male-dominated sectors?	1=Strongly Disagree, 2=Disagree 3=Uncertain, 4= Agree 5=Strongly Agree	Cross tabulations/Proportions
44. Affirmative Action policies hamper productivity?	1=Strongly Disagree 2=Disagree, 3= Uncertain 4=Agree, 5=Strongly Agree	Cross tabulations/Proportions
45. Affirmative Action fosters corruption in recruitment	1= Strongly Disagree 2= Disagree, 3= Uncertain, 4= Agree, 5= Strongly Agree	Cross tabulations/Proportions
46. Affirmative Action is a program of gender preference	1= Strongly Disagree 2=Disagree 3= Uncertain 4=Agree, 5=Strongly Agree	Cross tabulations/Proportions
47. Affirmative Action leads to reverse discrimination	1= Strongly Disagree 2= Disagree, 3= Uncertain 4= Agree 5= Strongly Agree	Cross tabulations/Proportions
Are workplace policies in the oil	1 = Yes 2= No	Cross tabulations/Proportions

sectorsensitive to women unique roles as mothers?		
Doesyourorganizationhaveaclearpolicyon maternity?	1 = Yes2= No	Cross tabulations/Proportions
Arewomen givenpaidtimeofftoseektreatment whilepregnantintheoilminingsector?	1 = Yes2= No	Cross tabulations/Proportions

3.9 Field Work Experiences

This section presents the researchers experiences during the whole research process, challenges encountered and mitigation measures undertaken to counter the challenges. Prior training of research assistants before data collection was an important field experience. This ensured that the research team conducted themselves in a professional manner and were conversant with the culture of the locals. Introduction, goal of the study, ethical considerations, familiarity with the tools were taught at length and this ensured that the research team was able to adopt the tool with ease during data collection. The research team was also able to be taught research skills like probing and seeking for clarification. The questions were also interpreted in Kiswahili which is a language understood by many as compared to English in Kenya. This was followed by pretesting of the tool and this improved both the face and content validity. Ambiguous and repeated questions were improved. This also helped in improving grammatical errors in the tools. The researcher found the training and pre testing of tools as a very important experience, which contributed to the success of the study.

Proper introduction was vital during data collection and made the respondents feel comfortable and prepare what they were going tell the researcher and the research team. The researcher introduced his/ her name, the name of the organisation that she was affiliated and the department, the goal of the study and what the study was trying to achieve. This was followed by explanation of ethical considerations that governed the whole research process. According to Nachmias and Nachmiass (1996) included informed consent, protecting participant from harm, anonymity, privacy and confidentiality. All these are important and helped in making the study a success as respondents knew that their rights were well protected. During the introduction the permit by NACOSTI (Appendix V) was produced and an assurance that the County office was aware of the study. This was an important step as it provided the researcher with the cooperation from the locals and respondents.

Getting support of gate keeper/ approval is key in achieving the objectives of the study. From the onset the researcher sought permission from the county office. This enabled her get the support of the gatekeepers and the locals. At some point the researcher got access to offices without having to queue like other Kenyans. This was an experience that the research found very helpful. Some locals also volunteered to take us round and because I had used research assistants who were accepted and understood their language, this contributed to making the research a success.

During the study various challenges were encountered; Language Barrier was a great hindrance in this study during the data collection phase. English was not understood by many. Additionally, rough Terrain/ Inaccessible roads caused by rains hampered the data collection process. This delayed the process and forcing the researcher to settle for alternative means of transport like arranging for big vehicle. Lastly, unresponsiveness of the respondents who viewed oil industry as a threat to their pastoral lifestyle had reservations in participating in the study.

The mitigation measures to counter the above-mentioned challenges included; the research assistants had been taught how to translate the questions into Kiswahili and since most of them were conversant with the local language, this was employed. This served as a mitigation measure against language barrier. In the case of rough terrain where small vehicles could not navigate, bigger vehicle was hired. There was also a time when the data collection process was stopped to wait for the rains to subside so that the process can kick off. Unresponsive respondents who proved to be difficult were replaced, those who erroneously choose to not answer some questions triangulation was adopted to cover this. Replacement was a last resort which the researcher employed in case where they saw that the respondents were purposely refusing to give information. The research assistants were trained to do this in a professional way.

3.10 Ethical Considerations

Madges (2006) asserts that conducting research while upholding individual rights is consistent with ethics in research. The study took ethical concerns into account at every stage of the investigation. The National Commission for Science, Technology, and Innovation (NACOSTI) granted the researcher a research authorization as verification of compliance with research regulations. For the NACOSTI letter and authorization, see Appendix V (under "Research Authorization"). The researcher informed the respondents concerning their participation and the expectations of the researcher. In light of this, Trochim (2006) argues that the study participants cannot be forced to participate in research because voluntary involvement is required. The question of whether the researcher should provide the participants any kind of remuneration or reward is raised by Jwan and Ong'ondo (2011). They come to the conclusion that the volunteers shouldn't be coerced into taking part. In this instance, participants' consent was requested but nothing in return was guaranteed. An additional crucial ethical principle that guided this investigation was voluntary involvement. Respondents were informed that taking part in the survey was completely optional and that they could opt out at any time. This was made aware to them during the introductory phase of data collection. Additionally they were informed that they will not be harmed as a result of their choice to choose to participate or not.

Anonymity and confidentiality are critical to maintaining the privacy of the respondents who participated in their study. Bhattacherjee (2012) claims that this is accomplished by combining the complimentary ideas of secrecy and anonymity. He defines anonymity as the inability of the researcher or those who read the final study report or publication to associate a given response with a particular responder. Permission was sought from the respondents to include their names on the references. Those who agreed to this, their names or identity were revealed while those that declined their identity was not disclosed. Informed consent was another research ethic that was applied in this study. According to Kumar (2011), informed consent entails that adult respondents are adequately and accurately informed about the type of information you are seeking from them, the purpose for which it will be used, how they are expected to participate in the study, and how it will affect them either directly or indirectly. He continues by stressing how crucial it is for the consent to be given voluntarily and without any sort of coercion.

The study also had a provision for minors less than 18 years. Consent was sort from their parents or their guardians to interview them and were present during the interview process as it was unethical to interview minors without this consent. By verbally telling the interviewer that you will participate and allow the child to participate, they gave consent.

As noted by Punch (2003), participants ought to be objective throughout the study. There was equitable engagement from many contributors to the study questions in order to attain justice (Ellis-Barton 2016). The study's results were therefore shared with the scientific community through publications and returned to the community through local government channels. A soft copy version of the final thesis will be made available to NACOSTI as required in order to serve as a means of disseminating research findings and its contributions. Additionally, copies of the completed thesis were made accessible for academic use at the University of Nairobi Library.

CHAPTER FOUR: DATA ANALYSIS AND RESULTS

4.1 Introduction

Chapter four focuses on the research findings where interpretations of analyzed data is done both descriptive and inferential. The chapter also seeks to ascertain whether or not the objectives have been achieved after analyzing both quantitative and qualitative data. The section starts with the demographic characteristics then the responses from respondents sampled.

4.2 Socio-Demographic Characteristics of Respondents

The social and demographic features of the respondents, such as their gender, sex, marital status, age, degree of education, sources of income, and engagement in oil mining, are presented in this section. The traits aid in characterizing the population from which the data were gathered.

4.2.1. Gender

Of all respondents, men accounted for 49%, while women made up the majority (51%). The data is displayed in Table 4.1 as follows:

Table 4.1 Gender of the Respondents

Gender	**Frequency**	**Percentage %**
Male	148	49.0
Female	152	51.0
Total	**300**	**100.0**

In order to define the expectations and perspectives from the opposing sexes, gender studies must concentrate on both genders. The majority of responders were women, highlighting their significance in the study (GOK, 2009). This idea that women make up the predominant gender in flowers is supported by recent studies (Dolan et al.; 2003 Dolan, 2005; Risgaard, 2014).

4.2.2 Age

The ages of the respondents were also collected in order to determine which age groups were most likely to work in the oil exploitation (drilling) industry. The data are summarized in Table 4.2;

Table 4.2 Age of the Respondents according to gender

Age of the respondent	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Under 18	1	0.7	3	2.1	4	1.4
Between 18-21	30	20.7	40	26.7	71	23.8
Above 21	115	78.6	108	71.2	223	74.9
Totals	147	100.0	151	100.0	298	100.0

According to the survey, the majority of the workers (74.9%) in Lokichar's oil mining industry was above the age of 21. The age group under 18 had the lowest percentage, at 1.4%. The findings show that the majority of respondents were over the legal age of 18 and hence qualified to work. Given that Kenya's government actively promotes child protection, the country's legal working age is 18 years old. According to Kabiru (2018), one reason why age is a crucial element in determining a worker's profile in a given industry is that it may be used as a proxy variable to determine the workforce's caliber. It's interesting to note that the study's conclusions match GOK's (2009) assertion that there are more women than men in Kenya. According to the study's findings, there are more women than men in the age group of 18 to 21 years, with a female to male ratio of 26.7% to 20.7%. Males outnumber females as they age, 78.6% to 71.2%, as they reach the age of 21. This is consistent with the FGD respondents' findings, who stated that at this age, women are married and the husband must give permission for them to work. They claimed that most spouses never provide this consent since they want their wife to handle household duties.

4.2.3 Marital Status

A significant Informant asserts that the marital status of both men and women has some bearing on gender roles. Marriage is subject to various limitations in terms of gender roles because there are some groups where certain responsibilities are assigned for either gender. She continued by saying that when there are several career alternatives in a region with a high unemployment rate, the culturally established or perceived roles are likely to change. This fits with the definition of innovation given by Jewkes et al. (2015), which states that an innovative thought is one that may be accepted or rejected and is seen as novel by an individual or a specific institution of adoption. Like other distant areas of Kenya, Lokichar in Turkana County has few employment options, which is probably determined by the number of locals-friendly businesses who are prepared to hire there. Thus, a crucial factor that could have an impact on gender roles for the Lokichar inhabitants is marital status. Table 4.3 displays the respondents' marital status information;

Table 4.3 Marital Status of the respondents by gender

Marital Status	***Respondent gender***				***Totals***	
	Male		**Female**			
	N	**%**	**N**	**%**	**N**	**%**
Married	58	38.4	59	39.0	117	39.2
Single	84	55.5	81	53.7	165	55.2
Widowed	3	2.1	8	5.3	11	3.6
Separated	4	2.9	3	2.0	7	2.3
Totals	147	100.0	151	100.0	298	100.0

In comparison to 39% of the female respondents, 38.4% of the male respondents were married. Additionally, 55.5% of men and 53.7% of women said they were single. According to the poll, 39.2% of respondents were married, compared to 55.2% who were single. In contrast, 2.3% of people were single and 3.6% were widowed. As a result, 5.9% of participants had been married before. At 55.2%, the single made up the bulk of the sampled respondents. Since all of the FGD groups agreed that the husband, as the group leader, had to grant agreement, it was expected that decisions made during marriage would affect the locals' decisions to work in oil mining and how they saw the

industry. The gender relations hypothesis (Johansson & Ringblom, 2017) holds that society adapts to the roles and interactions that men and women play in society. That theory is related to this. The reason for this is that there are generally more men (55.5%) and unmarried people (55.2%).

It's interesting to note that women make up a bigger percentage of the married group than men do (39% as compared to 38.4%). This specific significant source connected it to the fact that women work additional part-time jobs at the oil mining operation, such hawking and food supply, to supplement their housework and keep enough food on the table. She said that this work did not necessitate their permanent presence at the mining company. This further validates the radical and moderate assumptions of the conflict theory, which serves as its foundation. The former claims that social change is caused by society's ongoing struggle, whilst the latter maintains that conflict and custom are inextricably linked. According to Haslam and Tanimoune (2016), the conflict theory is best illustrated by the pyramid form. In this situation, the female attempts to blend in with society by upholding her morals while also striking a balance at work to prevent a conflict between her obligations at home and at work.

4.2.4 Education Level

The degree of education of the respondents and the Turkana community as a whole significantly affects how gender roles have changed. Senior positions are held by those with higher education levels, whereas lower educated individuals labor in entry-level employment with little compensation. According to the respondents' perceptions on the different job categories, non-locals with higher education were awarded senior positions while locals were given low cadre jobs. Table 4.4 displays an overview of the educational statistics.

Table 4.4 Respondents gender by level of Education

Education Levels	*Respondent gender*				*Totals*	
	Male		**Female**			
	N	**%**	**N**	**%**	**N**	**%**
Never Attended School	43	29.3	49	32	92	30.7
Primary Education	39	26.4	40	26.5	79	26.5
Secondary Education	25	17.1	45	29.9	71	23.6
College	40	27.1	18	11.6	57	19.2
Totals	147	100.0	152	100.0	299	100.0

In comparison to men, who made up 17.1% of respondents with a secondary education, women made up 29.9% of the group. Furthermore, compared to 11.6% of females, 27.1% of men held a college degree. 32% of females and 29.3% of males were those who had never attended school, making up the majority. In all, 30.7% of respondents reported never having attended school, while 26.5% reported having completed elementary school. On the other hand, only 19.2% had a college degree, while 23.6% had only a secondary education.

The respondents' educational background was significant since it was discovered that a large number of them in Turkana, Lokichar, had never attended school, which resulted in significantly higher rates of illiteracy. Given that 30.7% of respondents had never attended school, it was expected that the highly competitive global economy would have an influence on opportunities. The tiny percentage of respondents (19.2%) who reported having attended college or above stated that they had a higher chance of finding employment in the oil mining business or any other formal employment that was directly or indirectly related to oil mining. It was highly likely that people without formal education would not have access to career chances on par with those with secondary and postsecondary education, according to a key informant, a woman with a master's degree who works for Tullow Oil. Gender roles were more likely to change with education than without it. Notably, men (27.1%) were almost twice as likely to hold a college degree as women (11.6%).

This suggests that men have higher chances of landing a job than do women, and one of the key informants highlighted the need for more ways to empower women and

encourage them to continue their education past the secondary level. Girls can be empowered through programs like school price bursaries, mentorship programs, and community education about the value of girls' education. Others include oil businesses that offer qualified girls roles within the industry right away and internship chances that lead to full-time employment.

It's interesting to notice that more men than women are continuing their education in college. Women in mining in Canada recognized education levels as one of the main hurdles to their professional advancement, along with work cultures, a lack of mentors, how people perceive their skills, and conflicts between work and family. The position of women in Canada's mining and exploration industries was the study's main topic. It would be easy to assert that working in the mining industry is inherently incompatible with raising a family and that this makes it unattractive to family-oriented workers, especially women (Women in Mining Canada, 2010). It is very difficult to tackle problems of this kind. This is well explained by the conflict and gender relations theory. According to Burrell (2017), the conflict theory believes that society's ongoing fight for few resources has an effect on social interactions. The gender relations theory, on the other hand, contends that all social interactions must take into account how men and women interact and carry out their social obligations in society (Johansson & Ringblom, 2017). The results of the study suggest that this explains why there is a conflict between work and home life because most working women select occupations that yet permit them to take care of their domestic responsibilities.

4.2.5 Involvement in Mining of Oil

The researcher wanted to know what percentage of the respondents worked in oil mining in Lokichar. The FGDs were used to establish who was engaged in oil mining. It was discovered that although there were job openings created by oil exploitation, the locals did not have easy access to them and that the ones open were for low cadre, leaving high level positions to foreigners. Table 4.5 following provides an overview of their responses;

Table 4.5 Gender and Involvement in Oil Mining

Gender	*Response whether ever been directly involved in oil mining*				*Total*	
	Yes		**No**			
	N	**%**	**N**	**%**	**N**	**%**
Male	81	55.0	66	45.0	147	100.0
Female	59	39.0	92	61.0	151	100.0
Totals	140	46.9	158	53.1	298	100.0

The study found that men made up 55% of those who had worked in the oil mining sector, compared to women's 39.0% participation. According to the study, just 46.9% of the respondents had direct experience with oil mining, while 53.1% had no direct experience with the industry. According to a key informant, a higher number of people were working in jobs like catering, training, transportation, purchasing, and security that were not directly related to mining. Given that 61% of females and 45% of males, respectively, have never worked directly in the oil industry, this is a considerable gap.

The findings of this study are supported by a 2013 study by Women in Mining, which discovered that the reason for the discrepancy is that few women choose degrees related to mining, as doing so would guarantee that more women get employed in this field. Another conclusion was that men were perceived to dominate the mining industry, which is consistent with the study's findings. The survey also discussed the difficulties that women confront, particularly the tension between their personal and professional lives. Few women engage fully (directly) in mining since it interferes with their domestic duties; instead, they select temporary employment that are related to mining indirectly or that support mining in order to be flexible in juggling both their domestic and professional commitments.

According to one of the major interview informants, locals began participating in exploration and surveillance operations where local specialists were consulted. One of the participants in the FGD stated, "Both professionals and unskilled workers were employed in large numbers during exploitation. Jobs became available as the process moved toward drilling, although they were transient. While not directly participating in oil mining, other respondents—the majority of whom were community gatekeepers—explained that they did provide services by serving as middlemen for infrastructure like tippers and transport lines. Other respondents claimed that the majority of women were involved in the supply of goods and services to directly hired oil mining company employees. Two years later, there was a sharp downscaling of the involvement.

