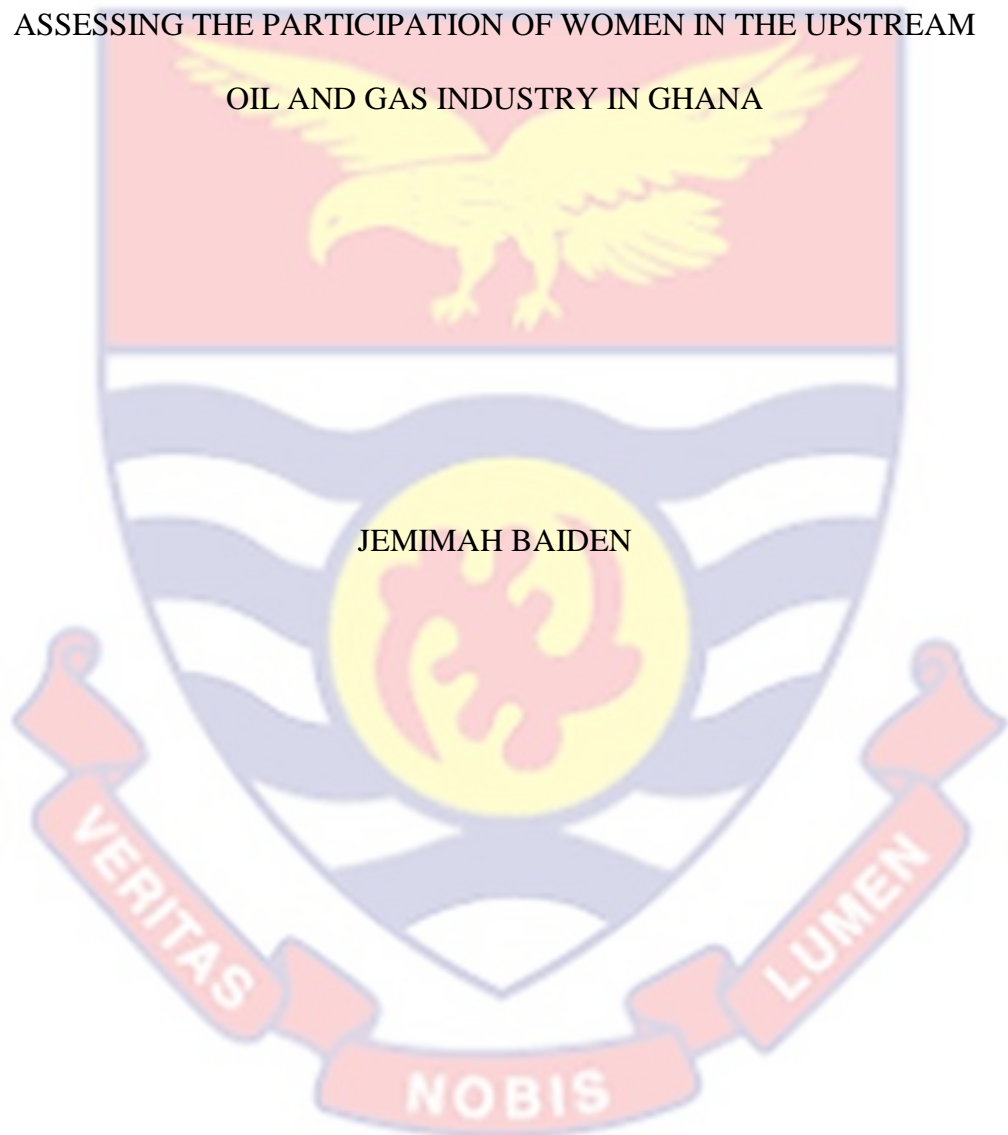


UNIVERSITY OF CAPE COAST

ASSESSING THE PARTICIPATION OF WOMEN IN THE UPSTREAM

OIL AND GAS INDUSTRY IN GHANA

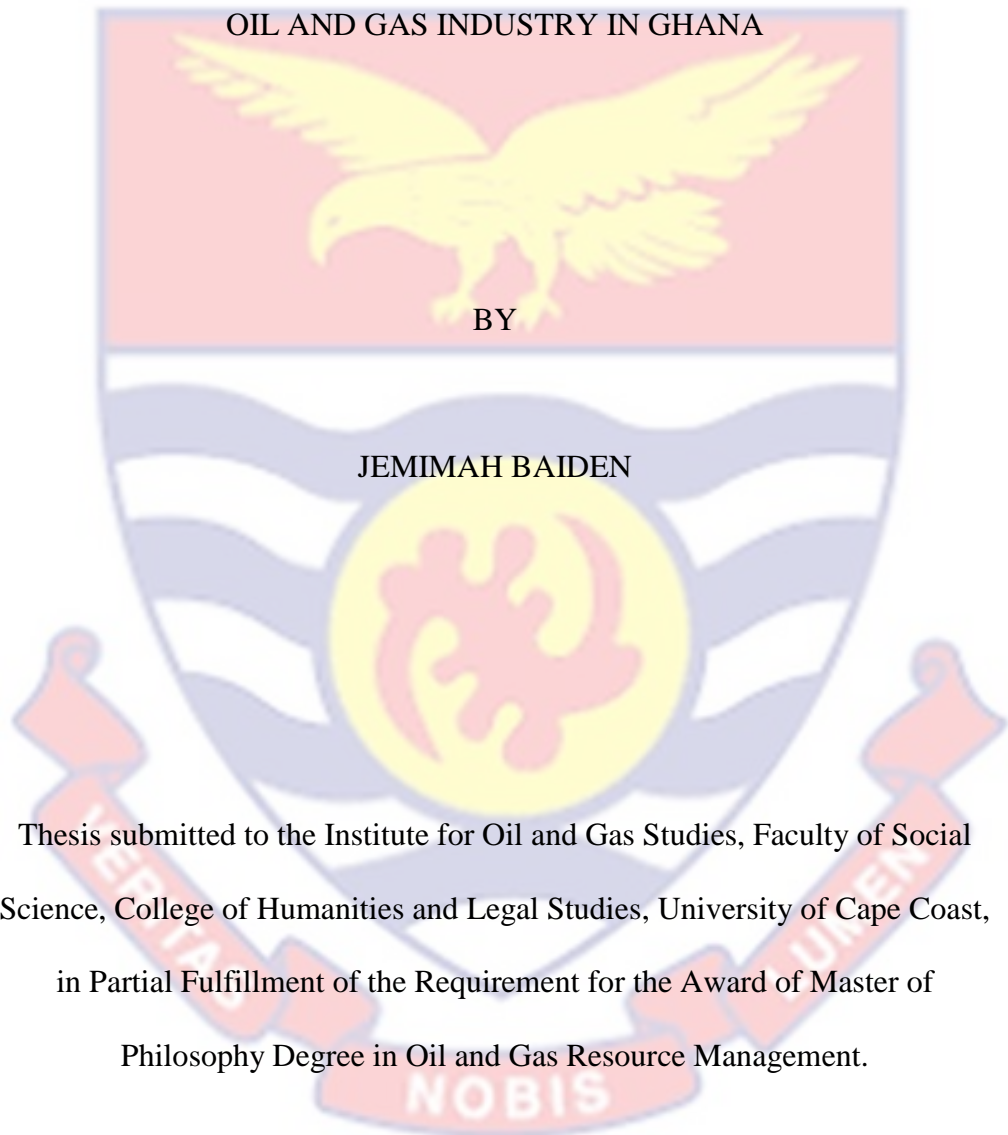


JEMIMAH BAIDEN

2020

UNIVERSITY OF CAPE COAST

ASSESSING THE PARTICIPATION OF WOMEN IN THE UPSTREAM  
OIL AND GAS INDUSTRY IN GHANA



Thesis submitted to the Institute for Oil and Gas Studies, Faculty of Social  
Science, College of Humanities and Legal Studies, University of Cape Coast,  
in Partial Fulfillment of the Requirement for the Award of Master of  
Philosophy Degree in Oil and Gas Resource Management.

OCTOBER 2020

## DECLARATION

### Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: ..... Date: .....

Name: Jemimah Baiden

### Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision on thesis laid down by the University of Cape Coast.

Supervisor's Signature: ..... Date: .....

Name: Dr. Edward Kweku Nunoo

## ABSTRACT

The disparity in the representation women in oil and gas industry has been found to slow down women development, affects economic growth in resource-rich developing countries and induces poverty as well. Too often however, women are denied their rights to contribute their quota in the Oil and Gas development upstream losing all opportunities associated with it in the quest for a balanced gender development and sustainability. Achieving the gains promised by the industry, in particular for women, depends on understanding, identifying and managing the challenges that militate against these goals. The study used descriptive research design with a cross-sectional survey to assess the participation of women in the Oil and Gas industry in Ghana by examining opportunities for gainful employment by women and the challenges that fight against equal gender representation in the Oil and Gas upstream development in Ghana. The study found that women were not equally represented in all sectors of employment identified within the Oil and Gas operations upstream and do not have any controlling positions and hence cannot influence decision making. The study recommended that support programs be set in place to ensure that women are not discriminated against in the Oil and Gas sector, which has been characterized as "hyper-masculine" and seems to favor male representation at the expense of females, based on the results.

## ACKNOWLEDGEMENTS

My sincere appreciation and gratitude go to my supervisor, Dr. Edward Nunoo of Institute of Oil and Gas, University of Cape Coast, for his contribution, support, encouragement and suggestions towards the successful completion of this research. Many thanks also go to my family and friends, for their diverse contribution that made the pursuit of this research possible.