One well-known local confirmed this story, saying, "Downscaling reduced locals' involvement in oil mining, negatively affecting businesses." As per the research conducted by Nayak and Mishra (2010), local involvement in multinational enterprises is likely to lead to the development of potent partnerships that benefit society as a whole. This poll is significant because more than 53% of people did not directly work for oil mining companies. The dynamics and way of life of the local/host community are likely to alter as a result of local participation. In light of this, 53% of the population was either unemployed or working as an indirect contractor for an oil mining company. This may also be attributed to the bulk of the population's poor level of education. A key informant stated that a higher percentage of migrants, especially from other Kenyan counties, were coming to fill the jobs that locals were unable to perform due to a lack of qualifications (education and experience).

4.2.6 Years of involvement in Oil Mining

The duration of the locals' involvement in oil mining was another goal of the study. The participation of the residents was essential in ensuring that they obtained employment and supported their livelihoods through the economic activity taking place on their land. According to a key informant, it was assumed that employees would have better livelihoods and be exposed to gender role dynamics the longer they worked for the company. Table 4.6, which is displayed below, summarizes the data for the involvement period.

Table 4.6 Years of Involvement and Gender

Year of involvement	*Respondent gender*					*Total*
	Male		**Female**			
	N	**%**	**N**	**%**	**N**	**%**
1 year	24	31.9	16	25.9	40	29.3
2 years	33	43.1	28	46.6	60	44.6
3 years	14	18.1	13	22.4	27	20.0
4 and above	5	6.9	3	5.2	8	6.2
Totals	76	100.0	60	100.0	136	100.0

Compared to 44.6% of those who had worked in the industry for two years, 29.3% for a year, 20.0% for three years, and 6.3% for more than four years, only 6.2% of those who had been directly involved in oil mining had been employed for four years or longer. The responders who had worked for oil companies had typically been employed there for between one and two years. The time frame is deemed sufficient to have an impact on crucial processes like changes in local residents' livelihoods and the definition of their roles. A significant finding of this study is that while both genders' percentages of years of involvement continue to decline, the dropout rate for females is higher and reaches 5.2% by the fourth year. Conflict between job and personal obligations is a major factor in this. Soyapi and Kotzé (2017) noted that the traditional responsibilities of women as primary caregivers and the perception of the house as the place where women belong were several of the issues preventing women from working in the oil mining industry. In a similar vein, a 2013 survey by Women in Mining (UK) found that, globally, the mining sector had the lowest percentage of women employed at company boards of any sector. Interestingly, by year two, there are 46.6% more females than men, a difference that decreases as the years go on. In the end, women choose sources of income that are more closely related to household duties, leaving their male counterparts (a woman running for parliament) behind. The ladies eventually agree on a livelihood that allows them to balance housework and provides them with income. This explains why female engagement is significantly lower than that of men.

Another important source who served as interim head claimed that Tullow, the primary oil company, had subcontracted BGB, a Chinese contractor, to map and examine oil fields for three years, during which time some locals were employed. Mahy and colleagues (2012) found that the duration of the firms' stays had an impact on the local community's means of sustenance in their research on the effects of multinational corporations on the host community. The study found that residents who had previously worked in the oil industry had a higher chance of improving their standard of living than those who had never worked in the industry and those who were still looking for employment.

4.2.7 Other Sources of Income

An aspect of the study that was linked to the capacity to deal with situations and raising one's chances of having a better way of life was the search for sources of income aside from oil exploration. All of the respondents were asked about their additional sources of income, and it was discovered that the majority of them operated other companies in addition to their jobs as oil miners. The responses' summary are shown in table 4.7 as follows;

Table 4.7 Other Sources of Income and Gender

Other sources of Income	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Business	81	68.8	82	66.9	163	67.8
Teacher	9	8.0	7	5.9	17	7.0
Civil Servant	9	8.0	14	11.9	24	10.0
Factory Worker	16	13.4	9	7.6	25	10.5
Farming	1	0.9	9	7.6	10	4.3
Others	1	0.9	0	0.0	1	0.4
Totals	118	100.0	122	100.0	240	100.0

Business was the respondents' most frequent source of income (at 67.8%), followed by industrial employees (10.5%), civil servants (10%), teachers (7.0%), farmers (4.3%), and others (0.4%). To determine whether the people were content with oil extraction as their sole source of support, the alternative sources of income were examined. 68.8% of males and 66.9% of women worked in business. Current Tullow employee who was one of the key informants stated that "these businesses were more appealing as they balanced with their work life." The women were able to take care of their duties while also conducting business. These businesses included fruit vending, selling water and airtime, and selling food.

4.3 Governance Factors Embraced in Oil Mining in Lokichar

Governance in many areas influence how women and men access important and critical facilities for their enhancement in public participation. Affirmative Action by the government and implementation of the same by partners acts as a catalyst for the community in involvement oil-mining areas in Turkana. The section under governance focuses on the available gender-sensitive policies, Affirmative Action as well as perceived benefits and perceived liabilities. This section dwelt more on testing the practicality and implementation of Affirmative Action policies.

4.3.1 Gender Sensitive Policies

The study's objective was to ascertain whether any workplace regulations account for the roles that mothers play. The investigation's goal was to find out if there were any gender-specific workplace regulations. Executive summary of the findings is shown in Table 4.8;

Table 4.8 Presence of Workplace Policies Sensitive to Women as Mothers

Policies at work in the oil industry that take into account women's special roles as moms	**Respondent gender**				**Total**	
	Male		**Female**			
	N	**%**	**N**	**%**	**N**	**%**
Yes	96	68.4	69	57.8	165	63.5
No	44	31.6	51	42.2	95	36.5
Total	140	100.0	120	100.0	260	100.0

The study found that 68.4% of men and 57.8% of women who participated understood that the oil business had workplace regulations that were respectful of working mothers. Having workplace policies was linked to increased levels of engagement by women in work activities and oil mining operations, according to a human resource professional in the oil mining industry. A whopping 36.5% of respondents thought that the oil mining sector lacked workplace regulations. Women made up 42.2% of those who disagreed with workplace rules. Nonetheless, the preponderance of participants in the focus group discussions (FGD) expressed the opinion that these regulations impede women's capacity to reconcile their professional and familial responsibilities. They contended that, as a result, women continue to work until their second year, after which the employee turnover rate rises as they discover what suits them. Two KIIs highlighted that it was worse for women than for males because there was no work-life balance. This is explained by the fact that oil mining is still a relatively recent development in Turkana.

Additionally, knowledge, persuasion, and decision are the elements in the innovation process that Messerschmidt, Tomsen, and others (2018) claim impact how novel an innovation is seen to be. An essential element in the spread of innovation is communication. The gender relations theory describes the rate at which new technology is accepted as well. Its proponents, which include Dominelli (2017) and Messerschmidt et al. (2018), contend that women have been reduced to fulfilling reproductive and devalued roles inside the household. This explains why people steer clear of professions that, as one of the FGDs advised, do not permit a work-family balance. It also explains why the implementation of Affirmative Action legislation has been disappointing.

4.3.1.1 Clear Policies on Maternity of women

One of the governance concerns that empowers women and allows them to continue working while taking care of family duties is how pregnant women are treated. Finding out if the oil mining businesses owned by Lokichar had active maternity policies was the aim of the investigation. The results are compiled in Table 4.9 as it is now shown;

Table 4.9 Existence of Active Policies on Maternity of women

Whether Policies Exist	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	125	89.5	112	93.9	237	91.5
No	15	10.5	7	6.1	22	8.5
Total	140	100.0	119	100.0	259	100.0

A total of 91.5% of the participants in the survey agreed that there were laws governing women's maternity. According to table 4.9, 93.9% of those who agreed were women and 89.5% were men. Additionally, it was noted that the 8.5% of respondents who believed that there were no policies governing women's maternity were quite few. There were 6.1% of women and 10.5% of men who said there were no policies on maternity

leave for women. Women's maternity policies empower men and women to practice and give their wives great support. It was noted that the oil mining corporations did not strongly support the introduction of maternity policies for women as stated by one KII. Women's participation must be supported during pregnancy since they are more likely to contribute more at work when they feel supported (Atieno, 2006).

4.3.1.2 Paid off for Weekly Treatment During Maternity

Giving mothers who work for oil firms compensated weekly wages or paid leave is one of the things that drives both men and women. The study asked the participants to indicate whether they received weekly care while pregnant. The findings were summarized and reported in table 4.10;

Table 4.10 whether paid off for weekly treatment during maternity

Response Whether Paid Off	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	118	84.2	96	80.2	214	82.3
No	22	15.8	24	19.8	46	17.7
Totals	140	100.0	120	100.0	260	100.0

According to the poll, 84.2% of men and 80.2% of women agreed that they received pay for their maternity leave. Overall, the study found that 82.3% of women agreed they received compensation for either weekly or occasional care throughout pregnancy. As shown in table 4.10, only 17.7% of respondents disagreed that they received payment for their weekly treatments. From the focus group talks, it was also noted that depending on the type of employment contract, there may be weekly payoffs or periodic treatments for maternity.

4.3.2 Strength of agreement on Perceived Benefits of Affirmative Action

The study sought to establish the perceived benefits of Affirmative Action. Through the Affirmative Action, mothers, women, and men receive benefits that are perceived as mostly for women in the society. The summary of the findings are depicted on table 4.11;

Table 4.11 Perceived benefits of Affirmative Action

Strength of agreement	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Strongly Disagree	27	18.6	22	14.3	49	16.4
Disagree	19	12.9	25	16.3	44	14.6
Uncertain	22	15.0	19	12.2	41	13.6
Agree	60	40.7	69	45.6	129	43.2
Strongly Agree	19	12.9	18	11.6	36	12.2
Total	147	100.0	152	100.0	299	100.0

Males and females, respectively, made up 12.9% and 11.6% of those who strongly agreed that Affirmative Action had some perceived benefits. Males and females disagreed that Affirmative Action had perceived benefits in proportions of 12.9% and 16.3%, respectively. The majority of respondents, 43.2%, largely concurred that Affirmative Action, as promoted by the Kenyan government, was thought to have advantages. 16.4% of respondents, a sizeable percentage, firmly agreed that they did not see any benefits from Affirmative Action.

A key source, the participants in two of the focus group discussions, and the respondents agreed that women benefited more from Affirmative Action. A diverse workforce, on the other hand, calls for a transition from Affirmative Action to a market-oriented

discussion, according to opponents of the policy who see it as just but as a component of inclusion (Dessler 2005). During the FGD, this topic generated a lot of discussion since most men believed that Affirmative Action made women lazy and that there is a significant likelihood that an underqualified woman will be appointed to a position of authority rather than a worthy qualified man.

4.3.2.1 Affirmative Action as an ambitious attempt to correct past discrimination

Governments have specified particular affirmative action programs to address gender role disparities in the workforce. The gender relations hypothesis, according to Booth and Erskine (2016), has been essential in explaining cultural norms and behaviors surrounding the division of labor between genders. The argument explains why men are more prevalent than women in extractive industries, including the production of oil. In order to determine if Affirmative Action was a bold endeavor by the government to end historical discrimination, the study set out to answer this question. Table 4.12 shows the results' executive summary;

Table 4.12 Affirmative Action as an attempt to correct past discrimination: strength of agreement

Strength of agreement	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Strongly Disagree	21	14.3	8	5.4	29	9.8
Disagree	6	4.3	13	8.8	20	6.6
Uncertain	23	15.7	12	8.2	36	11.9
Agree	84	57.1	100	66.0	184	61.6
Strongly Agree	13	8.6	18	11.6	30	10.1
Total	**147**	**100.0**	**152**	**100.0**	**299**	**100.0**

Males at 57.1% concurred that Affirmative Action was implemented to address historical discrimination. 14.3% of men and 5.4% of women strongly disagreed that Affirmative Action was intended to make up for past wrongdoings. In general, it was discovered that 10.1% of respondents had a strong conviction that Affirmative Action might be used to correct previous gender discrimination that had been practiced by earlier governments. The results corroborated Mahy's (2012) claim that applying

Affirmative Action produced the idea that acts are driven by a desire to make up for past wrongs. Heilman, Manzi, and Braun (2015) state that the study's conclusions also have implications for the notion and viewpoints of women's affirmative action as advanced by the UN, the 2010 Kenyan Constitution, and article 2.2 of the Convention on the Elimination of All Forms of Racial Discrimination. The purpose of affirmative action is to lessen historical discrimination against women.

4.3.2.2 Affirmative Action is an effort to promote diversity

The gender relations hypothesis, according to Booth and Erskine (2016), has proven useful in explaining cultural norms and behaviors related to the gender distribution of labor. The argument holds that, in terms of diversity, men outnumber women in the extractive industries, even when it comes to oil extraction. The purpose of this study was to determine whether or not the respondents agreed with the claim that Affirmative Action is an effort to foster diversity. This is also done in the light of social change in a society where people might experience anomie, normlessness because traditional norms might change, change or be resistant to change (Dominelli, 2017). The summary of the findings are depicted on table 4.13;

Table 4.13 Affirmative Action as an effort to promote diversity versus gender: Strength of agreement

Strength of Agreement	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Strongly Disagree	19	13.2	6	4.2	25	8.6
Disagree	17	11.8	23	15.3	40	13.6
Uncertain	33	22.8	28	18.8	60	20.7
Agree	62	43.4	81	54.2	143	48.9
Strongly Agree	13	8.8	11	7.6	24	8.2
Total	**143**	**100.0**	**149**	**100.0**	**292**	**100.0**

The percentage of respondents who strongly agreed that corporations and the government both employ affirmative action to improve diversity was 7.6% for women and 8.8% for males. 8.6% of the respondents believed that diversity had not been promoted by the employment of affirmative action. According to Table 4.13, 54.2% of respondents (or 48.9%) thought affirmative action was a strategy to advance diversity. Affirmative Action was seen as a way to advance diversity, according to the majority of FGD participants, the qualitative data also showed. The results were also in line with those reached by Jenkins (2017), who believed that as most initiatives aim to lessen historical injustices, it was because of Affirmative Action by governments that levels of depression among women were declining.

The importance of gender diversity must be given top priority in any organization. Ely & Meyerson (2010) claim that the possibility of overlooking or compromising other diversity requirements is a significant barrier to achieving gender diversity goals of 50% female participation. The gender relations theory, which holds that rapid societal change might result in workplace diversity, is relevant to the findings as well. But in contemporary times of swift social change, it can be difficult to determine what constitutes appropriate behavior because accepted positions are frequently in flux (Johansson & Ringblom, 2017).

4.3.2.3 Affirmative Action and Motivation to both gender: Strength of Agreement

The goal of the study was to gauge how strongly both genders were motivated by and agreed with Affirmative Action. When employees work in a relaxing and pleasant setting, motivation increases. In table 4.14, the summary of findings are shown;

Table 4.14 Affirmative Action and Motivation to both gender: Strength of agreement

Strength of agreement	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Strongly Disagree	16	10.9	3	2.1	19	6.4
Disagree	2	1.5	1	0.7	3	1.1
Uncertain	22	15.3	17	11.0	39	13.1
Agree	64	44.5	91	60.3	155	52.6
Strongly Agree	40	27.7	39	26.0	79	26.9
Total	**144**	**100.0**	**151**	**100.0**	**295**	**100.0**

Affirmative Action increased employee morale, according to the majority of respondents (52.6%), whereas only 1.5% of men disagreed. Affirmative Action is a motivator for both genders, according to 60.3% of females and 44.5% of males who agreed with this statement in general. One of the key informants, who was backed by three other people, believed that Affirmative Action was essential for enabling both genders to actively participate in community development projects and to have varied perspectives on a project that take gender diversity into account. According to a key informant who formerly worked in human resources, diversity is linked to the goodwill of businesses and the government, which results in unified workforces and encourages a gendered perspective on issues within the enterprise. This is crucial to ensuring that all employment-related factors linked to various genders are taken into account. The mining industry promotes a "masculinity" stereotype in which women are marginalized. According to Ely and Meyerson (2010), mining businesses should make an effort to create a competitive environment where women feel valued and accepted as the other

gender of men. As a result, the organization can guarantee quality work and compete for gender equality.

4.3.3 Affirmative Action: Perceived Liabilities

Through its applications, Affirmative Action has sometimes been thought to have drawbacks. The section provides responses to the question of whether Affirmative Action is a burden to the locals and the government.

4.3.3.1 Affirmative Action hampers productivity for both males and females

Affirmative Action is linked to initiatives that could result in a rise in the number of employees at a company or underrepresented members of the other gender. The goal of the study was to determine whether adopting Affirmative Action led to decreased productivity.

According to the survey, 29.4% of men and 19.6% of women said that affirmative action decreased productivity. A Key Informant who worked in the human resources section stated that most males think that women get more from affirmative action than men do, which consequently affects productivity. As an illustration, she went on to say that if a male and a woman both enter the company at the same time, the woman will have more options for training and scholarships, enabling her to go up the professional ladder more swiftly. 42.7% and 22.8%, respectively, of men and women disagreed that Affirmative Action decreased male production. A major source claimed that nothing concerning Affirmative Action is related to diminishing production for either men or women because the tasks assigned to the personnel nominated are clearly specified. However, men believe that Affirmative Action favors women, which demotivates them and lowers productivity. The claim made that Affirmative Action was linked to increased female productivity.

4.3.3.2 Affirmative Action and Cause of Corruption

The goal of the study was to determine whether instances of corruption in the process of putting Affirmative Action into practice existed as a result of the practice. Table 4.15 in the text below is an overview of the findings.

Table 4.15 Affirmative Action fosters corruption: strength of agreement

Strength of agreement	Affirmative Action (AA) fosters corruption				Total	
	Male		Female			
	N	%	N	%	N	%
Strongly Disagree	29	20.9	38	25.7	67	23.3
Disagree	52	37.4	84	56.2	136	47.2
Uncertain	40	28.7	19	12.5	59	20.4
Agree	10	7.2	4	2.8	14	4.9
Strongly Agree	8	5.8	4	2.8	12	4.2
Total	**139**	**100.0**	**149**	**100.0**	**288**	**100.0**

37.3% of men and 56.2% of women disagreed with the idea that Affirmative Action encourages corruption. Only a small percentage of females (2.8%) felt that Affirmative Action encouraged corruption. In the FGD, a respondent mentioned that many men pay kickbacks to be given preference for jobs or chances that are meant for women. According to the conflict theory, when men and women compete for limited possibilities, this makes sense. Overall, 47.2% of those polled said that the development and application of Affirmative Action does not encourage male corruption. 20.4% of respondents were unsure whether corruption was connected to the implementation of Affirmative Action. Only 5.1% of respondents agreed that Affirmative Action's implementation had led to corruption.

4.3.3.3 Affirmative Action is a program of gender preference: Strength of Agreement

It was crucial to learn about the region's Affirmative Action policies. 19.2% of females believed that affirmative action was a scheme that preferred one gender over another, while 45.9% of females disagreed. Consequently, 20.4% of the male respondents denied that Affirmative Action was a scheme to provide preference to men. The results show that increasing women's contributions to and involvement in community development was one of affirmative action's primary objectives. Affirmative action, according to three important interviewees, was intended to improve the contributions

and participation of women, who had traditionally been underrepresented in societal discussions on gender issues.

4.3.3.4 Affirmative Action Reverses Discrimination

The analysis found that only 25.5% of male respondents disagreed with the assertion that Affirmative Action helps to end discrimination, compared to 56.5% of female respondents. It was also noted that only 3.4% of females and 14.6% of male respondents agreed that Affirmative Action ended workplace discrimination. 41.4% of respondents in total disagreed that Affirmative Action was implemented to end employment discrimination. 24.0% firmly concurred that Affirmative Action was implemented to end discrimination. The findings support the widely held notion that the purpose of affirmative action was to lessen prejudice against women based on their gender. This aligns with the gender relations theory put forward by proponents such as Dominelli (2017), who argue that women are relegated to performing menial tasks. It also supports Burrell's (2017) claim that society is constantly in competition with itself for limited resources. According to Booth & Erskine (2016), this explains the link between the need to end discrimination against women and men's dominance in the extractive sectors.

4.4 Equal Employment Opportunities

This section contains information on the oil mining regions where men and women worked mostly. The section also includes a breakdown by gender and ethnicity of the majority of mine employees for the oil mining company in Lokichar. In this part, the first hypothesis—according to which there is no connection between equal hiring and equal job chances for men and women in mining—is investigated. Large businesses with both domestic and international activities are expected to uphold gender equity in their hiring procedures and to comply with the equal employment opportunities policy. The section evaluated whether the employment standards for different sexes were followed in the oil mining industry. The findings on the various work kinds assigned to different genders while employed are summarized in Table 4.16.

Table 4.16 Types of jobs allocated to men and women when employed

Type of job allocated when employed	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Director	4	4.0	0	0.0	4	1.5
Management	0	0.0	8	5.0	8	3.1
Skilled	88	88.0	120	75.0	208	80.0
Semi-Skilled	8	8.0	24	15.0	32	12.3
Unskilled	0	0.0	8	5.0	8	3.1
Total	**100**	**100.0**	**160**	**100.0**	**260**	**100.0**

In the sample, women were not represented at any level in the directorship, with 88% of skilled workers being men and 75% being women. The majority of males who responded said they were skilled in their occupations, at 80%, compared to 5% of women who said the same. According to the study, men indicated that 88% of those working in Turkana's oil mining industry were in skilled jobs, with the remaining 8% coming from semi-skilled positions. According to female responders, as indicated in table 4.16, the majority of workers were in skilled positions (75%), whereas there were none in directorship positions. Additionally, it was observed that only 4% of males held senior director positions. The results also have implications for the conceptual framework, which postulated that social democratic elements, aspects of governance, and patriarchy would be some of the components influencing the availability of jobs for men and women. Due to the division of labor, fewer women in the population under study held directorships or positions of management, delaying the advancement of gender equality.

4.4.1 Employment Positions for Males

The goal of the study was to determine the proportion of males who work in various roles in the oil mining sector. According to the survey, 88% of participants claimed that men were hired as skilled workers in the oil business, while 8% said that men were hired as semi-skilled workers. Notably, a large majority of respondents (96%) claimed that men from the Lokichar tribe were likely to work in vocations requiring some level of skill or education. According to the survey, only 4% of local men and women had directorships, and neither gender held management roles. According to a research by

Eftimie, Heller, and Stongman (2009), it is likely that the top management will favor hiring non-locals for senior positions, especially those held by former senior firm executives. According to a key informant, issues of management trust, abilities, and knowledge were crucial in helping locals obtain top jobs. Trainings and corporate social responsibility were recommended as ways to support the local community, which led to the creation of new jobs and cooperative projects with locals (Mahy, 2012).

4.4.2 Employment Positions for the Females

Women have only recently entered the corporate workforce, particularly in Kenya's underprivileged communities, due to sociocultural limitations placed by society and husbands for married women as well as restrictions related to education level. Particularly in Kenya, women have fought for equal opportunity with men in the workplace and other powerful positions (Omia, 2015). The study's objective was to pinpoint the potential positions or settings in which women would operate in the Lokichar oil mining sector. Comparatively, 15% of the Oil Company's female employees were hired as unskilled labor, as opposed to 8% of their male counterparts who were hired as semi-skilled workers.

A 2011 Ghanaian study by Boohene and Peprah found that women with lower education levels are more likely to work in lower cadres, which lowers their prospects of ever reaching the top. This is consistent with theories of gender relations and conflict, which maintain that discrimination against women arises from traditional gender roles and that they struggle to manage their obligations at home and at work. This perspective is supported by prior studies. Kabiru (2018) found that although Beyene (2014) described the cut flower industry's workforce as having low educational attainment and a link to the industry's significant need for unskilled labor, the workers had finished their primary and secondary school.

4.4.3 Gender and Origin of the Employees

The origin and gender of the participants were also studied. The respondents were questioned about where they believed the majority of the workforce originated. In this context, anyone who does not have Turkana roots is referred to as a migrant. This could be national or global. On table 4.17, a summary of the responses is presented;

Table 4.17 Gender and Origin of Employees

Gender and origin	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Male Local	42	21.6	19	10.1	61	16.0
Female Local	24	12.4	18	9.6	42	11.0
Male Migrant	110	56.8	123	66.9	233	61.7
Female Migrant	18	9.2	25	13.5	43	11.3
Total	**144**	**100.0**	**141**	**100.0**	**284**	**100.0**

From the study male respondents suggested that 56.8% and 21.6% of the staff at the oil mining sector in Lokichar were male migrants and male locals respectively while their female counterparts suggested that 66.9% and 10.1% of the same respectively. Migrant in this case refers to anyone who is not a local whether from other counties in Kenya or international (other countries). The study further revealed that from the opinion of the respondents that more than half (56.8%) of the employees at the Oil company were male migrants. This disparity especially on the origins of the employees was heavily attributed to the perceived lack of skills and experience among the locals making them disadvantaged in getting jobs at the oil company as mentioned by a key informant. A large proportion at over 30.7% of the respondents were illiterate. Other reasons for this also included discrimination and segregation during the hiring process, vacancy advertisements not being done locally, and lack of awareness among the locals as mentioned by three key informants and one FGD group. An influential key informant attributed the few chances of job opportunities held by the locals to the continuous lobbying for equal opportunities in the Oil Company by the locals and them as the gate keepers.

It is interesting to note that all FGD respondents indicated that initially, during exploration and mapping of the oil resources, job opportunities were shared equally, 50% to the locals and 50% to the other Kenyans out of Turkana County and

internationals. Through the 50%-50% sharing, locals were able to get job opportunities, but most of these jobs were skilled and semiskilled. The findings in this study were similar to findings by Kotsadam and Tolonen, (2015) pointing out that multinationals could not solely depend on the local skills for the entire company operation but needed to import external skills especially in the management of the company. This was largely because the locals lacked the expertise. These findings relate to the conceptual framework through gender empowerment in Turkana can gender equality be achieved. The change explained by a key informant can be achieved by change of mindset to embrace education and upholding gender equality campaigns.

4.4.4 Equal Opportunities for both Genders

Men and women working in Lokichar's mining sector ought to have equal opportunities. The purpose of the study was to ascertain whether men and women had equal opportunities. The results are shown in Table 4.18 below;

Table 4.18 Response whether men and women have equal employment opportunities

		What gender is the respondent?					
		Male		Female		Total	
		N	%	N	%	N	%
In your opinion, are men and women given equal opportunity to work in mining activities	Yes	31	22.1	18	12.2	49	17.1
	No	111	77.9	126	87.8	237	82.9
	Total	**142**	**100.0**	**144**	**100.0**	**286**	**100.0**

According to the report, there are no equal employment chances for men and women, according to 87.8% of women and 77.9% of men. 17.1% of those polled said that treatment of men and women was equal. The specific requirements for employment, however, were the same for both sexes. One of the key sources emphasized the unequal treatment of men and women in recruiting techniques before subsequently including women in jobs like catering.

The respondents gave reasons for why they thought men and women in Lokichar's oil mining did not have equal employment prospects. The unequal work possibilities for men and women have been attributed to reasons including the fact that the majority of job openings in the oil industry involve the use of excessive amounts of energy, preferring men over women. In addition, there was a gender pay gap in hiring, with men candidates getting the job over female candidates. One of the main informants brought up the fact that some women had to provide sexual favors in order to get hired, underscoring the barriers that discrimination places on women seeking equal work prospects.

The fact that women had a lot of housekeeping to perform made it impossible for them to commit to a full-time position at the oil company was another justification offered for the employment gap. These elements were linked to the theoretical framework, which put forth the notion that patriarchy (traditions and values), in addition to socio demographic elements like gender and education, were important determinants of women's empowerment in the oil sector in Lokichar.

Men and women were asked in the FGD whether they believed they were given equal opportunity. Among the affirmative responses were the following: gender equality is mandated by the Kenyan constitution and is expected of businesses. According to one of the primary interviewees, despite the fact that corporate Affirmative Action plans and the Kenyan constitution are well-defined, there are differences in how they are implemented and how Turkana dynamics affect the availability of skills from both genders. The respondent asserts that, in addition to other detrimental elements, prejudice, corruption, nepotism, racism, an imbalance between work and personal responsibilities, stereotypes, and culture all contribute to the widening opportunity gap between men and women (Nayak & Mishra, 2005).

Oil businesses requested a number of documents and information from job applicants, including their birth certificate, national identification card, national hospital insurance fund card, national social security card, and other information. O-level and post-secondary education prerequisites in terms of academic standing; skills and practical experience in the oil sector; good health; proximity to the location of the oil company; communication skills; and dedication to the oil company. Women occasionally had to

use a pregnancy test to demonstrate that they were not expecting. One would not be given the chance if it was discovered that they were pregnant.

4.4.5 Testing the Hypothesis on whether Oil Company hires Males and Females Equally

The first hypothesis, which tested whether Lokichar oil mining businesses hired men and women equally, was used to measure objective one. The following were the hypotheses:

H_0: Equal hiring does not equate to equal employment opportunities for men and women in the mining industry.
H_1: Equal hiring and equal employment opportunities for men and women in mining activities are related.

Unlike the null hypothesis, which maintained that there is no correlation between the two, the alternative hypothesis claimed that there is a relationship between equal hiring and equal opportunity for men and women to work in mining operations in Lokichar among the oil mining enterprises. The null hypothesis was assessed using the Chi-Square test of association. The Chi-Square test was found to be the most efficient way to investigate the hypothesis since it allowed for the testing of categorical variables—in this case, sex and gender—and whether or not there was equal employment for men and women in Lokichar, Turkana. Moreover, the cross categorization function of a bivariate table was employed to assess the statistical significance of the difference between the observed and expected frequencies. The goal of the study was to ascertain whether there were equal employment opportunities for men and women in the mining sector in Lokichar, Turkana County. Finding out how the industry performs in terms of equal opportunities may open up possibilities for female empowerment. The results of the cross tabulation and chi square analysis are summarized in Table 4.19.

Table 4.19 Cross-Tabulation and Chi Square Test for Gender and Equal Opportunity for Locals

What gender is the respondent? * Are men and women given equal opportunity to work in mining activities Cross tabulation

			Are men and women given equal opportunity to work in mining activities		Total
			Equal opportunity	Unequal opportunity	
What gender is the respondent?	Male	Count	31	111	142
		Expected Count	24.3	117.7	142.0
	Female	Count	18	126	144
		Expected Count	24.7	119.3	144.0
Total		Count	49	237	286
		Expected Count	49.0	237.0	286.0

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.385[a]	1	0.036		
Continuity Correction[b]	3.752	1	0.053		
Likelihood Ratio	4.427	1	0.035		
Fisher's Exact Test				0.042	0.026
Linear-by-Linear Association	4.369	1	0.037		
N of Valid Cases	286				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 24.33.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	0.124	0.036
	Cramer's V	0.124	0.036
N of Valid Cases		286	

Chi Square test results for equal employment for men and women

A Chi-square test was used to investigate this hypothesis and see whether there was a connection between equal hiring and equal opportunities for men and women to work in the mining industry. A chi-square test of association revealed a significant correlation between equal hiring and job opportunities for men and women in mining operations (X2 (1, N=286) =4.385, p=.036). Put another way, the null hypothesis was shown to be false. The Cramer's V test reveals a marginal correlation, with an alpha of 0.05, between equal hiring and career prospects for men and women in the mining sector.

There is a fragile link in Lokichar between equal hiring and equal employment opportunities for men and women in the mining sector. According to several key informants, there was a perception that hiring practices did not equally favor different genders. These factors included cultural patriarchy, the tension between work and home responsibilities, and the lack of gender-specific community outreach programs. The results were in line with expectations, and it was shown that patriarchy and governance variables had a big impact on how many people participated in mining. These findings have implications for gender equality. Oil businesses and the government both have solid employment rules that are focused toward hiring both genders equally, however it was acknowledged anonymously that these policies lack goodwill in their implementation and gender codification in some areas.

4.4.6 Roles of Different Stakeholders in the Oil Mining Industry

A key informant claims that the several players in the oil mining industry perform a range of tasks in different areas, such as the mining process, exploration, transportation, and other support operations. The majority of the stakeholders, and those that received preference for positions, were found to be external. The industry received the unskilled labor from local stakeholders. Major contracts for technical work like exploration, surveying, and mapping were allocated to outside corporations. External members were given contracts. The task of surveillance was handed to Africa Oil Exploration, whose employee was the spouse of one of the respondents. While BGB (an old female respondent from FGD) was given a subcontract to investigate the oil deposits, Globals Limited was assigned the task of surveying the area. This is due to the fact that most residents were uneducated. The duty of providing a favorable working environment for the locals fell to the local stakeholders. Locals helped to make sure the specialists had assistance in accessing the site, establishing boundaries, and directing the team in the area. Local leaders also took part in land negotiations, organizing the community's efforts to relocate the displaced, and choosing communal initiatives that would benefit society as a whole. The local county and the federal government were also significant actors (stakeholders) in that they provided the oil explorers with opportunities, licenses, and technical help.

One of the important female sources made a comment regarding the mining and prospecting process for oil. "The community must consent to oil drilling, but awareness raising efforts must be made. People are inclined to oppose the process if they are not aware of it. Despite all the procedures, the oil mining corporation has made some insignificant steps to raise public awareness. Religious authorities who play a significant role in educating the populace regarding the process of oil mining were among the other stakeholders mentioned. Religious leaders help their followers learn vital life lessons like planning and maintaining societal order.

The KIIs mentioned that there were different stakeholders for the oil mining process with the major ones being the local citizens who contributed the land where oil is being mined, the local leadership including the governor, senator, local Member of Parliament (MP), MCAs (Member of County Assemblies) and the other leaders including religious leaders and opinion makers. The government was also a major stakeholder as it provided negotiations and platform for the engagement of the oil mining companies. The different stakeholders had different roles and responsibilities thus providing a teamwork in implementing oil mining. There were also civil societies that worked on areas like advancing gender equality, community mobilization and sensitization of urbanization and need to change, agriculture and generally improvement of livelihood as explained by the KIIs.

4.4.7 Factors responsible for hiring staff in oil mining

Men and women were hired at different rates, based on the findings of three focus group discussions (FGD) and four key informants. It was noted that women had entered the mining industry later on, in the drilling and mining stages. According to a key informant, "Women were not engaged at first; they were afraid to go and ask for jobs until they saw women from other parts of Kenya participating and going to seek them out." According to another commenter, "Women leaders are mostly from Nairobi or wazungus (white persons) who are at the top positions and no local women has been hired for leadership." It was also thought that the majority of women in management were extremely scarce. The claims supported the idea that involvement in oil mining was primarily related to wealth, status, and other socio-demographic criteria that could have an impact on female empowerment.