**DEDICATION**

To my family





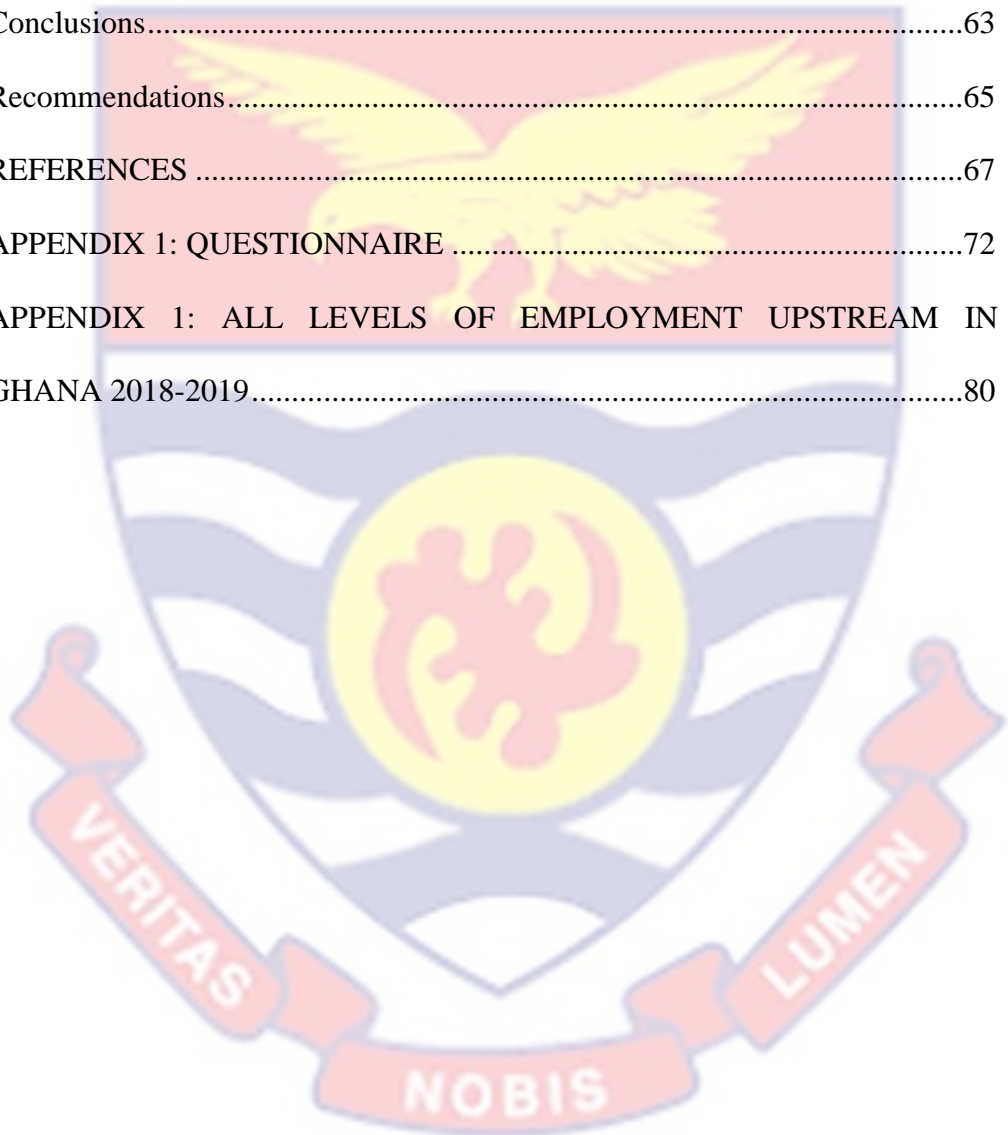
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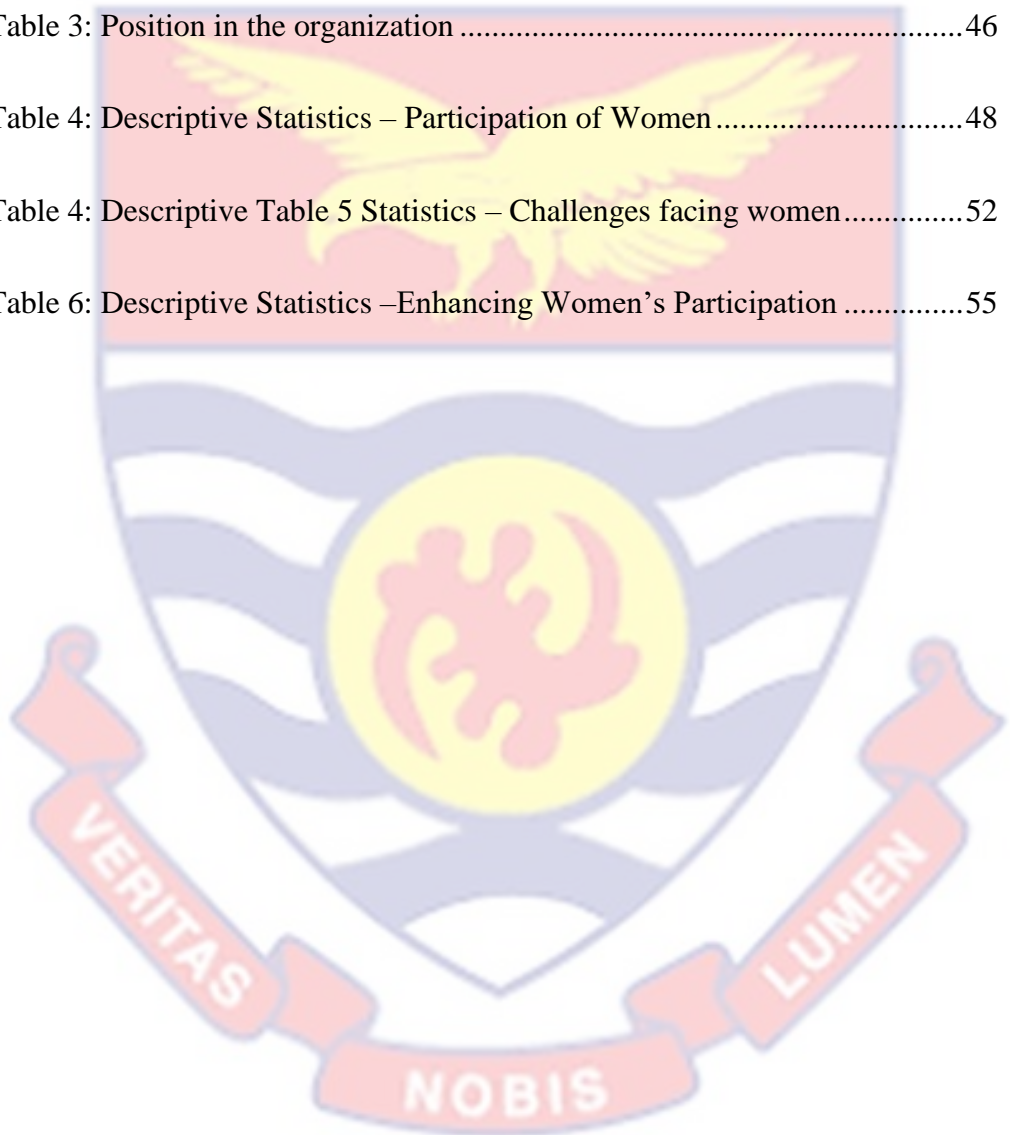