Work assignments were given to both locals and visitors, foreigners and Kenyans. The majority of educated individuals, both male and female, served as Village Liaison Officers (VLOs), engaging and inspiring the peasantry. The local pastor added, saying that "few women were engaged due to the heavy workload involved that does not favor women." Most of the people hired were men. In order to raise awareness of the work that is done in society, women were also assigned to a range of positions, including Community Liaison Officers (CLOs). The employment of CLOs with physical limitations made the gender contribution important to the community. The large number of women appointed as CLOs and Village Liaison Officers (VLOs) supported the theory of change's tenet that cultural standards might change depending on the current state of affairs.

Subsequent FGD debate uncovered Tullow Oil's hiring restrictions for potential employees and locals. Potential hires were required to go through medical examinations prior to being hired by the company. Additional criteria include identity cards (ID) and experience for specific occupations. Oil Company need knowledgeable employees who can influence the recruiting and selection decisions of locals. There were fewer prospects for technical positions because they required precise qualifications, which the majority of locals lacked. According to one participant, "Most of the top management people were employed based on political influence and not qualifications." Additionally, it was noted that job postings were closed, that hiring employers did not give young people preference, and that those living close to oil mines were the first to receive employment.

Additionally, it was noted that Tullow Oil's employment fairness has improved compared to the past, when few locals were employed in the oil mining activities. Since the majority of the staff were sent from Nairobi, rather than the local populations, in other parts of Kenya, justice was mentioned. The low wage offered to the locals who are semi-skilled was one of the unfairnesses cited. It was clear that many job seekers, particularly women, had to do favors for their bosses and other powerful individuals. It was noted that women were more inclined to request sexual favors from men. Three (3) important informants who participated in the FGD agreed that there was a possibility of sexual favors being exchanged for employment, a claim they claimed was based on certain beneficiary confessions but lacked supporting evidence.

4.4.8 Family Relations as Influenced by Working in Oil Sector

One of the critical issues emerging from the oil mining process was the societal realization and value of the dowry payments. It was observed that the increase in money flow led to increase in payment of dowry. Many people, and mostly women, were displaced from their homes leading to family disorientations that elicited family breakups. One respondent (informant) quoted that, "*There was increased prostitution (sex work) emanating from the cosmopolitan nature of the Lokichar town, and influenced by the immigration to the mining town. Sex workers were destroying families as several men were caught by their wives with the prostitutes leading to domestic squabbles."* The effects of increase of number of people into one place from different walks of life resulted to increased crime where families were victims of robbery, theft and injuries. Relationship insecurities strained family relationships in different families. Most of respondents, more so male members of the FGD, were opinion that several women got their jobs through sexual favors. One member opined, "*Sex for job by senior employed personnel is common where ladies offer sexual favors for positions. When their husbands complain, there arises quarrels leading to effects like domestic violence and consequently breaking of families."* The statement was supported by other eight members of the FGD and three key informants. An example was given of a household that broke when the housewife was engaged in extra-marital affair leading to pregnancy. The results of the social changes and family breakdowns relates with the conflict theory where the community is eternally in conflict and the elite (or the advantaged-mostly men in the Turkana community) use the patriarchal customs to discriminate against women and accrue benefits to themselves.

4.5 Transformation of Gender Roles Due to Oil Mining

One part of gender role transformation entails shifting from old roles to new roles that are determined by the chances that are offered by oil mining businesses. The conventional roles for both men and women are also mentioned in section 4.5 before the changes that have taken place are demonstrated.

4.5.1 Positive and Negative Challenges Caused by Oil Mining

The study sought to find out whether oil mining has caused changes. Oil mining in Lokichar is linked to both positive and negative effects. In relation to the traditional

roles as mentioned by a key informant, the people in Lokichar have strong connections with land ownership where land belongs to the community with established closely-related villages. For instance, having the probability of losing land to the oil miners, degradation of the environment and increasing exposure to health hazards. In contrast to their female colleagues, who listed land loss and health hazards as the two biggest effects of oil mining, respectively, male respondents cited land loss at 15.2% and health concerns at 13.5%. People of both sexes mentioned displacement (12.1%), environmental degradation (10.0%), changes in manner of life (8.4%), immorality and STDs (12.3%), and other effects as well. Other studies (Omia, 2015; Ndzwayiba, 2017; and Dlamini, 2018) have found that women are predominantly affected by costs like social unrest and environmental damage, whereas men are more favorably treated in the mining industry due to the nature of the labor and remuneration.

Both positive and negative developments were noted by KII respondents, it was said. Jobs becoming available, earnings rising, and communities' ways of life altering are a few of the positive developments noted. One of the respondents indicated that there was an extreme change in livelihoods while another noted, “There was an extreme change in livelihood during the first phase of 2010-2012 with people even changing their houses from the traditional *Manyattas* to iron-roofed houses signifying a great change in our livelihood.” He also pointed out that there was a great deal of rural-urban migration when people started getting money. Another key informant said, “*People shifted from rural areas to urban centers, especially here in Lokichar town, where people developed the city by building houses and other infrastructure, thus developing the local area*.”

An opportunity to work as transport brokers and profit from the oil industry was presented to a few peasants. The development of the residential neighborhoods that housed roadways, pharmacies, and schools was another alteration. "There were job creations, especially for the VLOs (village liaison officers) and CLOs (community liaison officers)," stated one of the interviewees. Among other infrastructural improvements, tarmacked roads were constructed, along with two classrooms (one for each of Muharal and Lomokmal schools), a dispensary, and a dorm at Uhuru High School. By offering college and secondary school bursaries, the educational attainment of the local populace rose. A Memorandum of Understanding (MoU) that would have

permitted the workers to return to work after a one-month strike in exchange for 5% of the profits going to the neighborhood was also discussed. The acting chief has been the Assistant Chief since 2007. "The locals wanted the 5% was was to be channeled to ATM cards, with 1% for personal consumption, 1% for bursaries for education, 1% for the health of the people, 1% for the health of the livestock, and 1% for food production," stated the officer.

The administrator of the medical center reported that "there was an increase in prostitution (commercial sex working)." One of the bad things mentioned in the primary sources is an increase in prostitution. More individuals (local residents) had to relocate as a result of the loss of grazing meadows. The attacks and the hazards to oil delivery vehicles have led to an increase in security. Psychologically speaking, most of the residents who lost their jobs experienced depression as a result of losing their source of income and support, believing that their work would be a waste of time that would last them the rest of their lives (Elmhirst, Siscawati, Basnett, & Ekowati, 2017). Crime and sickness were on the rise, according to the facility administrator, the area chief, and two other key sources.

A study by Macdonald (2003) claims that the extraction of oil has had both beneficial and detrimental consequences on the local populace. Oil spills, the depletion of oil during mining, and pollution from the emission of harmful gasses and other substances are a few examples of environmental pollution. The findings also relate to the diffusion of innovation hypothesis, which postulates that sociocultural factors, the discovery of oil, modifications to other economic endeavors, and, most importantly, shifts in gender roles for both men and women throughout time, all contributed to the progressive acceptance of oil innovation.

The area chief, who happened to be one of the key participants in oil exploration and mining process, pointed out that over Ksh. Seven (7) million was given to the local community to establish a community project of their own preference. *"In addition to the money given to the community, two (2) classes were constructed at Muharal and Lomokmal, one dispensary at Lokichar town (by the time of the study it was not yet commissioned) and one dorm at Uhuru high school. There were also bursaries given for secondary schools and colleges,"* said one of the key informants. From the key

informant interviewees, it was observed that there were some levels of benefits accrued to the society. One of the changes witnessed was the socioeconomic changes among the locals. One informant (health facility administrator) opined, "*There was rapid and abrupt changes where the town of Lokichar grew in bounds with many commercial houses erupting in the town to accommodate the immigrants due to oil mining*." There were changes in livelihoods as fast huge money came into the hands of locals who ended up building commercial buildings, schools and health facilities. One of the beneficiaries of the oil mining was the community in terms of taking school-going children to learning institutions. In addition to building schools, there was provision of enabling environment to the learners to improve education levels in Turkana. The bursaries and the education fund provided enabled locals to improve learning process among the children. The training was made to promote the improvement of social livelihoods of the locals.

There was mushrooming and improvement of social amenities. FGD members mentioned that Education was bolstered through building of structures like classrooms, dormitories, and boreholes for supply of water to the community. More men and women enrolled for further education and training as mentioned by a KII and this changed their position for the better especially in terms of getting jobs. Through these social amenities, people were able to get employment and generally improve their lifestyle. The locals were also demanding about 5% of oil revenues generated. One of the impact was shared revenues where five (5) sources of money were to be shared in the following order; one for cash given per month, another for education bursary, another one for health of the locals, another for keeping of livestock and lastly for food production. In general the improved social amenities led to improvement in living standards as both genders got jobs leading to a balance in their roles at home and at work. The source of the various money was an agreement between the Oil Company and community on how the 5% revenue was to be used for the purposes of benefiting the community.

A key informant mentioned that Social amenities that came up as a result of oil mining as discussed included schools for primary, secondary and higher learning. Contributions were made for enhancing education, health of the society and building of other structures as needed by the society. Both women and men benefited directly from the

amenities established by the oil mining company as a form of Corporate Social Responsibility (CSR). Boreholes dug through CSR benefited women mostly because they are the ones associated with searching and fetching water for domestic use. Dispensaries built benefit more women and children while the schools benefit both gender. Feeder roads were also built in many villages and made transportation of people, business and ferrying of pregnant women possible. This the key informant mentioned reduced premature deaths of infant and enabled women to have safe deliveries on time.

It was mentioned in all FGDs that the community benefited from the employment opportunities available. More youths, men and some women were employed in different capacities leading to changes in income. The income impacted both positively and negatively on males and females, with females starting businesses, educating their children and improving their food diversity. Men who had increase in income were seen changing their homesteads including changing the housing forms (more iron-sheet rooftops) and starting businesses too. Promiscuity was associated with increased income for men. Generally, since more men were employed by oil mining companies, there was more disposable income among the men as compared to unemployed women who mostly started small businesses at the local town. The benefits of oil mining led to more income for both men and women and ultimately leading to gender empowerment among the Lokichar community. On the negative side it was mentioned in FGDs that drunkardness and promiscuity increased with men marrying more women.

4.5.2 Land Negotiation, Land Loss and Compensation

From the key informant interview, the issue of land was popular among the respondents. There were diverse opinions on the issue of land loss as some members from the key informant felt that there was no loss of land as there was compensation given to the true owners of the land where there was oil. The local population perceived the oil companies to be possessing their land without appropriate compensation, making it a hotly debated land issue. Handling land issue was a concern as the majority of the respondents felt that they were shortchanged as some land owners were given gifts in form of local and foreign tours/trips/holiday and some few favors that led them to giving away the land. The summary of the people who were viewed as the ones who negotiated for the land were as shown on table 4.20;

Table 4.20 Persons who negotiated for the Land

		What gender is the respondent?					
		Male		Female		Total	
		%	N	%	N	%	N
Who negotiated for compensation for the loss of land?	Political leaders	34.6	47	45.2	59	39.8	106
	Community/ Local people/ Land owners	20.8	28	22.2	29	21.5	57
	Chief	10.8	15	7.9	10	9.4	25
	National government	0.0	0	1.6	2	0.8	2
	No one	13.1	18	9.5	12	11.3	30
	Local elders/Village elders	11.5	16	11.1	14	11.3	30
	County government	4.6	6	0.0	0	2.4	6
	Investors	2.3	3	0.8	1	1.6	4
	Stakeholders	2.3	3	0.0	0	1.2	3
	Land commissioner	0.0	0	1.6	2	0.8	2
	Total	**100.0**	**110**	**100.0**	**121**	**100.0**	**231**

Table 4.20 presents the summary of the persons who negotiated for the land given/sold to the oil mining companies in Lokichar. It was observed that the political leaders cumulatively negotiated for the land as they were viewed (the political leaders) by 34.6% (males) and 45.2% (females) as the leading negotiators. Other respondents at 20.8% (males) and 22.2% (females) felt that negotiations were done locally by the local people. 11.3% understood that the local elders were responsible for the negotiations of the land. Another 11.3% felt that no one had negotiated for compensation for loss of the land. 69.5% (males) and 82.6% (females) of the respondents felt that the negotiations were carried out in appropriate ways. 76.3% of the respondents felt that the indicated way of compensation for the land acquired was the right one. There was 50.7% of the respondents who felt that the money for compensation taken was handed over to the right person. On the matters regarding the compensation sharing, 45.0% of the respondents felt that the person who got the compensation would share the money or benefits received fairly as they know those affected by the loss. 55.0% indicated that the person who received the compensation was not likely to share the compensation fairly

among the community, as the latter was not involved in the negotiation process, as shown on table 4.21.

Table 4.21 Land Negotiations

Option		Respondent gender				Total	
		Male		Female			
		N	%	N	%	N	%
Do you think it was appropriate way to carry out negotiations (as explained on table 4.20)	Yes	77	69.5	98	82.6	175	76.3
	No	34	30.5	21	17.4	54	23.7
Total		**110**	**100.0**	**119**	**100.0**	**229**	**100.0**
Do you feel this was the right person (captured on table 4.20) to receive the money	Yes	43	42.3	64	58.5	107	50.7
	No	59	57.7	46	41.5	105	49.3
Total		**102**	**100.0**	**110**	**100.0**	**212**	**100.0**
Will the person share the compensation fairly among family males and females	Yes	37	37.6	54	52.0	91	45.0
	No	61	62.4	50	48.0	111	55.0
Total		**98**	**100.0**	**104**	**100.0**	**202**	**100.0**

On matters of land negotiations, half of the key informants indicated that owners of the land (which is the community) was involved with the oil company in negotiating for land. One of the respondents indicated, "It is a process that included county and national government. I represented district advisory committee- deals with community roles. I was chosen by community and political leaders to represent the community in the land negotiations." Another respondent added that "Leaders called for *barazas* (community open meetings), window meetings (the meetings were well represented by youths, women, and locals for negotiating for the land.)" A different respondent indicated that the land where oil is being exploited was a community land, and thus the residents were dislocated. Another respondent was supported by four other key informants that there was no proper form of compensation as they were never given money nor employed. They said, "The real owners of the land (who were displaced from their dwellings) were given some cash (with one key informant quoting about seven (7) million shillings), and their children sponsored for some education."

In cases of loss of land to the Oil Mining Company, the community was at the forefront in the negotiation for compensation. In most cases, the community formed a committee, which comprised the local leaders such as Chiefs, Ward Representatives, Governor or the Local Member of Parliament. The committees also comprised the members of the local communities who have extensive knowledge of the community problems affecting the community, the people affected by the displacements and the costs of the damages caused by the displacement. The committees were also tasked with receiving the compensation money from the Oil Company upon reaching an agreement on the compensation.

From the focus group discussions (FGDs), members agreed that there was no loss of land but displacement of people as they were to receive the land after the oil exploitation. The members agreed that land was and still belongs to the Turkana Community. The members also pointed out that there was no interference with the land as only a few structures extracted oil from the land given. The FGD further indicated that the oil companies compensated the displacements of people with construction of facilities including schools, boreholes, water pumps and dispensaries. The members also benefited from the facility constructed by Tullow Oil. A study by Scott et al (2013) on the prospects of the local communities losing land indicated that the oil companies left the land used for oil exploration extremely damaged and inhabitable. The study also pointed out that majority of the households who give out the land do not get the right benefits. The findings in this study are in line with previous findings by Scott et al (2013) that found that there was loss of land due to oil mining and that community members are likely to lose their ancestral livelihoods.

The study sought to find out who received compensation of cash from the land acquired for oil mining. The findings are depicted on table 4.22;

Table 4.22 Person receiving the compensation cash

Person receiving money for compensation	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Community Committee	24	21.7	45	39.3	70	30.7
Political leaders	24	21.7	16	13.4	40	17.5
Local/community elders	6	5.7	14	12.5	21	9.1
No one	37	33.0	23	19.6	59	26.2
Land owners	4	3.8	1	0.9	5	2.3
Land commissioner	0	0.0	2	1.8	2	0.9
Land minister	0	0.0	1	0.9	1	0.5
County/ National government	5	4.7	6	5.4	11	5.0
Community	10	9.4	7	6.3	18	7.8
Totals	**109**	**100.0**	**114**	**100.0**	**223**	**100.0**

It was observed that majority of the people at 21.7% (males) and 39.3% (females) of the respondents felt that the committee of the land acquisition was responsible for receiving money made for the land. Other few respondents at 0.9% and 0.5% indicated that the land commissioner, and land minister respectively were responsible for receiving the compensation money.

It was agreed by most of the members in FGD that there was no loss of land to the oil mining companies since the land was to be returned to the owners after the oil exploration was over. Members pointed out that there was possession of their land but they could not work on it. The group of members in the FGD pointed out that there was no interference of the land as the area under drilling and under equipment was small. One female member indicated, "*It was a community land and those people who stayed in those areas were displaced/dislocated*." Both males and females were not affected grossly as it would be expected due to mining practices. In many instances, males were the ones who negotiated and worked on issues of land, culminating into dislocation of the family. The affected areas were few and thus the community members were able to accommodate the affected persons leading to reduced effects of the land loss.

4.5.3 Traditional Roles for Men

Prior to the Oil Company's founding in the Lokichar community, this study created traditional roles for both men and women. Traditionally, men's duties included taking care of their families, hunting, guarding the flocks of sheep and cattle, and protecting their dwellings. Men were instructed to assist women when necessary to make sure their spouses weren't overburdened with the labor they were doing, according to another remark from the FGD members. Men were also in charge of upholding the community's boundaries and making sure there is peace and harmony there. Men performed significant responsibilities in the community as well, helping to disseminate data gathered from the elders. The senior men had a responsibility to attend elders' meetings in order to get outside information, which they then had to share with their wives in order to aid them in making decisions. According to a respondent, "Men who provided data were able to provide advice and responses to the issues impacting the community, including the decisions about relocating animals to newer grazing pastures."

Respondents from FGD groups mentioned that both men and women had specified roles that were expected of them by the society. Men were associated with roles like heading the family, looking after the animals (the young men-morans), and assisting women where necessary. It was also observed that men were associated with maintaining boundaries, peace as well as ensuring the community lived well and in harmony. Other recognized responsibilities for men included, "*Meeting at elder's level to gather intelligence information on matters security of the community, places with livestock feed to move the animals, and listening to their wives' views on matters home affairs.*" Men were supposed to give direction as well as providing solutions to the problems noted in the community. It was also noted that women were not allowed to go to elder's meetings.

4.5.4 Changed Roles for Males

The study also looked for any changes in male gender roles. With new opportunities came the likelihood that people would adapt to new roles and alter the conventional roles that were thought to be for men and women.

According to the study's findings, 61.9% of respondents switched to working as security, cleaners, cooks, or drivers. Males altered their roles to become CLOs, machine operators, and supervisors, according to 20.1% of them, while 9.7% of them worked in business. According to their female counterparts, males reverted to their previous duties and were heavily involved in menial labor at a rate of 48.5%, which included driving, cooking, and storekeeping. Supervisors, business, machine operators, and CLOs ranked second, third, and fourth, respectively, at 23.1 and 18.5%. A crucial source stated that the guys worked as engineers, drivers, mechanics, plumbers, field workers, storekeepers, security, cleaners, and cooks when they first joined the oil mining company. Others were employed as managers and supervisors. Some people made the decision to run enterprises that catered to the mining firm. Women often feel marginalized since men are usually linked with physical labor that requires greater effort. The focus group discussion (FGD) at Tullow Oil Company revealed that men were now doing tasks that were previously considered to be done by women, such as cooking, serving food, and washing clothes. It was found that technical professions required educated workers, therefore competent individuals—regardless of gender—were more likely to be hired.

4.5.5 Traditional Roles for Women

Turkana women were responsible for taking care of the families and the kids, as well as performing various household tasks like cooking, cleaning, gathering firewood, and getting water. Making animal kraals was traditionally a woman's job in Turkana. Additionally, they had to drill yearly water boreholes. The upkeep of cleanliness at the homesteads was another woman's responsibility. According to a significant informant, women managed houses by carrying out the necessary household tasks. Women also assign tasks to other family members. Additionally, they build and repair homes.

A key informant mentioned that women were associated with nursing young ones and babies, making enclosures for livestock (kraals), and colleting firewood. Other roles included building houses (manyattas), and maintaining cleanliness at the homestead. One of the member of the focus group discussion (FGD) suggested that, "*Women were the makers of the houses we live in and they are given the roles of digging seasonal boreholes for watering of animals and for fetching water for domestic use. In addition, women have taken the role of ensuring the house is successful in accessing its basic*

rights of food and clothing." One of the respondents summarized the roles of women as, "*The manager who implements household work."* Other responsibilities noted were delegating responsibilities including fetching water, herding animals, selling food stuffs, and collecting firewood. "*Women were also responsible for repairing houses (thatching houses) as well as supervising the household jobs."* Members stated that workers at Tullow Oil, whether men or women assumed all the available roles available regardless of their gender. It was noted that people with skills were given roles commensurate to their skills and qualifications.

4.5.6 Changed Roles for Females

The study also looked into whether women's roles had altered. According to the research, women were mostly employed as the company's cooks and cleaners (51.9%) and in the business sector (21.9%). One of the key sources said, "Women drive big Lorries but I have not yet seen any woman operating machines," in support of the notion that women have begun taking up men's work. Women have also been able to land security jobs as gatekeepers at oil mines, a position previously reserved for men. Women transitioned from the historically conservative society to new occupations in order to keep up with the times. According to one of the responses, "There are women who work as Community Liaison Officers (CLOs), who educate the community on what to do." A movement from traditionalism to modernism can be seen in the fact that women began operating enterprises where previously they had only worked from home. Another important source said that although women may participate in land talks, they had no voice because the decisions were made elsewhere and then imposed on them.

One of the FGD respondents said, "mothers can do what males do, especially for single mothers who are required to take care of their children and satisfy fundamental demands owing to the nature of their needs. Men and women do collaborate to achieve a common life objective. Also mentioned was the fact that "Tullow Oil Company employees assume all roles regardless of gender provided they possess critical competencies to perform the assigned roles." One of the challenges women faced in applying for jobs at oil mining companies was the high management's compromising requests for sexual favors. All six of the major informants agreed that one must perform some favors before being hired, with women particularly exchanging sexual favors for employment.

Another person claimed that both financial and sexual favors were exchanged. The participant stated, "For someone to get employment, they need to pay some cash (10k to 50k) or sexual favor." According to a study by Scanlan (2015), which is supported by the findings on changes in gender roles, women face barriers to employment, particularly in low-income communities with high illiteracy rates. He continues by saying that in order to ensure that women receive the same treatment as males, management must encourage them and grow their capacity.

4.5.7 Affected Gender in Changes of Roles

The study also sought to seek the most affected gender in the changes of roles as influenced by oil mining in Lokichar, Turkana County. Changes in terms of new employments, new livelihoods and the changing societal roles were expected to have high influence on women. Women started accessing job opportunities, earning income and participating in roles that were traditionally considered for men. The summary of the respondents' views are contained on table 4.23.

Table 4.23 Affected Gender

Affected Gender	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Women	103	84.4	115	64.6	218	72.7
Men	19	15.6	63	35.4	82	27.3
Totals	**122**	**100.0**	**178**	**100.0**	**300**	**100.0**

Only 35.4% of women felt that men were most affected, while 64.6% of women said that women were most affected. According to the report, women were the group most impacted by the changes, accounting for 72.7% of all respondents, compared to just 27.3% of men. The study's findings also corroborate those of Keenan and Kemp (2014), who found that oil mining operations benefited women, particularly in rural locations where a sizable percentage of them obtain employment and others see changes in their

standard of living. The study also indicated that women and, to some extent, children were indirectly influenced by the negative impacts. The socio-economic effects including increased populations in town influence business performances, have an effect on local/host community fertility, and crimes. One of the key informant interviewees mentioned that patriarchy is solely responsible for the slow realization of gender equality in the oil mining sector in Lokichar and is so deeply rooted in culture. He continued to mention with community sensitization on aspects gender equality this is slowly changing and men are beginning to allow their wives to work.

4.5.8 Relationship between Gender and Involvement in Oil Mining

There are strong correlations between gender and participation in oil mining. The purpose of the study was to determine how the two concepts related to one another; table 4.24 shows the results;

Table 4.24 Cross Tabulation for gender and mining involvement

Gender of Respondent	***Have you been involved in any oil mining activities***					
	Yes		**No**		**Total**	
	N	**%**	**N**	**%**	**N**	**%**
Male	81	55.0	66	45.0	147	46.9
Female	59	39.0	92	61.0	151	53.1
Total	**140**	**46.9**	**158**	**53.1**	**298**	**100.0**

A cross tabulation of the respondents gender with involvement in the Oil Mining since its introduction in Lokichar area revealed that 55.0% of the male had been involved in the mining process while 45.0% had not. On the other hand, 39.0% of the female had been involved in the oil mining while 61.0% had not been involved in the mining of oil. Ooverall, only 46.9% of the respondents had been directly involved in the mining of oil while 53.1% of the respondents were indirectly involved.

4.5.9 Changes in Gender Roles due to oil mining

It was expected that the influx of new business will change the traditional gender norms held by the locals of Lokichar. The study also examined if oil mining has affected conventional gender roles. To do this, a cross-tabulation on whether gender has affected conventional gender roles was employed. The results are displayed in Table 4.25 in the following ways:

Table 4.25 Changes in Traditional Gender Roles

Have traditional gender roles changed	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	88	60.4	95	63.9	183	62.2
No	58	39.6	54	36.1	111	37.8
Totals	**146**	**100.0**	**149**	**100.0**	**295**	**100.0**

When asked whether the extraction of oil in the region has altered the conventional gender roles of the inhabitants, 60.4% of men and 63.9% of women responded in the affirmative, while 39.6% of men and 36.1% of women disagreed. The high percentage of respondents (62.2%) who agreed that gender roles had changed could be attributed to changes in locals' income levels, infrastructure changes, and gender roles as a result of more goods and services being made available for consumption by locals. The locals' way of life is anticipated to change with the establishment of an economic activity.

The study's conclusions were in line with those of Fatusin, Afolabi, and Adetula (2010), who observed that the standard of living significantly changed in areas where large-scale projects were based and where locals had the chance to participate. Large-scale activities were anticipated to benefit the community because of investments made in the area, benefits from corporate social responsibilities (CSRs) of the corporations, and local businesses growing and providing income for the general public.

The study's findings are also related to the theoretical framework, which holds that the method of extracting oil had an impact on how gender roles were transformed, which changed how much women were empowered and how much they benefited (and were threatened by) the oil business.

There was unanimity among FGD participants that "women can do what men do, especially the single women." It was also noted that gender roles within the home had altered; where men used to take care of animals, women could now take care of them, and while women's tasks were in the kitchen, men would now take on the same responsibilities as women. By working together more frequently to do their responsibilities, men and women have improved symbiosis at home and at work. The majority of the elder generation still plays by the rules and is quite resistant to change. In general, it was noted that gender roles had changed, with both men and women filling traditionally reserved positions for men. According to a respondent, "Education has changed things since women can now compete as men. Both managerial and executive positions can be filled by women in their businesses.

People need to stop profiling women and embrace them as equal partners in building of a just society. The same was extended to men where women were requested to respect men as well and offer support in delivering roles like cooking or cleaning. Gender equity is needed from the family up to the society where equal representation is needed. The findings are related to the theory of change where the introduction of oil mining has led to changes in gender roles, leading to gender empowerment.

Before oil mining in Lokichar and Turkana, it was not noticed that women held positions as plant operators and drivers. Men also assumed new jobs at Tullow Oil as cooks and servers, providing meals to the workforce. In Turkana, women have also worked as security personnel, which has increased perceptions of a community that values gender equality. Some members also observed that gender roles perception hampered them from seeking jobs. The respondents said, "*If a man goes seeking a job as a cook or waiter, they are likely to be turned off or experience fear since the work has been associated with women gender."* Another aspect that was fronted as a

challenge to the changes in gender role was lack of information and poor perception of the roles associated with the other gender.

4.6. Changes of Livelihoods for Both Genders Due to Oil Mining

The study anticipated that changes in work status and income level would result in changes in livelihoods. The aim of the study was to investigate potential changes in the means of subsistence for both genders by means of responding to questions on means of subsistence and income.

4.6.1 Changes in Traditional Livelihoods for Men

The third objective was to investigate how oil mining affects both genders' livelihoods in the Lokichar community. It is assumed that men and women would still perform their respective tasks when seen through the traditional prism of socially acceptable roles. Depending on the availability of new job opportunities, Lokichar may witness shifts in traditional livelihoods into new livelihoods as a result of the presence of oil mining businesses. The respondents' perceptions were presented in table 4.26. The third goal was to look into how oil mining affected the livelihoods of both sexes in the Lokichar village.

In Lokichar, oil mining has affected the traditional livelihoods of men, according to more than 60.4% of respondents who were male and 63.9% who were female, while 37.8% disagreed. The percentage may reflect rising local incomes, flourishing local enterprises, and rising local job prospects. It was noted from the key informants and the FGD that men received more opportunities than women, which led to some substantial changes in their standard of living. One of the major informants said that males often married other women or had concubines in order to share their increasing money with other women. As a result, their change in means of subsistence is less significant for the family's well-being than the change in means of subsistence for women (Heemskerk, 2000). Overall, typical male occupations changed, and some males began taking on tasks that had previously been considered the domain of women. With the alteration of established roles, both conflict theory and the theory of gender relations were applicable. The new positions that men embraced were expected to spark tension in the Lokichar community, where patriarchy has been noted to exist.

4.6.2 Changes in Traditional Livelihoods for Women

Traditional livelihoods have been related to the traditional roles of women, which centered on managing the homesteads and ensuring the family had adequate food. According to Table 4.26, respondents associated women with less economic engagement because of conventional gender stereotypes.

Table 4.26 Changes in traditional livelihoods of men and women

	Livelihood change for males				Totals		Livelihoods change for females				Total	
	Male		Female				Male		Female			
	N	%	N	%	N	%	N	%	N	%	N	%
Yes	88	60.4	95	63.9	183	62.2	88	60.4	94	62.8	182	61.6
No	58	39.6	54	36.1	111	37.8	58	39.6	56	37.2	114	38.4
Total	**146**	**100.0**	**149**	**100.0**	**295**	**100.0**	**146**	**100.0**	**150**	**100.0**	**296**	**100.0**

According to the study, the conventional livelihoods of roughly 62.2% and 61.6% of the respondents—males and females, respectively—had changed. The employment opportunities and changes in income that resulted from the oil mining in Lokichar were deemed to have affected women's way of life. Women's employment in oil mining companies, where they could replace their revenues from traditional jobs, was the cause of the shifts in lives. There were varied reactions to the effects of oil mining on modifying the traditional livelihoods of women, as seen by the 38.4% of respondents who said that women had not modified their livelihoods. The FGD participants also claimed that since women could now find employment and get income from oil mining, their standard of living had changed. The results are consistent with the conceptual framework, where it was anticipated that community members' livelihoods would alter. This poses a problem for the gender relations theory, as rigorously established normative behavioral roles are disrupted. The research is also relevant to the diffusion of innovations hypothesis, which proposes that women shifted from conventional roles to new ones in which they were shown performing menial tasks.

4.6.3 Hypothesis testing for change in livelihoods

Chi- square test was used to test if the change in the livelihoods of the men was significantly different from change of livelihoods of women. The test was used to compare both genders, males and females and test on whether they had experienced the same changes in their livelihoods. We tested the null hypothesis. Here are the alternative and null hypotheses;

H_0: Participation in oil mining operations has no bearing on one's ability to make a living.

H_1: There is a relationship between involvement in oil mining activities and change in livelihood

The chi square shown in table 4.27 contains information on the shifts in men's and women's conventional livelihoods;

Table 4.27 Cross tabulations and Chi- Square Test Result on Changes in traditional livelihoods of men and women

Have you been involved in any oil mining activities					
			Livelihood changed	Livelihood not changed	Total
Have you been involved in any oil mining activities	Directly involved in oil mining	Count	103	37	140
		Expected Count	85.9	54.1	140.0
	Not directly involved in oil mining	Count	78	77	155
		Expected Count	95.1	59.9	155.0
Total		Count	181	114	295
		Expected Count	181.0	114.0	295.0

Chi-Square Tests					
	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	16.769[a]	1	0.000		
Continuity Correction[b]	15.803	1	0.000		
Likelihood Ratio	17.039	1	0.000		
Fisher's Exact Test				0.000	0.000
Linear-by-Linear Association	16.712	1	0.000		
N of Valid Cases	295				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 54.10.

b. Computed only for a 2x2 table

Symmetric Measures			
		Value	Approximate Significance
Nominal by Nominal	Phi	0.238	0.000
	Cramer's V	0.238	0.000
N of Valid Cases		295	

A chi-square test of association revealed a significant correlation between changes in livelihood and involvement in oil mining (X2 (1, N=295) = 16.769, p.001). This suggests that involvement in oil mining activities and a shift in one's means of subsistence are related, and the null hypothesis is rejected. With an alpha of.05, the Cramer's V test reveals a rather modest correlation between altering one's means of subsistence and participating in oil mining operations. The jobs, earnings, and eventual

life transitions of the locals demonstrate how the oil mining sector in Lokichar has influenced shifts in the means of subsistence.

The FGD participants and key informant interviews, which observed a notable shift in the first half of 2010 to 2013, corroborate the findings. During this time, those who were employed were paid enough to build better homes than they had in the past, and other people established businesses in the neighboring town of Lokichar. The notion that the mining of oil in Lokichar had a major impact on their way of life was supported by all primary sources. The research validated the assertion made by Lozeva and Marinova (2010) that women profited from oil mining operations, irrespective of whether they worked alongside their husbands, were physically employed in the mines, or received indirect benefits from the money made from mining. The results also have implications for the theoretical and conceptual framework, since it was shown that the concept of women's empowerment was impacted by changes in gender roles and active participation in the mining process.

4.7 Ways for Empowering Men and Women in Participation in Oil Mining

The study was also intended to make recommendations for strategies to increase both male and female participation in oil mining in Lokichar, Turkana County. Participation makes it simple for the people to gain authority and expand their capacity to enhance their standard of living, therefore empowering both genders. The study also looked for instances where involvement had given both men and women more influence. The possibility of gender-based discrimination against job applicants in the oil mining industry, the existence of organizations that support the empowerment of women and their rights, and the existence of laws and policies that ensure both men and women participate in oil mining activities are among the factors taken into consideration.

4.7.1 Law and/or Policy Dealing with Gender in Oil Mining

Laws and regulations addressing gender issues in the oil mining sector may have an impact on the extent and conditions of women's and men's empowerment. Policies assist businesses in involving both men and women in the range of possibilities designed to strengthen the community. Study participants were asked if there were any rules or regulations in Kenya's oil mining industry that addressed gender concerns. The majority of the respondents brought up Kenya's well-known gender rule, which requires a gender

balance in all positions held by public employees. The responses were noted, as table 4.28 below demonstrates.