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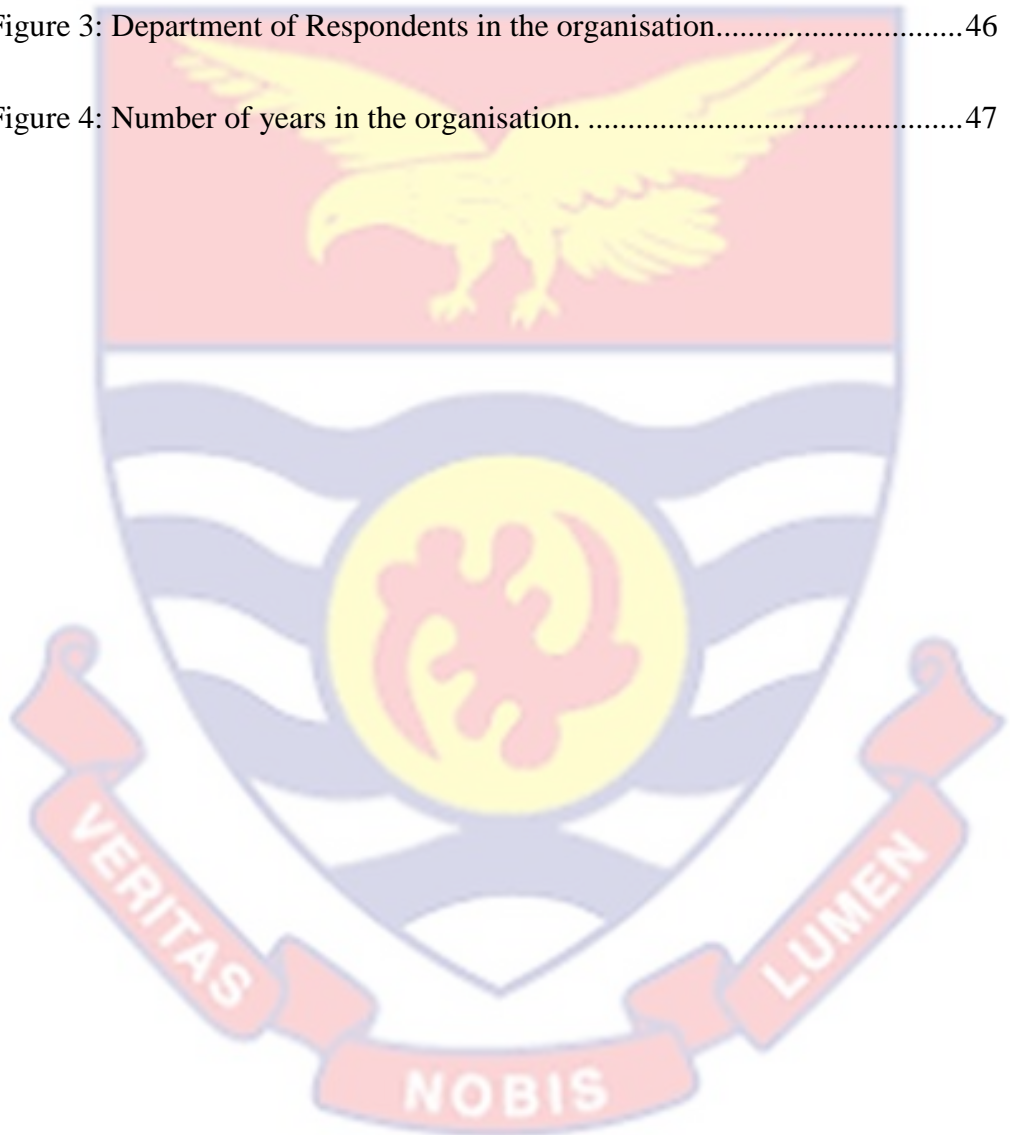
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## CHAPTER ONE

### INTRODUCTION

The oil sector contributes to the Gross Domestic Product of many countries in which Ghana is included, provides job opportunity as well as community development. Increasingly, oil and gas firms tend to diversify into the renewable energy market. Extractive industries in different countries have an impact on the social, economic, cultural and political processes of citizens worldwide. Women in energy statistics are often hard to come by, inconsistent, and incomplete when compared to other categories in the oil industry. However, there is undeniably a gender divide in the industry. Women make up a small percentage of the oil industry's workforce. For example, women make up about 12% of Exxon Mobil executives, compared to 9% in 2000; women made up 38% of the company's professional and management personnel hired in 2007 (Amoako-Tuffour & Owusu-Ayim, 2012). This study therefore assessed the participation of women in the upstream oil and gas industry in Ghana.

#### **Background to the Study**

According to Gyan, (2013) the discovery of oil in Ghana in 2007 brought hope to majority of Ghanaians especially the people in the western region as the nation was to generate an extra source of revenue for the country's growth agenda. The people of Ghana became happy because most oil-producing countries have shown that there is a relationship between development and oil production (Amoako-Tuffour & Owusu-Ayim, 2012). This development was evident when the Ghanaian economy grew by twenty-

three percent (23%) in the first quarter of 2011 when oil production and exploration had begun (Ahadzie, 2007). The general outlook of economic growth stood at (13.6) in 2011 as the growth rate was heightened by oil export (Adam, 2012). As a result, Ghana has now become a destination for foreign direct investment with domestic development and a stable political environment in the African sub-region.

According to the World Economic Outlook (2009), the global economy is highly reliant on oil and gas to satisfy much of its energy needs even as fuel is a key predictor of both developed and emerging countries' economic well-being. The International Energy Agency (IEA) predicts that global oil demand will reach 90 million barrels per day in 2010 and 104 million barrels per day by 2020 (WEO, 2009). And that the continued increase in global energy demands is attributed in part to strong global economic growth.