Table 4.28 Aware of Laws and Policies dealing with gender in oil mining in Kenya

Aware of laws and policies on gender	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	46	32.4	52	35.2	98	33.8
No	97	67.6	95	64.8	192	66.2
Totals	**143**	**100.0**	**147**	**100.0**	**290**	**100.0**

In response to the study, just 32.4% of men and 35.2% of women stated they were aware of any laws or policies that addressed gender issues in Kenya's oil mining sector, while 64.8% of men and 67.6% of women said they were not. The fact that more than 66.2% of respondents were clueless of any legislation or regulations connected to female empowerment was fascinating to observe. It suggests that the vast majority of Lokichar residents are unaware of any policies pertaining to their empowerment. Thus, it would be advised that Lokichar people as well as all Turkana citizens become knowledgeable about the available rules and legislation that serve as a guide for their empowerment through information sharing. The results of this investigation were consistent with those of Akintola and Chikoko (2016), who found that most marginalized communities lacked knowledge, particularly about opportunities for their socioeconomic and cultural empowerment. Therefore, in order for oil mining firms to embrace and promote gender equality, it was imperative to adopt laws that supported it and inform them of it.

4.7.2 Upholding of the Law/Policy in the area

The survey also sought to ascertain whether those who reported that the law was in force in their neighborhood or at their place of employment were correct. When employment or participation does not support the anticipated hiring practices, it is easier to apply—or, to some extent, to activate—the legislation when it is known that it applies to their situation. We asked the respondents if they thought that the law or gender-

related policy applied to all other types of empowerment in their society. The responses are presented in Table 4.29;

Table 4.29. Whether the law is upheld in the area

Whether the law is upheld in the area	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	24	17.3	11	7.9	36	12.5
No	115	82.7	133	92.1	249	87.5
Totals	**140**	**100.0**	**145**	**100.0**	**284**	**100.0**

Out of the study participants, 87.5% (82.7% of men and 92.1% of women) agreed that the gender law was not being implemented in the Lokichar area, whereas just 12.5% (17.3% of men and 7.9% of women) believed that it was. Respondents who were important informants suggested holding workshops and educating the public on advancements made in the implementation of gender equality, particularly in the Lokichar oil mining sector.

4.7.3 Discrimination against Employees or job seekers

One of the things that makes it difficult for locals to accept changes in gender roles and obtain work possibilities is discrimination. Most locals thought that there was discrimination against opportunities. The purpose of the study was to collect cases of discrimination by asking participants if they or members of their family had encountered it while employed by oil mining businesses. The respondents denied knowing of any incidents of discrimination against workers or job candidates due to their gender. After that, the data was shown as table 4.30 shows;

Table 4.30 Employee Discrimination

Ever experienced Employee discrimination	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	72	50.7	86	58.9	158	54.8
No	70	49.3	60	41.1	130	45.2
Totals	**143**	**100.0**	**146**	**100.0**	**289**	**100.0**

Only 49.3% of men and 41.1% of women said they were unaware of this type of discrimination, but 50.7% of men and 58.9% of women said they were aware that it had happened to an employee or job applicant at an oil mining business. A small proportion of respondents (54.8%) who reported bias among staff members expressed concern about the possibility of locals being discriminated against, particularly when employed by oil mining companies. The findings of this study support those of Dutt, Grabe, and Castro (2016), who found that discrimination against women was more common than against men and that it was more prevalent in vulnerable communities. Additionally, their research demonstrated that discrimination against workers leads to missed opportunities, which subsequently result in lowered capacities and less chances for better living conditions. Every FGD revealed that instances of prejudice disproportionately impacted women. Discrimination also affected women, who are often denied employment opportunities, because there were more men than women employed in the oil mining sector. A few of the issues that were anticipated to have an effect on women's empowerment in the instance of labor participation in Lokichar were the type and degree of discrimination.

4.7.4 Organizations Empowering Women on their Rights

The survey also wanted to know if there were any groups that dealt with educating women about their rights. Locals can seek assistance for their empowerment by being aware of the organizations that are available. Knowing the organizations and chances for empowering the neighborhood is another way to improve the socioeconomic standing of both men and women. Governmental and non-governmental organizations both have duties that involve educating communities and dispersing information. We

questioned the respondents if they were aware of any groups that educate women about their rights and allow them to participate in activities. Table 4.31, as displayed, contains the summaries;

Table 4.31 Awareness of Organizations Empowering Women

Awareness of organizations empowering women	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	85	60.9	85	59.0	170	59.9
No	55	39.1	59	41.0	114	40.1
Totals	**140**	**100.0**	**144**	**100.0**	**283**	**100.0**

According to the poll, 60.9% of men and 59.0% of women were aware of the groups that support women's rights in connection with oil mining operations in the Lokichar region. The organizations, which are mostly non-governmental organizations (NGOs), were praised for their great coverage because many respondents believed that the subject of local groups empowering women was effectively covered. The respondents stated that greater outreach efforts were necessary since some key informants mentioned that the remote interior regions were underserved and that it was necessary to reach the rural communities. The key informants provided examples of numerous organizations and programs that were active among the locals and promoted local empowerment, including World Vision and Save the Children, proving their familiarity with the possibilities.

The study's conclusions, which hold that women's access to knowledge influenced their decision to pursue empowerment, are supported by Sassen's (2016) research. Organizations supporting women's rights in Lokichar's oil mining region encourage gender equality and women's empowerment, two concepts that were explored in this study. One of the primary sources emphasized the necessity for increasing government and civil society involvement in attempts to advance Affirmative Action in the oil mining industry as well as the significance of governance in improving gender equality.

She emphasized the importance of giving women access to legal services as well as economic empowerment through programs like SACCOs.

4.7.5 Avenues for seeking legal redress

The goal of the study was to determine if there were any channels for redress. The question of whether both men and women had legal recourse was put to the respondents. The results were displayed as given in table 4.32;

Table 4.32 Men and Women having avenues for seeking legal redress

Available avenues for seeking legal redress	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	62	44.0	87	59.6	149	51.9
No	79	56.0	59	40.4	138	48.1
Totals	**141**	**100.0**	**146**	**100.0**	**286**	**100.0**

According to the study, 44.0% of men and 59.6% of women felt that both men and women employed in the oil mining business had legal recourse, while 56.0% of men and 40.4% of women disagreed. It appeared that both sexes were aware of their legal remedy rights. According to the key informant interviews, the most common method of securing a legal remedy was to report the issue to management; very few respondents stated they went to court. Having access to legal ways of making sure their opinions are heard is the cornerstone of empowerment for both men and women. The focus group discussions revealed that there are choices for pursuing legal redress, but that paying the necessary resources and having fear of the outcomes or consequences of the legal redress method are the main barriers. The results supported those of Sassen (2016), who argues that when the work environment is supportive of women, it is more likely that someone may seek redress through the legal system in the event that their rights are violated.

Most of the sampled respondents were of the opinion that procedures were to be followed and that any challenge experienced at the company level, caused by disagreements with the other staff was supposed to be handled by seeking legal procedures. The primary principles for informing any illegalities that needed answers were cited as the Constitution and corporate laws. There was a widespread sense of how the legal procedure was handled at the corporate levels even if there was no actual direct victim of workplace victimization or discrimination. It was highlighted that very few women held executive positions, making them vulnerable to discrimination at work. One of the key informant, noted that there was high levels of adherence to a third-gender rule with the major challenge being getting qualified women to fill the competitive positions. Another key informant pointed out that there was need by the Senate to legislate on policies governing counties and sharing of revenues. Members of the FGD recommended that in order to obtain legal redress, it was necessary to first comprehend the root of the issue, pay attention to the parties concerned, and then offer answers. It is important to understand the root causes of discrimination and potential solutions. Most of the important sources emphasized the dearth of groups devoted to women's rights. Women must be aware of their legal obligations and when to seek help.

The approaches for seeking legal redress for women were sought from the respondents. Some of the key informants indicated that there was need for establishing legislative framework for sharing revenues and engaging the locals (with a focus on women) in the oil mining processes. One respondent suggested that the Senate needs to legislate a policy to govern the counties on sharing of revenues to other members of the community. On matters of handling conflict on resources and enabling women to participate fully on matters of oil mining, members of one of the FGD groups indicated that the sources of discrimination had to be handled and solutions given. They further suggested that more organizations dealing with women issues need to be established and deployed to the oil mining areas. Women also need to be informed about the available opportunities for employment. Two of the key informants were of the opinion that any injustices done at organizational level could be handled by following procedures set by policies at company level, and reporting any uncivilized behaviors. It was also suggested that other stakeholders get into the community and help educate women about their rights while working, and the available opportunities to improve their livelihoods.

Despite the projected solutions, these key informants mentioned that there were some challenges that were identified including tribalism, discrimination (where members from other communities discriminate against the locals in terms of employing), and biased hiring (with high mentions of sexual favors to the senior management for employment positions). The findings thus relate to the conceptual framework where it was expected that perceived threats from the oil mining would be paired with the possible solutions, including legal redress mechanisms.

4.7.6 Test of Hypotheses on oil mining activities and gender equality

The purpose of the hypothesis testing was to determine the connection between gender equality and oil mining. The alternate hypothesis and null hypothesis were as follows:

H_0: Equal employment opportunities for men and women in mining do not correlate with participation in oil mining operations.

H_1: Equal employment opportunities for men and women in oil mining operations are correlated with participation in oil mining activities. Table 4.33 below shows the cross tabulation and hypothesis testing.

Table 4.33 Have you been directly or indirectly involved in any oil mining activities * Are men and women given equal opportunity to work in mining activities Cross tabulation

			Are men and women given equal opportunity to work in mining activities		Total
			Equal opportunity	Unequal opportunity	
Have you been directly or indirectly involved in any oil mining activities	Directly involved in oil mining	Count	18	121	139
		Expected Count	23.8	115.2	139.0
	Not directly involved in oil mining	Count	31	116	147
		Expected Count	25.2	121.8	147.0
Total		Count	49	237	286
		Expected Count	49.0	237.0	286.0

Chi-Square Tests

	Value	Df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.333[a]	1	0.068		
Continuity Correction[b]	2.785	1	0.095		
Likelihood Ratio	3.372	1	0.066		
Fisher's Exact Test				0.084	0.047
Linear-by-Linear Association	3.322	1	0.068		
N of Valid Cases	286				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.81.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	-0.108	0.068
	Cramer's V	0.108	0.068

An association test using chi-square (X2 (1, N = 286) = 3.333, p =.068 at alpha =.05.) found no connection between employment equality and participation in oil mining activities. Therefore, the null hypothesis was not refuted. Participation in oil mining activities is consequently unrelated to the availability of mining jobs for men and women. This supports the assertion made by participants in each Focus Group Discussion (FGD) that men have gained primarily from oil mining while women have suffered. They pointed out that although women play a significant role in the process, they are not included in decision-making; that pay disparities exist and that positions tend to favor males more than women; and that overall, these observations are true. They added that pollution that damages the air, water, and agricultural sector is a

problem that women must deal with. The Cramer's V indicates that there is minimal correlation between participation in oil mining activities and equal job opportunities for men and women.

4.7.7 Empowerment of men and women

Since the residents are the ones who own the oil and the land, this section focused on whether they have the capacity to take part in oil mining activities. On whether there was actually emancipation of both men and women, five questions were asked. The belief that there is no job discrimination, the application of the law, awareness of the regulations or policies governing gender in oil mining, and the presence of local groups that support women were the foundations of the empowerment process. Another matter of concern was the availability of legal remedies for members of the community who had departed Lokichar.

4.7.7.1 Availability of laws and policies to deal with gender in oil mining

Gender parity and women's empowerment can be achieved through enacting laws and policies that address gender issues in the oil mining sector. It is expected that the campaign for women's empowerment will pick up steam as more people become aware of the laws and how easily accessible they are. Regarding the existence of legislation or regulations pertaining to gender in the Lokichar oil mining industry and throughout Kenya, the following findings were reached: The cross-tabulation of knowledge about gender-related legislation and regulations in Kenyan oil mining is shown in Table 4.34.

Table 4.34 Cross-Tabulation for Awareness of Laws and Policies dealing with gender in oil mining in Kenya

Aware of laws and policies on gender	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	46	32.4	52	35.2	98	33.8
No	97	67.6	95	64.8	192	66.2
Totals	**143**	**100.0**	**147**	**100.0**	**290**	**100.0**

The research revealed that neither the men nor the women in the Lokichar community knew about the rules and regulations governing how gender is handled in the oil mining sector. The majority of respondents, or 66.2%, were unaware of any laws or policies pertaining to gender in oil mining, whereas 33.8% of them were. The findings also bear on the conceptual framework, which linked the notion of access to legal services as a means of good governance to raised awareness and gender equality. The female gender in this instance was directly impacted by the gender policies of the family heads, at 33.8%, while the male gender was at 32.4%.

4.7.7.2 Upholding of law on gender in Lokichar

The growth of women's employment in the workforce and gender empowerment is accelerated by the upholding of legislation promoting gender equality. The outcomes can be used to determine whether more measures are required to force businesses to abide by labor regulations.

Table 4.35 provides a cross-tabulation and information on whether or not the statute was upheld.

Table 4.35 Cross-tabulation on whether the law is upheld in the area

Whether the law is upheld in the area	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	24	17.3	11	7.9	36	12.5
No	115	82.7	133	92.1	249	87.5
Totals	**140**	**100.0**	**145**	**100.0**	**284**	**100.0**

12.5% of respondents claimed that the law is upheld in the oil industry, whereas 87.5 percent disagreed. The Lokichar oil mining sector was found to not enforce or adhere to the rules and regulations regarding female empowerment. One of the independent variables was the governance component of the conceptual framework, which examined how access to legal services affects gender empowerment. The host society's (Turkana) patriarchal structure was mentioned as the cause for the non-compliance with laws and regulations regarding women's empowerment. Every important source stated that they had never encountered prejudice in the oil mining industry in Lokichar or elsewhere in the nation. This underscores the importance of the appropriate authorities ensuring that hiring agents adhere to gender equality regulations.

4.7.7.3 Awareness on Discrimination of Employee or Persons Seeking Employment Based on Gender

When employees become aware of any type of discrimination at work, they are likely to respond and seek legal recourse. The residents of Lokichar have been made aware of discrimination by non-governmental organizations, so they are somewhat likely to detect it when it occurs. The knowledge of information on people who have been discriminated against serves as a foundation for legal action. The goal of the study was to determine whether there was any gender-based employment discrimination or other forms of prejudice against job applicants.

Table 4.36 on the awareness of employee discrimination presents the results of the cross tabulation.

Table 4.36 Cross Tabulation for Employee Discrimination

Ever experienced Employee discrimination	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	72	50.7	86	58.9	158	54.8
No	70	49.3	60	41.1	130	45.2
Totals	**143**	**100.0**	**146**	**100.0**	**289**	**100.0**

Of those surveyed, 54.8% claimed to be aware of instances of discrimination against workers or job applicants in the oil mining sector. 45.2% of those surveyed indicated they had no knowledge of discrimination. The fact that discrimination against workers and those seeking employment opportunities is still an issue demonstrates how patriarchal society is and a factor that undermines efforts to promote gender equality and gender empowerment.

4.7.7.4 Awareness of organizations empowering women on their rights

Table 4.37 Cross Tabulation on Awareness of Organizations Empowering Women

Awareness of organizations empowering women	Respondent gender				Total	
	Male		Female			
	N	%	N	%	N	%
Yes	85	60.9	85	59.0	170	59.9
No	55	39.1	59	41.0	114	40.1
Totals	**140**	**100.0**	**144**	**100.0**	**283**	**100.0**

59.9% of respondents indicated they were aware of organizations that promote women's empowerment, compared to 41 percent who said they were not. The researchers concluded that Lokichar residents were aware of groups that promoted women's rights in the oil mining sector. The findings thus supported the existence of social programs aimed at empowering women in the Lokichar oil mining village.

4.7.7.5 Levels of Participation for Both Gender in Oil Mining

Men and women worked on every stage of the project, from oil prospecting to oil drilling. According to a male key informant, "people used to gather for barazas with the oil explorers and the Tullow oil." Tullow Oil, an oil exploration company, was granted mining rights by both the federal and state governments. It seems that the local officials had a big influence in securing the contracts for oil mining. A trustworthy source claims that local authorities were instrumental in closing the deals. They used to take part in talks on the community's behalf. It was evident that not all residents were pleased when a community member stated that "about 5% of the community locals were not happy with some comments from the top leaders concerning the sharing of the revenues from oil." Contracts were given to foreigners who benefited from the exploitation. Most locals who worked in any capacity and were categorized as either temporary workers or permanent employees had to complete some kind of training, whether it was for job performance or safety. Generally speaking, women in leadership positions and with educations above the elementary school level were the enlightened ones who worked in the oil extraction industry.