According to the African Development Bank Group's Oil and Gas report (2017), Africa's natural gas reserves account for 7% of global reserves and 8% of oil reserves. Seventeen African countries export crude and at least 24 countries have petroleum reserves, with drilling taking place across the continent. Recent oil and gas developments have the potential to significantly increase federal income and poverty-relieving services. Despite the fact that oil and gas discoveries had the potential to boost national prosperity, questions about the sector's commitments and management to the development of several developed countries appeared in the 1980s (Maconachie & Binns, 2007)



Ghana discovered oil and gas in 2007 and started extracting these resources in 2010. Through subsequent discoveries, the country has been able to realize a long-held dream of boosting its socio-economic development through oil and gas revenues. The extractive industries in Ghana (defined as oil and gas, as well as mineral and metal mining) are major sources of wealth and opportunities in the surrounding economies, with the potential to stimulate economic growth by providing employment, revenue, development opportunities, and poverty reduction.

In a recent study titled 'Oil, Islam, and Women,' Ross (2008) made some intriguing claims about the relationship between an oil-based economy and gender equality. Simply put, an oil-based export-led economy keeps women out of the workforce, limiting their political power and rendering them economically unable. Ross's (2008) statement contradicts a number of widely held myths about sustainable growth and gender equality. Economic development, according to Inglehart and Norris (2003), has a direct impact on gender equality. According to other research, this principle does not apply to the oil-rich Gulf States because of the patriarchal structures in place in Muslim countries, which oppress women. When a developed country suddenly encounters an oil boom, according to Ross (2008), the demand for domestically produced products decreases and is redirected to non-tradable commodities like manufacturing and heavy industry. As a result of the occupational division of labour that exists in most developed societies, women are excluded from jobs for two reasons. For first, the male income makes women's work in terms of economic participation obsolete; and second,



workers in the light industry that formerly attracted women to the labour force are being phased out.

However, the financial benefits can come at a significant environmental and social expense. According to Darkwah (2010), the importance of oil and gas in a country's economic growth cannot be overstated due to the vast financial capital that can be obtained through this sector. Boohene & Peprah (2011) have stated that oil and gas not only act as significant foreign exchange-earners for a country but also provide job opportunities for both men and women by all standards. "Benefits and costs of the extractive industry (EI) are often broadly measured at management and society level, but the multiple impacts on men and women are not distinguished," according to the World Bank (World Bank, 2006)

According to the IFC, (2018) study "Unlocking Opportunities for Women and Industry," there is a gender disparity in the allocation of risks and rewards in extractive industries projects: benefits accrue further to men in the form of work and wages, whereas costs, such as family or social disruption and environmental loss, fall disproportionately on women. According to an empirical analysis of the gender and economic growth nexus in Ghana, a significant increase in female literacy may result in a real output growth increase of roughly half. To put it another way, a major rise in gender equity, whether in terms of human capital accumulation or economic participation by women, would have a significant positive effect on the pace of economic development. Unfortunately, policymakers and industry are unaware of the impact of extractive business programs on gender equality. While men outnumber women in paid jobs in most countries, women play a critical role in

the development of our human capital. Women, like their male counterparts, have several capacities to accomplish the above functions (Barnabas et al., 2009). Women should be allowed to participate in the oil and gas sector at all stages to improve the industry's overall capability.

### **Statement of the Problem**

Research shows that women in most extractive industries, especially the oil sector, are less represented. The United State (U.S) Labor Department recognizes male-dominated extractive industries where women make up just one-fourth of the overall workforce. Again, a study conducted by the United Nation (U.N) Coal Mining Methane Expert Group shows that women are involved in the extractive industries, helping to promote profitability, boosting more precise and objective thinking, and also contributing to or enhancing decision-making. It is important to understand how the extractive industries have a different impact on men and women and the value of ensuring equal access for women to the benefits of the extractive industries (EI).

In some countries, the oil and gas boom has seen active women's participation in the economic sector, while some countries have faced negative effects. The inference is that, by reducing the participation of women in the labour force, oil production influences gender relations. The emphasis on women's economic empowerment is also explained by their relative lack of access to productive resources, including within the oil and gas industry, in Africa. Therefore, for further growth and development, women need to be drawn to and retained in the industry. The goals of equity and inclusive growth, according to Gyan (2013), call for greater participation of women in

the oil and gas industries, either as members of the labour force or as entrepreneurs, taking advantage of the supply-side opportunities provided by the industry.

A study conducted by Gyan, (2013) explores the role of women in the oil and gas industry in Ghana, using only two companies and his analysis conducted in the downstream market. In the oil and gas field upstream is about the extracting oil and the natural gas from the ground. The upstream deals with the exploration and production while the downstream deals with the distribution of the finished products. The focus of Gyan (2013) was on the role of women, this research aims to look at women's involvement in the oil and gas industry, which included the role and challenges facing women in the industry. This paper will discuss the opportunities available to women in the upstream Ghanaian market.

Women in Ghana are thought to lack access to the resources and education necessary to develop their skills and abilities, resulting in their inability to obtain jobs in the country's top industries. Thus, assessing the participation of women and given them opportunities can help create resources for them to develop their lives. Also, women have no potential in the oil industry, according to research evidence from around the world. The low level of education and skills required for the sector has been the key reason for this. Women are usually regarded as home caretakers (reproductive roles), which makes it difficult for them to engage in such activities, even though some of them have the necessary skills. Oil processing has also been viewed as a rather masculine occupation that most women are unable to participate in. It is hoped that the oil that has been discovered in the country will help both men and

women improve their economic condition. This study would also look at the various options available to women working in the oil industry. The types of roles that women are likely to play in this industry to achieve economic equality with their male counterparts, as well as their contribution to the oil and gas industry's development, will be revealed.

However, while there have been a few studies on women's contributions to the oil and gas industry, there is no current literature on women's involvement in the Ghana upstream market. Only the role of women in Ghana's oil and gas sector is discussed in studies conducted by (Gyan, 2013). Regardless, this study will shed more light on the contributions of women who work in the upstream oil field, capturing their positions, resources, and challenges.