4.7.7.6 Negotiations and Consultations between the Community and the Mining Company

Land was a hot contested issue during the an FGD discussion as members, both males and females, rose with tempers citing how the oil miners were benefiting from the oil at the expense of the local residents. It was also noted that the community members were not given money as a form of compensation. Perceptions of some roles as gender-based were influential in terms of who participated in the land negotiations and who were consulted. It was observed that local leaders were the major participants in terms of negotiations and establishing the value of the land. Negotiations were at some points conducted at public *Barazas* where people would give their opinions. Other members of the FGD and the key informants were of the opinion that there was no clear information whether there was any form of compensation or not. It was also found that the real owners of the land were given cash for the land repossessed as one respondent noted, "*The real owners of land were given cash as a way to cool them and use their land. There was no specific formula or value for the land compensated for and thus there was no uniformity in terms of handling compensations."*

Females were also appointed to the boards that negotiated for the land on behalf of the community. For instance, one of the key informants was key to land negotiations as she represented the district advisory committee in handling community roles in making better choices for their land. The key informant noted that she was chosen by the community to represent their views on the negotiation table. She was able to represent the county and the national government on matters negotiating for their land. Other members of the FGD pointed out there was representation of all the groups of people including the youths, local persons and women.

4.7.8 Practical mechanisms for improving women's capacity to cope with mining effects

Members offered various platforms and strategies for putting gender policy into action. "Women need to be included in platforms for growing their potential, such as training on skills they may use to empower themselves," stated a key informant. Workshops and seminars are suggested activities. Four more members concurred with the assessment, saying that for women to feel empowered, they needed to be taken outside to share ideas with other women's groups and institutions. If women are exposed to new environments, they are more likely to take on leadership roles in the community. For women to see other strong women, they need to be exposed to the media. According to a respondent, "women need to be included in management functions, like being on school committees and assigning them roles for the purpose of building their capacity."

Members made a number of recommendations regarding strategies that are likely to increase women's engagement in initiatives for empowerment. According to a number of FGD respondents, "Scholarships to women and marginalized men should be provided to improve their capacity to participate in development and empowerment activities." Among the suggested jobs include plumbing, managing and maintaining technology, and teaching men and women about beauty. Since it allowed women and men to create their own programs for empowerment, information exchange was seen as crucial to success.

It has been suggested that training in the arts, such as painting, stamp-making, and welding, is ideal for economically empowering both men and women. Operating cybercafés and gaining independence can also empower women.

In Lokichar, Turkana, neither the men nor the women frequently participated in SACCOS. Two responders made the suggestion that it was vital to involve the locals in saving cooperatives in order to obtain loans for development. The registration of SACCOs and their ability to use financing facilities for their improvement were linked to gender empowerment. Women need to be involved in all projects, yet they have limited access to loans. To empower women, business training, workshops, and seminars were promoted. It was noted that there was a need to end the high level of gender segregation in Lokichar. SACCOs have helped several local residents expand their enterprises. It was also noted that the local adolescents had a SACCO that was registered and permitted loans from both sexes. Tullow Oil offers a program designed to help and enhance societal livelihoods. SACCOs made it possible for the local community to develop new skills and increase resilience.

Women, especially in Turkana need to be encouraged to go to school and learn. The high illiteracy levels need to be reduced through subjecting men and women to school, and to enable them have equal opportunities to get employment. Some FGD members in one of the groups pointed out that creating awareness for women to go to school was necessary to increase the capacity in participating in local development programs. The perception that men are most honored should be erased to empower women also to be honored through education. Women also need to remove the notion that they cannot do the things men can do to be motivated to search for positions equal to the men counterparts.

Another aspect that was suggested by both the K11s and FGDs on enhancing mechanism of women to cope with mining effects was male involvement on matters gender equality. Without male involvement all the gains made towards gender equality all efforts with be futile. Kenya is a patriarchal society and it is men who head the families. When they are involved they are bound to support their women in all aspects.

4.7.9 Challenges of implementing gender policies in Turkana

The implementation of gender policy has run into difficulties in Turkana and other underprivileged areas of Kenya. Males behave as hurdles to the empowerment of

women out of a worry that women will do better than males. Workplace and societal gender regulations are likely to encounter cultural obstacles. One of the women made the following argument, for instance: "Women cannot perform traditional religious roles thus limiting them in their execution of their leadership roles." When women were unable to serve in leadership roles, which would be considered proper by society, it was seen as a problem. According to one respondent and three more respondents, it seemed likely that women becoming pregnant would prevent them from carrying out their mandate. Some people in the society have been discouraged from putting gender regulations into practice due to a fear of competition. The conflict theory, which holds that male and female genders struggle for scarce resources and opportunities, supports this.

Another aspect was lack of goodwill to implement the set policies. *Kenya has very good policies but what is lacking is the goodwill to implement* (Human Resource practitioner). This is made worse by the fact Quality Assurance and systems like monitoring and evaluation follow are lacking hence making it impossible to improve the existing gender policies. This has been a great challenge in the implementation of gender policies in the mining sector in Turkana.

The mining sector, culture, and religion are important hindrances to the enforcement of gender laws in Turkana. All social interactions must take into account how men and women interact and carry out their social obligations in society, claims the gender relations theory (Johansson & Ringblom, 2017). The theory asserts that gender roles are defined by the society largely through norms and values which are embedded in our culture. Both culture and religion can hinder the implementation of gender policies especially if there are cultural/ religious practices that counter the realization of these policies. Traditionally a woman's place was at home and some individuals still follow this. Similarly, Kenya is a patriarchal society. In all FGDs it was mentioned that lack of male involvement has deterred the implementation of gender policies. *For any gains to be realized male involvement is key since they are the heads of family* (pastor of a local church). This has both a cultural and religious connotation.

Lastly, duplication of efforts by key stakeholders was mentioned by many key informants as a hiccup. Stakeholders are not cooperating to complement each other's efforts. This has diluted the synergy levels that would have been realized if they cooperated I their various program activities geared toward gender equality in the mining sector.

4.8 Summary of Chapter Four

Chapter four discussed the findings from the collected data, both primary and secondary data as well as data from similar previous studies. Both qualitative and quantitative data were analyzed, and qualitative information was provided by paraphrasing a few of the respondents' quotes. Based on the four research goals—determining whether oil mining companies in Lokichar support gender equality; measuring the extent to which oil mining has affected gender roles; analyzing the impact of oil mining on the livelihoods of both genders in the Lokichar community; and measuring the extent to which oil mining in Turkana County has influenced changes in gender equality—the conclusions were drawn. The results of the hypothesis test show that there is a correlation between equal hiring practices and oil mining in Lokichar, Turkana, but not between gender equality and either of the two. The mining of oil in Lokichar has significantly altered the locals' means of subsistence.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

Chapter 5 provides a summary of the data analysis and research findings, as well as recommendations for more study and activity by the targeted stakeholders. A summary of the results based on the stated goals and hypotheses, highlighting what was discovered from the study and connecting it to the research gaps, may be found in the research findings section. This chapter describes the research study's shortcomings while highlighting its benefits and contributions to knowledge. This section also explains what remains to be done to encourage future researchers to delve into these areas. The study set out to ascertain whether women's participation and empowerment in the oil mining industry had resulted in a shift in gender roles. The study's four main goals were to determine how much oil mining has influenced both genders' lives in Lokichar, how much it has transformed gender roles, and how much working in the industry has empowered men and women. The recommendations are based on the survey's results as well as the concepts that respondents submitted.

5.2 Summary of Findings

In general, the study discovered that the engagement and empowerment of women in the oil mining business led to shifts in gender roles. Due to oil mining, the Lokichar community's way of life had undergone considerable alterations. In the demographic area, there were 51% more females than men overall and 49% more females than males. In terms of education, it was discovered that just 19.2% of the respondents had completed a college degree, and roughly 30.7% had never attended school. About 55.2% of respondents were single, compared to about 39.2% of married respondents. Additionally, the majority of responders were over the age of 21 and had been working in oil mining for at least two years. Other sources of income identified by the respondents included business, employment in factories, teaching and employment as civil servants.

Employment opportunities for both genders arising from oil mining were not found equal. Men were favored against women. It was found that more male at (over 88%) and more female at (over 15%) were working as skilled and semiskilled professionals

respectively at Tullow Oil as compared to men. The oil mining company had more migrants working in senior positions while locals were in lower cadre and menial jobs needing less skills to execute. The migrants were mostly from other counties of Kenya with few from the international community. The survey also found that the Lokichar oil firm employed more local men (16%) than local women (11%), which contributes to the discrepancy in employment between the oil companies. The results of the hypothesis test indicated that there is a link between equal hiring and equal opportunity for men and women to work in mining operations in Lokichar, even though the association was tenuous. The study came to the conclusion that, even if there are opportunities for women, the community has to be made aware of the importance of training and education in relation to various aspects of oil mining.

It's interesting that the survey discovered that gender roles were changing, with both men and women taking on roles that were previously thought to be designated for men. The study also identified changes in gender roles with women pursuing roles like driving tippers, security guards and operating machines, while men had new roles like cooking for the Tullow Oil employees, serving food, washing clothes and mopping the floors. There was a significant change in roles as influenced by oil mining in Turkana. The traditional livelihoods were identified where households earned from their livestock rearing and other traditional livelihoods. It was found that there were almost similar changes for both men and women in their livelihoods with 62.2% agreeing to change in livelihood for males and 61.6% to the change in livelihood for females. There were changes mentioned like investing in businesses, brokering for transport for the oil products, and supplying goods and services to the oil mining company in Lokichar. The hypothesis testing results demonstrated that there is minimal correlation between involvement in oil mining activities and modifications to one's means of subsistence.

It was observed that the locals were mostly not aware of policies and laws dealing with gender in oil mining sector in Kenya. Majority of those who were aware of the law were of the opinion that the law was not upheld. There were also moderate cases of discrimination against employees as perceived by the respondents, despite their awareness of available organizations empowering women on their rights. There were challenges identified for both males and females with tribalism and discriminations being mentioned by majority of the respondents. A sizeable number of respondents also

mentioned that sexual favors were common in seeking employments. The respondents also suggested approaches that could be used to solve the challenges experienced by women on handling discrimination at workplace. The approaches included having legislative frameworks to handle challenges/injustices, sharing of information amongst women, and having women form groups to empower themselves.

According to the results of the hypothesis test, there is a connection between participation in oil mining operations and the availability of jobs in the mining industry for both men and women. It was recognized throughout various FGDs that the government and oil firms both have good policy; what is lacking is implementation. Several key informants identified the patriarchal society, the tension between work and customary tasks, the high percentage of illiteracy, and assumptions that mining jobs are dominated by men as the reasons why there was a perception that hiring practices were unequal for various genders. In Turkana and most of Africa, patriarchal power structures predominate. According to Women in Mining (2013), men still make up the majority in the oil mining industry even with strong rules in place. Because of this, the Mining Bill (2014) does not highlight the gendered aspects of the use of natural resources for national development, especially when it comes to resource management and extraction, even if it recognizes their usage. In this predominantly male-dominated field, there are no clear guidelines on compensation, decision-making, sharing royalties, or power dynamics. The fact that both men's and women's livelihoods have changed as a result of oil mining in Lokichar led to the second conclusion. The results were corroborated by the key informants and FGD participants, who saw a significant shift from the first half of 2010 to 2013, when those with jobs were able to adjust their earnings and upgrade the type of house they owned, and others opened businesses in the nearby town of Lokichar.

The study shades light on important opportunities and considerations for women engagement in this industry giving considerations to policies related to women engagement; more so on work/ home role balance. Although there are many options available for women, more focus needs to be placed on educating and preparing these women so they can take advantage of these chances. The final conclusion was that there is no connection between gender equality in Lokichar, Turkana and oil mining activity. This confirms what participants in all FGDs hinted at, namely that the advantages of oil

mining have primarily benefited men while having a detrimental effect on women. This fills the study vacuum that was hinted at by the fact that the business is dominated by men and that there are significant potential and considerations for women engagement in the oil, gas, and mineral value chain that are now underutilized. The results of this study further add to the scant research in the oil mining industry. Oil mining is a recent development that is little understood throughout Africa, not only in Kenya. This study adds to the body of knowledge needed to make well-informed decisions, particularly in terms of promoting gender equality and participation in the oil business.

5.3 Implication for Policy and Practice

This study on gender in the oil mining industry has several advantages and applications to different stakeholders both academic and non-academic; the findings are important since they provide recommendations that will guide in streamlining the conflicts that surround women in this industry so that their participation in this industry can improve and greater GDP realised. This is so that women's participation in the oil, gas, and mineral value chains may take advantage of significant opportunities and aspects that are currently underutilized, according to UN Women (2014). In the domains of exploration, contracts and licensing, operations and extraction, value addition, tax and royalty collection, income distribution, and administration, women and men have distinct demands and opportunities. The participation of women will lead to a significant rise in the nation's GDP.

Second, this research will broaden our understanding of how gender affects the oil mining business. In Kenya, oil mining is a recent development that has received little attention. In this area, very little research has been done. As a result, this study adds to the body of knowledge about employment practices for men and women, the evolution of gender roles, and lifestyle changes in the oil mining sector as they relate to gender equality. In a similar vein, the work advances theory and methods. The mining industry is largely male-dominated, according to earlier studies (Women in Mining 2013, for example). This study, on the other hand, compares the perspectives of both sexes and focuses on the aspects of changing gender roles as a factor in gender participation and empowerment in the oil mining industry. This brings a wealth of knowledge on the methodological aspect demonstrating how a sociological study can be done with a gender touch by gathering data from the different gender. The study marries conflict

theory, gender relations theory with diffusions for innovation theory explaining how new technology can be embraced in a patriarchal society to bring gender empowerment. Finally, the study will be helpful in developing better policies, and as a result, existing policies that lack gender components will need to be revised. The mining Bill, for all its various tools for mainstreaming gender, neglects to draw attention to the specific gendered aspects of resource management and extraction. In this predominantly male-dominated industry, there is often room for interpretation when it comes to issues like power dynamics, compensation, decision-making, and sharing royalties.

Conversely, the research study has limitations which are twofold; first, generalization is limited to similar marginalized site like Turkana with similar population that has been marginalized over years. Secondly, the difficulty of isolating different gender from the sampling frame at household level to achieve 50:50 gender representation of respondents was not easy.

5.4 Conclusion

Women's participation in the mining, oil, and gas value chains presents significant opportunities as well as currently underappreciated elements. At different stages of the value chain, men and women have different demands and possibilities. There are many excellent policies and programs that are gender neutral, but they overlook gender in areas like power dynamics, remuneration, decision-making, and sharing royalties. Allows for personal interpretation in a field that is primarily dominated by men. This has had a significant impact on gender equality in the mining industry, especially with regard to women's participation in this historically male-dominated field.

5.5 Recommendations

The research makes the following suggestions;

5.5.1Trainings, seminars, workshops, capacity building forums and community sensitization

Oil mining businesses invest time and money in teaching the locals so that they will be better able to engage in the oil mining procedures. The community could be educated on the value of education and encouraged to seek employment in the oil business while continuing their studies in order to shift gender roles. Emphasizing education for the people will help them find better career chances regardless of the tasks they take on,

because of the high rates of illiteracy in the neighborhood. Their decision-making and involvement will therefore significantly increase all the way up to senior management roles. As a result, participation will skyrocket, particularly among women, and GDP growth will accelerate. The business may then decide to give the locals more on-the-job training in order to improve their skills. The people there are advised not to get too caught up in the bad aspects of their culture, particularly the ways that patriarchy hinders women's chances in society. In addition, the communities are encouraged to conduct conferences for capacity building, seminars, and workshops in order to boost the participation of men and women in economic activities within the oil mining sector in Lokichar. Promoting engagement in oil mining is vital to improve livelihoods further since oil mining has changed how people live their lives. Following the implementation of Affirmative Action in this industry, seminars, trainings, and media efforts are crucial to changing the outdated notions of roles for both men and women. These are tactics to encourage involvement and gender equality for both men and women. It will be beneficial to increase community knowledge of efforts for female empowerment.

5.5.2 Gender mainstreaming of new and existing policies

As previously stated, the Mining Bill (2014) acknowledges the use of natural resources for national development, but although having multiple methods for gender mainstreaming, it ignores the gendered elements of resource extraction and management. In this predominantly male-dominated industry, there is often room for interpretation when it comes to issues like power dynamics, compensation, decision-making, and sharing royalties. The report advises that when we revisit some of our current policies, we should take gender into account.

In order to eliminate any loopholes that might permit the exploitation of the poor and those who are unaware of their rights, the report also makes recommendations for strengthening the laws, initiatives, and policies controlling the management of natural resources and their extraction. Women's rights will be enhanced by a suitable legal framework, especially in the oil industry, where their involvement in official roles (or employment) will improve their socioeconomic status in the mining industry. The research also suggests using forums for community sensitization and information exchange to enlighten Lokichar people and all Turkana inhabitants about the laws and policies governing gender empowerment.

5.5.3 Conducting Gender Audits, Monitoring and Evaluation and Quality Assurance

It is crucial that oil firms carry out gender audits because doing so would enable them to mainstream gender into every element of staff life. Similar to this, more focus should be made on goodwill in implementing gender policies. This may be done by monitoring, evaluating, and assuring Quality Assurance in the area of implementing gender policies in the oil mining sector. More suggestions from both genders can be acquired by conducting gender audits, which will close the gender empowerment gap. The implementation of Affirmative Action policies will be considerably enhanced, resulting in greater economic development and women empowerment, which will assist the oil mining industry. The study so suggests reviewing mining-related legislation and making sure that every component is taken into account in terms of gender dimensions.

This would guarantee that the Mining Bill, the Kenyan Constitution, and other Affirmative Action programs get the rewards of embracing gender in all its deeds. In order for the mining Bill to be clear and unambiguous, it should clearly define issues like compensation, decision-making, royalty sharing, and power relationships. The promotion of work-life balance should also be a part of these policies, allowing women to care for their children without jeopardizing their careers or worrying about the wellbeing of the children.