### **Purpose of the study**

The main purpose of the study is to assess the participation of women in the Oil and Gas upstream industry in Ghana.

### **Specific Objectives**

1. To the extent to which women participate in the upstream Oil and Gas development processes in Ghana.
2. To analyze the Challenges women face in the upstream Oil and Gas sector.
3. To advance strategies for enhancing women's participation in the upstream sector.



### **Research Questions**

To achieve these specific objectives, the following questions were asked to serve as a guide in meeting the objectives:

1. What role do women play in the Oil and Gas upstream sector?
2. What are the various challenges women face while working in the upstream Oil and Gas industry?
3. What are the strategies for enhancing women's participation in the upstream oil sector?

### **Significance of the Study**

The study will be useful to the management of the oil and gas sector in Ghana, especially with the upstream operators. Also it will help government and politicians as well as policy makers to decide on the upstream sector in Ghana. It will also serve as a guide for researchers in this area. These recommendations are intended as a practical policy tool for emerging oil and gas industries in African countries, whose benefits can be shared by both men and women in the community. It will also assist other stakeholders, such as oil and gas companies, women's and industry associations, chambers of commerce, and growth partners as well. The research provides advice based on evidence of practical and validated approaches to increase women's access to opportunities created by new oil and gas infrastructure. The goal is to contribute to evidence-based decisions on women's economic advancement in the region, with a focus on long-term growth and equality.

Further, this study will add to the existing knowledge base. As a result, the findings will complement previous research, allowing people in other areas

of the world to have a better understanding of the problem, with women at the frontline of the energy future, reaping equal gains from these investments and taking a leadership role at all levels of the energy value chain.

### **Delimitation of the Study**

Only women working in Ghana's upstream oil and gas sector will be included in the research. Only the Ghana National Petroleum Commission (GNPC), Tullow, and ENI Oil and Gas firms are included in the report. The research focuses on women's involvement and achievements in the oil and gas industry since all female workers of these three oil and gas firms are the study's target. While there are a variety of approaches that can be used to perform this analysis, I have narrowed my research to only using quantitative methods, which would necessitate the use of questionnaires to answer all of my research questions.

### **Limitations of the Study**

The study intends to assess the participation of women in the upstream oil and gas sector in Ghana. The study was limited in scope because of a series of resource limitations as well as practical research. Firstly, financial constraints were a potential deterrent to the study at hand and hence, partially realizing the research objectives. Secondly, the poor rate of the respondent is likely to occur. Lastly due to the recent pandemic which also cause some challenges with the administering of questionnaires to the right respondents. Even though it was a challenge another alternative used to solve the problem which did not compromise the outcome of the work. In addition, the time allocation for the research study was limited due to equally important tasks,



which need to be accomplished although these challenges were met, they did not delimit the quality of the content of this paper.

## **Definition of Terms**

### **Extractive Industries**

Extractive industries are those that extract raw materials from the ground, such as oil, coal, gold, iron, copper, and other minerals. Drilling and pumping, quarrying, and mining are all industrial techniques used to extract minerals. Mining and oil and gas are the two most common extractive industries.

### **Upstream Sector**

The upstream sector of the oil and gas industry encompasses all procedures involved from preliminary exploration through resource exploitation. Upstream companies may be active in all stages of the oil and gas industry's life cycle, or they may simply be involved in a portion of the upstream sector.

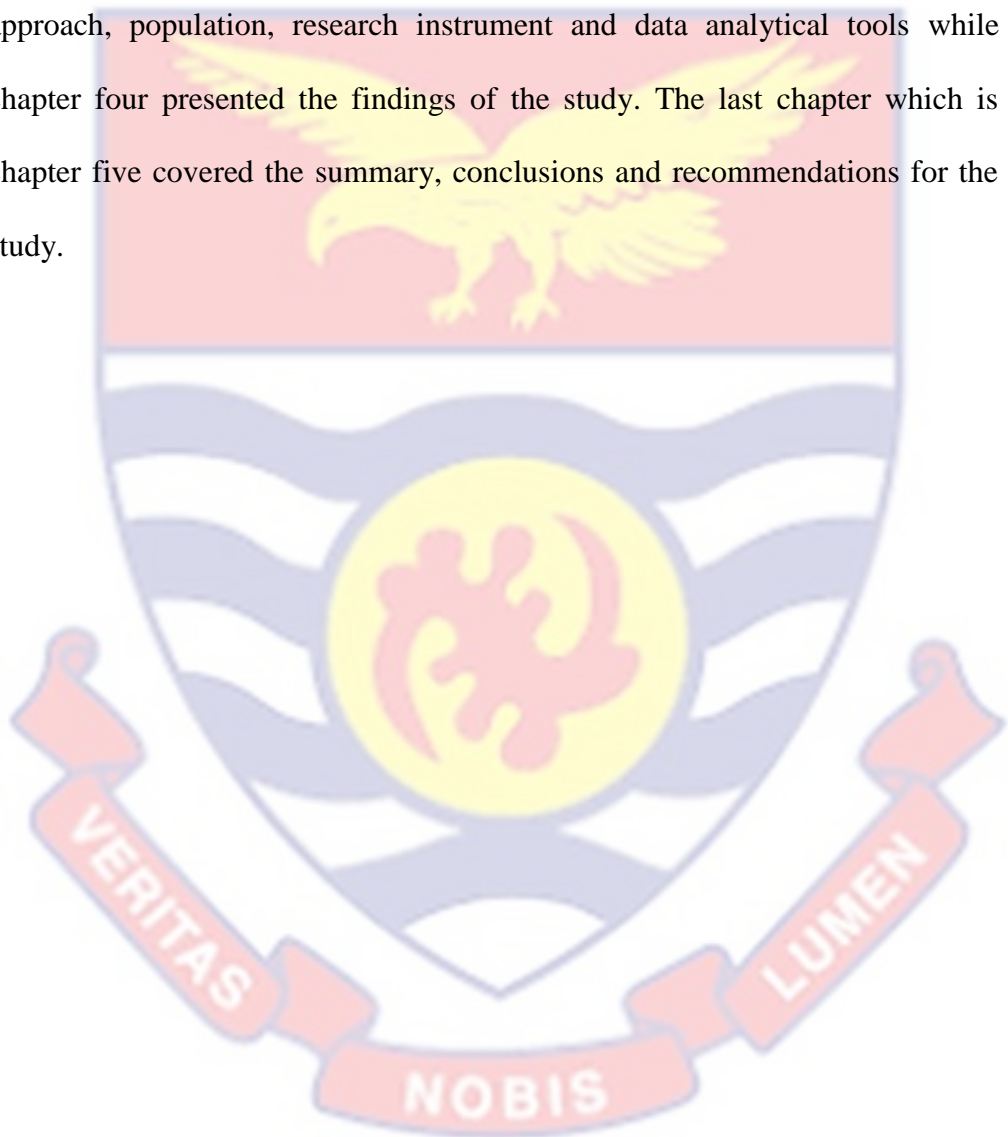
### **Downstream Sector**

The procedures involved in transforming oil and gas into final products are referred to as downstream operations. Refining crude oil into gasoline, natural gas liquids, diesel, and a number of other energy sources is one of them. The closer an oil and gas firm is to the process of supplying petroleum products to customers, the further downstream the company is said to be.

## **Organization of the Study**

The research was presented in five chapters. Chapter one comprised the introduction which elaborates on the background to the study, problem

statement, purpose of the study, research questions, significance, delimitations and limitation and also the organization of the study. Chapter two reviewed key concepts, and discussed the theoretical foundation of the study as well as the empirical studies. Chapter three considers the methodology used in the study which captured issues such as the research design, the research strategy, approach, population, research instrument and data analytical tools while chapter four presented the findings of the study. The last chapter which is chapter five covered the summary, conclusions and recommendations for the study.



## CHAPTER TWO

### LITERATURE REVIEW

#### **Introduction**

This chapter focuses on various views and perspectives on the participation of women in the oil and gas industry. This chapter seeks to review available and relevant literature that informs the study to further discuss the opportunities and challenges in the field of study. It covers three main theories considered for the study, the empirical review, the overview of local and global oil industry, challenges and opportunities of gender issues as well as the efforts the industry is implementing to ensure that those challenges are mitigated.

#### **Theoretical Review**

##### **The Legitimacy Theory**

The legitimacy theory was developed by Dowling and Pfeffer in the year 1975. The aim of the legitimacy theory clarifies the organization's ongoing efforts to ensure that they function within their respective communities' bounds and norms. According to the theory, organizations that follow the legitimacy theory disclose activities willingly if management believes that the acts were anticipated by the societies in which they operate (Aklorbortu, 2016). Legitimacy theory is based on the premise that an entity and the community in which it exists have an "ethical contract." According to Ganesan and Ward (2008), an organization's activities are heavily reliant on the social compact it has with the community under which it works. The supply of such socially favourable ends to society as a whole, as well as the allocation of economic, social, and political rewards to the communities

through which it extracts its influence, are therefore critical to an organization's viability and success.

Lindblom (1994) opines that where there is a divergence between the expectations of the stakeholders of an organization and the organization's actual actions, there is likely to be a threat to the very existence of the organization. Lindblom (1994) refers to this divergence as a 'legitimacy gap'. Legitimacy theory holds because there needs to be a kind of agreement and harmony between an organization and the society in which the organization operates since an organization cannot operate in a vacuum.

However, the theory seems to be silent on the environmental and health benefits of the society in which an organization is operating. Though the environment and health of the people might implicitly be included in the economic, social and political benefits to the groups from which an organization derives its power, there is the need to explicitly mention them in the theory. This is because most often, organizations do corporate social responsibility (CSR) at the expense of the environment. Especially in the case of extractive companies, the environment may be polluted or degraded and the companies turn around to engage in CSR. If the society in which an organization operates is enlightened about environmental and health issues, then a legitimacy gap can develop, though the organization may be providing economic, social and political benefits to various groups (Aklorbortu, 2016).

In Ghana's oil and gas industry, therefore, the oil and gas companies must have some social contract with the Ghanaian society. This social contract extends to the provision of some socially desirable resources and the distribution of economic, and political benefits (Aklorbortu, 2016). The host



community expects these provisions from the oil and gas companies operating in the country's oil and gas industry. For example, the Ghanaian society expects some level of local content in the operations of industry players in the production of oil and gas. Local content may come in the form of direct employment of locals or indigenes on the rigs or Floating Production Storage and Offloading (FPSO). It can also be the engagement of locals in the supply of some foodstuff for example to the workers or the involvement of the locals anywhere along the oil and gas production chain (Aklorbortu, 2016).

The legitimacy theory believes that there should be a social contract between the community and the organization operating in the community. Therefore, women must have the same opportunity as their male counterpart does in Ghanaian's upstream sector. There should not be less engagement on the side of women in that regard. Women are innovative when it comes to making decisions, having the involvement of women in decision making in an organization or the oil sector will improve and make it better than it used to be.

### **Stakeholder Theory**

The stakeholder theory was first developed by Freeman in the year 1984. Stakeholders are businesses and individuals that benefit from or are impacted by company actions, and whose values are either exploited or valued (Aklorbortu, 2016). The stakeholder definition is a variation on the stockholder concept, in which stockholders have specific claims on a business. Stockholders have the power to seek such acts from management under the stockholder principle. Similarly, under the stakeholder principle, stakeholders can recommend that a company perform specific steps (Freeman, 1994).