5.5.4 Collaboration of Oil Mining Stakeholders

Furthermore, oil companies and government agencies responsible for managing oil and gas resources should collaborate more closely on issues such as hiring locals, providing trainings to them, awarding contracts to them, pooling incentives for value-adding activities that benefit the community, creating jobs for locals, and combining resources for corporate social responsibility (CSR), which can support local nonprofits, build social amenities, and raise community awareness of ways to accelerate gender empowerment.

For organizations such as the IFC, financing is available. IFC offers competitive long-term financing options that may be tailored to meet the needs of individual projects. These options include debt at the corporate and project levels, equity and quasi-equity, green loans, SDG-linked finance, and equity and quasi-equity. IFC provides mining clients with decades of experience in finance and sustainable business solutions, including advice on community participation and assistance in reducing social and environmental

risks. In addition to securing funding from outside sources, IFC provides technical and operational experts that work closely with the organization's Sustainable Infrastructure Advisory Services team to improve community development and shared benefits (IFC, 2022).

5.5.5 Men Involvement in matters Gender in the oil Mining

Lastly, all stakeholders need to involve men in all their activities. It was realized that most NGOs have been doing various activities to promote gender equality in the mining sector but have not been involving the males. We are living in a patriarchal society where men are the heads of families. Male involvement on matters gender equality in the mining sector will go a long way in promoting gender empowerment and gender quality.

5.5.6 Supporting Opportunities and Improved Working Conditions for Women Employees

In order to reduce gender inequality, it is important to support opportunities and better working conditions for female employees, expand access to financial services for women, and invest in cutting-edge technologies that give female consumers more options, support business skills and leadership development for female entrepreneurs, and increase the representation of women on boards.

5.6 Future Research Gaps/ What Remains to be done

The study established that there were changes in gender roles due to women participation on matters oil mining in Lokichar. It was also established that there were many social vices emerging due to the oil mining like crimes, prostitution, and fraud. Research could be focused on gender involvement in such vices as associated with oil mining. Other opportunities for research include focusing on the demographic changes among the women including the fertility trends and other fertility associated issues as connected to moving in of migrant workers to participate in oil mining. After some period of time (say after five, ten years), researches could focus on the gender gap on employment and assess whether it has been bridged. The researchers could also assess whether women have increased their literacy levels. Additionally, studies on Corporate Social Responsibility by the Oil mining companies is a research gap that still needs to

be addressed. Similarly, a study on migrants in the Oil mining sector and how they have played a big role in realizing Soci-economic development. Lastly, Studies on social inclusion in mining in Turkana, Kenya in the context of granting oil exploration and exploitation also needed to be performed.

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APPENDICES

Appendix I: Survey Questionnaire

I am a Ph.D. student carrying out a research in partial fulfillment of my studies on **Change in Gender Roles as a Factor in Gender Participation and Empowerment in the Oil Mining Industry: A Case of Lokichar, Turkana County, Kenya**.

Your household has been selected by chance from all households in the area for this interview. The survey is voluntary and the information that you give will be confidential and anonymous. The survey will take 45 minutes to 1 hour. Thank you for your participation.

Screening questions:

1. Do you belong to this community Yes___ No ___
2. Are you between ages 15 and 64 years and active in the oil mining labour force or retired or a retiree. Yes____ No ____

Basic Information			
1	Date of survey		
2	Name of the Enumerator		
3	Questionnaire No		
Demographic Characteristics			
4	**What gender is the respodent?**	1= Male	
		2= Female	
5	**How old is the Respondent?**	1=Under 18	
		2=Between 18 -21	
		3=Over 21	
6	**Marital Status**	1= Married	
		2= Single	
		3= Widowed	
		4= Separated/ divorced	
7	**Level of Education**	1= Never attended school	
		2= Primary school	
		3= Secondary school	
		4= College	
8	What are the traditional roles of men in this society?		
9	What are the traditional roles of women in this society?		
10	**Have you been involved in any oil mining activities**	1 = Yes	
		2= No	
11	If yes in 10, what activities are you		

12	For how long have you been involved in oil mining activities (in Years)	1= 1 Year	
		2= 2 Years	
		3= 3 years	
		4= 4 and above	
13	Other than mining activities, indicate any other source of livelihood in your family?	1= Business	
		2= Teacher	
		3= Civil Servant	
		4= Factory worker	
		5= Other(specify)	
Employment of men and women			
14	In which area are men usually employed in the in oil mining activities in this area?	**Area**	**Tick**
		Director	
		Management	
		Skilled	
		Semi-Skilled	
		Unskilled	
15	In which area are women usually employed in the in oil mining activities in this area?	**Area**	**Tick**
		Director	
		Management	
		Skilled	
		Semi-Skilled	
		Unskilled	
16	Who do you think are the dominant mineworkers by gender and origin in this area? Explain a migrant is anyone who is not from the local community	1= Male Local	
		2= Female Local	
		3= Male Migrant	
		4= Female Migrant	
17	Give reason(s) for the response in 16 above		

18	In your opinion, are men and women given equal opportunity to work in mining activities	Yes	
		No	
19	Give reasons for the above response		
20	List the special conditions in place for men to be offered employment.		
21	List the special conditions in place for women to be offered employment		

Changes in gender roles and productive activities as a result of oil mining			
22	What are the issues that were introduced by mining operations in this area?	1=Displacement	
		2= loss of land	
		3=Loss of livelihood	
		4=Degradation of the environment	
		5=Availability of formal employment to community members	
		6= Influx of transient labor	
		7=Health hazards	
		8=Changing live hoods	
		9= Limited access to water, food, and firewood	
		10=Immorality, sexually transmitted diseases	
23	Who is affected more by the above issues	1= Male	
		2= Female	
24	What roles of men have come up with the coming of oil industry?		
25	What roles of women have come up with the coming of oil industry?		
26	Who negotiated for compensation for the loss of land?		
27	Do you think it was the appropriate way to carry out negotiations for compensation?	1= Yes	
		2 = No	
28	Give reasons for your response above		
29	Who received the money for compensation?		
30	Do you feel this was the right person to receive the money	1= Yes	
		2= No	
31	Give reasons for your response above		
32	Will the above person share the compensation fairly/equitably among all male and female members of the family?	1= Yes	
		2= No	

Change in livelihood		
33	Has oil mining changed the traditional livelihoods of men? 1= YES 2= NO	
34	Has oil mining changed the traditional livelihoods of women? 1= YES 2= NO	
Gender empowerment		
35	Are you aware of any law or policy that deals with gender in the oil mining sector in the Kenya?	Yes No
36	Do you think the law is being upheld in this area?	Yes No
37	Are you aware that no person shall discriminate against an employee or any person seeking employment on basis of gender	Yes No
38	Are there organizations in this area that empower women on their rights with regards to activities resulting from oil activities?	Yes No
39	Do men and women have avenues to seek for legal redress in case of any gender related injustice	Yes No

40 - 47 Tick where appropriate on your degree of agreement/disagreement with the following statements. 1= Strongly Disagree; 2= Disagree; 3= Uncertain; 4= Agree; 5= Strongly Agree

Perceptions within oil organizations	**Unit in agreement or disagreement**	**SD**	**D**	**U**	**A**	**SA**
40. Affirmative Action is a Kenyan Government effort to support Affirmative Action Policies and gender equality?						
41. Affirmative Action is an ambitious attempt to correct past discrimination in gender?						
42. Affirmative Action promotes diversity?						

43. Affirmative Action motivates women to look for job opportunities in male-dominated sectors?						
44. Affirmative Action policies hamper productivity?						
45. Affirmative Action fosters corruption in recruitment						
46. Affirmative Action is a program of gender preference						
47. Affirmative Action leads to reverse discrimination						

48. Are workplace policies in the oil sector sensitive to women unique roles as mothers?

Yes [ ] No [ ]

49 Does your organization have a clear policy on maternity?

Yes [ ] No [ ]

50 Are women given paid time off to seek treatment while pregnant in the oil mining sector?

Yes [ ] No [ ]

Appendix II: Focus Group Discussion Guide

I am a Ph.D. student carrying out a research in partial fulfillment of my studies on **Change in Gender Roles as a Factor in Gender Participation and Empowerment in the Oil Mining Industry: A Case of Lokichar, Turkana County, Kenya.**

You have been selected by virtue of the information you have to contribute in this group. The discussion will take roughly one and a half hours. The information that you give will be confidential and anonymous. Thank you for your participation.

a. Traditional gender roles of men and women in this Turkana community?
b. How have the roles changed with coming up of oil industries?
c. What are some of the factors responsible for staff hiring in the oil mining sector for different genders?
d. What difference is there for both genders who are working in the oil sector when it comes to relating to their families? *(probe to find out how it affects the family positively or negatively*)
e. What are the different levels of participation for men and women in the mining industry in Turkana County (*probe for direct and indirect participation, employment and business opportunities, supply chain, and value addition*)
f. How is the participation of men and women in the negotiations and consultations between the community on the one hand and the government and the mining company on the other?
g. How have women and men faired in the compensation schemes and other benefits accruing from oil mining in Turkana County?
h. How practical is the process of seeking legal redress when it comes to different genders?
i. How has loss of land to oil mining affected different genders?
j. What social amenities have been established in this community because of oil mining activities?
k. How have these social amenities impacted on gender roles?
l. Which of these amenities benefit men directly?

m. Which of these benefit women directly?
n. What influence has oil mining on the incomes of men and women? (Probe for both positive and negative influence)

o. What are some of the ways that men and women seek for redress in cases where there are gender injustices relating to oil mining?
p. Who are the different stakeholders in the mining industry in Turkana County? (*Probe for government, private sector, local leadership, civil society, foreign investment and their roles*)
q. What would you recommend as practical mechanisms for improving women's capacity to cope with the effects of the mining industries and their resilience in general in Turkana County and at the national level
r. What is your opinion of the gender policies and other mechanisms for ensuring gender participation and empowerment in oil mining in Turkana?
s. Have SACCOs played a role in gender empowerment?

Appendix III: Key Informant Interview Guide

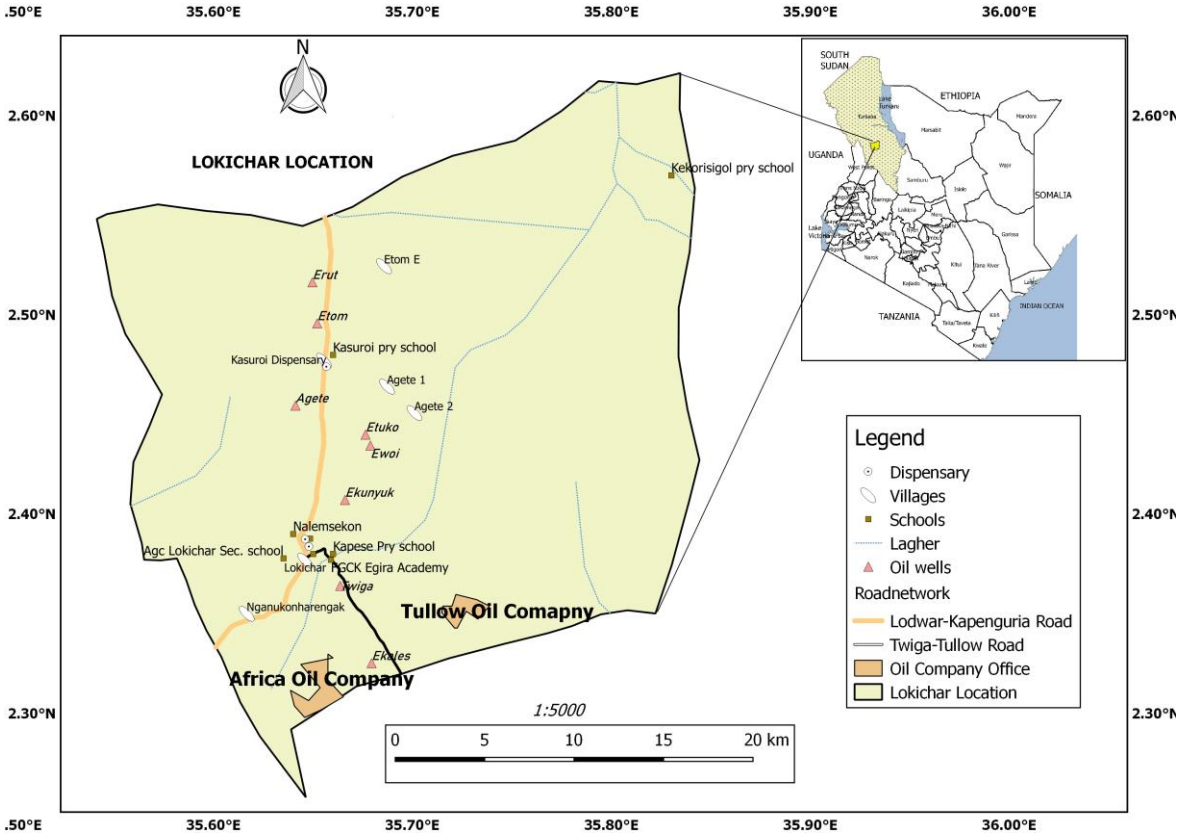
I am a Ph.D. student carrying out a research in partial fulfillment of my studies on **Change in Gender Roles as a Factor in Gender Participation and Empowerment in the Oil Mining Industry: A Case of Lokichar, Turkana County, Kenya.**

You have been selected by virtue of the fact that you have information that can be useful for this interview. The interview will take roughly one hour. The interview is voluntary and the information that you give will be confidential and anonymous. Thank you for your participation.

a. Overview of the oil mining industry in Turkana County.
b. What are the roles of the different stakeholders in the oil mining sector in relation to gender equality and empowerment?
c. Ways in which men and women experience oil mining differently in terms of staff hiring (*Probe for the factors responsible for staff hiring in the oil mining industry in the Turkana County*).
d. How has patriarchy affected gender equality in the oil mining sector in Lokichar?
e. How has governance affected gender equality in the oil mining in Lokichar?
f. How has the coming up of oil industries changed gender roles?
g. How has the coming up of oil industries contributed to changes in livelihood for different genders?
h. The levels at which men and women participate in the negotiations and consultations between the community on the one hand and the government and the mining company on the other. *(Probe for the impact of traditional roles and how they have affected how men and women have fared in the compensation schemes and other benefits accruing from oil mining in Turkana County*).
i. The best legal and policy practices in oil mining industries in relation to gender equality *(Probe for gendered review the of the policy and legal framework underpinning the extractives industry in general and oil mining in Turkana County in particular*).

j. What are some of the ways that men and women seek for legal redress in cases where there are gender injustices relating to oil mining?
k. Practical policy, legal and other mechanisms for enhancing gender equality in Turkana County in particular and Kenya's mining industry in general (*Probe for awareness of human and labor rights issues in the oil mining industry)*
l. What are the challenges faced in the implementation of gender policies in Turkana? (`probe in terms of gender participation and gender empowerment)
m. Recommend practical mechanisms for improving women's capacity to cope with the effects of the mining industries and their resilience in general in Turkana County and at the national level?

Appendix IV: Map of the Study Area



APPENDIX V: NACOSTI LETTER AND PERMIT

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/18/88052/23471**

Date: **17th July, 2018**

Caroline Khasoha Shikuku
University of Nairobi
P.O. Box 30197-00100
NAIROBI.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Change in gender roles as a factor in gender participation and empowerment in the oil mining industry: A case of Lokichar, Turkana County, Kenya"*** I am pleased to inform you that you have been authorized to undertake research in **Turkana County** for the period ending **17th July, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Turkana County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Turkana County.

The County Director of Education
Turkana County.

THIS IS TO CERTIFY THAT:
MS. CAROLINE KHASOHA SHIKUKU
of UNIVERSITY OF NAIROBI, 0-1020 NAIROBI,has been permitted to conduct research in *Turkana County*

on the topic: *CHANGE IN GENDER ROLES AS A FACTOR IN GENDER PARTICIPATION AND EMPOWERMENT IN THE OIL MINING INDUSTRY: A CASE OF LOKICHAR, TURKANA COUNTY, KENYA*

for the period ending:
17th July,2019

Permit No : NACOSTI/P/18/88052/23471
Date Of Issue : 17th July,2018
Fee Recieved :Ksh 2000

.....
Applicant's Signature

.....
Director General
National Commission for Science, Technology & Innovation

Appendix VI: List of Key Informants (Names shared with consent)

The following were the members who participated in the interviews;

1. Madam Veronicah Natesiro Lambart (mama tosha), a local politician and a supporter of women empowerment
2. Mercy Akotsio- Current employee at Tullow Oil and a masters' degree holder, a local having been selected to represent the community during land negotiations
3. Reverend Godom Lokael –Pastor and Reverend for the RCEA church
4. John Abukot- Lokichar Sub-County Hospital Facility administrator
5. Josephine Akimu Ekala, HSC.-Acting chief 2007. One of the more referred persons in the area, and a key person for the study.
6. Retired Human Resource Manager in Oil Company in Turkana who did not want her name disclosed.

Appendix VII: FGD groups

The following were FGD groups. They did not give consent for their names to be written;

i. Male youths 15 to 35 years- 12 Participants.
ii. Males 36 to 64 years- 12 participants.
iii. Female youths 15 to 35 years- 12 participants.
iv. Women 36 to 64 years- 12 participants.