Freeman (1994) described stakeholders in two ways: narrow and wide. Stakeholders are described as groups that are critical to an organization's existence and progress in a narrow way. Stakeholders, in the broadest sense, are any collective or person that may influence or be influenced by an organization. The stakeholder theory in expectations management in Ghana's oil and gas industry means that international oil companies like Tullow and Kosmos Energy, have stakeholders like the Government of Ghana, the host community, and civil society organizations. The host community may be regarded as a stakeholder in the wider definition of a stakeholder. In that, the host community may not be directly involved in these offshore oil and gas operations. However, the host community is affected in some way. For example, the people are fisher folks and their livelihood depends on the catch from the sea. But the production of oil and gas has limited how far the fishermen can venture into the sea environment of the productions. There have also been reported cases of dead whales in the catchment area of production. The death and washing ashore of these whales may be attributable to the disturbances in the oceanic habitat of fisheries (Aklorbortu, 2016).

These disturbances may affect the catch of fish in the host community, a situation that has the capacity of impacting unfavourably on the livelihood of people in the host community. If so, by the stakeholder theory, the people of Ghana and for that matter, the host community has the right to demand certain provisions from the International Oil Companies (IOCs) and the government. By implication, the host community has certain expectations of the IOCs and government. Again, since the operations of the oil fields have an impact on the occupation of the people, it is legitimate for the people to demand their



employment in the oil and gas industry (Aklorbortu, 2016). Stakeholder analysis is a clear way of defining those groups and individuals who have significant relationships with an organization. Writing on corporate strategy, Johnson and Scholes and Whittington (2005) consider how likely stakeholders are to press their demands on an entity to suggest stakeholder containment or management strategies. They consider how much interest stakeholders have in the organization's future problems and concerns if stakeholders have the means to drive their interest and how predictable they will be (stakeholders). Johnson and Scholes map stakeholder influence against both their degree of involvement in the problem and their conduct's predictability (Ackah-Baidoo, 2013).

The advantages of this theory are that it makes companies take on social responsibilities and presents fairness and trust to every participant in the business. This enables companies to gain more loyalty from their stakeholders and in turn promotes efficiency, with a result that the interest of all stakeholders is boosted (Aklorbortu, 2016). However, the theory has some significant shortcomings which include the hindrance caused by ambiguity or problem in defining who stakeholders are, makes the implementation of this theory difficult (Ayelazuno, 2014). In Ghana's oil and gas industry, the fields are located offshore. Therefore, the host community does not have direct contact with the fields and operations. Though the host community has a high interest in the industry, they do not have the constitutional power to negotiate contracts in the exploration, development, and production of the oil and gas found in the deep seas of Ghana. This is because the 1992 Constitution of Ghana vests all-natural resources in the executive. Therefore, it can be said

that the host community may be referred to as having high interest but low power (Aklorbortu, 2016).

The oil and gas companies in Ghana must have some social contract with the Ghanaian society. This social contract extends to the provision of some socially desirable resources and the distribution of economic, and political benefits. The host community expects these provisions from the oil and gas companies operating in the country's oil and gas industry. For example, the Ghanaian society expects some level of local content in the operations of industry players in the production of oil and gas. Local content may come in the form of direct employment of locals or indigenes on the rigs or Floating Production Storage and Offloading (FPSO). It can also be the engagement of locals in the supply of some foodstuff for example to the workers or the involvement of the locals anywhere along the oil and gas production chain (Aklorbortu, 2016).

### **Liberal feminism theory**

Liberal feminism was developed by Stanton and it is one of the most influential strands of feminism in management and organization studies. Historically, modern feminism has aimed to remove overt legal and cultural obstacles to women's inclusion in culture on an equitable footing with men. Liberal feminism views men and women as separate, self-sufficient individuals. As a result, removing barriers to women's involvement, especially in education and jobs, is the answer to their lower achievement. The liberal feminist reform continues to focus on barriers in education and employment. In the 1970s efforts were made to increase equality in the labour force by

removing gender as an explicit job qualification. The liberal feminist can only be satisfied as soon as women are allowed to partake or participate and they can make it to the top as their counterpart do. Women are to be allowed to explore their skills. Gone are the days they use to say a woman's place is the kitchen. In this recent time, women are doing better when given the opportunity. Women inclusiveness is very important in the extractive industries, especially in Oil and Gas sector.

## **Empirical Review**

### **Overview of the Global and Local Oil Industry**

Oil discovery affects people's lives and nations' fates all around the globe. Oil income is the primary source of income for most developing nations and is used to fund their sustainable growth programs. Indeed, without oil, growth would be slowed and life would be miserable, which is why policymakers are so worried with oil (Scott et al., 2013) The West African Oil and Fuel Company started the exploration of oil in Ghana in 1896. In 1970, a small discovery was made in the Saltpond region in eastern Ghana, and between 1978 and 1985, the field yielded 3.47 million barrels. The current big discovery was made in 2007 in Ghana's Western Maritime Zone, 60 nautical miles offshore, by a group of investors<sup>1</sup> in partnership with Ghana's national oil firm, Ghana National Petroleum Corporation (GNPC). In honour of Ghana's 50th anniversary of independence, the area has been dubbed "Jubilee Field." On December 15, 2010, the Jubilee Field was formally dedicated. The field could contain up to 1.8 billion barrels of medium, crude oil, according to estimates. About 120,000 barrels of oil are extracted daily from the region,

generating over US\$3 billion in revenue for the exchequer since output began. After the start of commercial activity, several findings have been produced, with the Tweneboah-Enyenra-Ntomme (TEN) Field set to begin production in 2016. Its regular production is expected to be about 80,000 barrels.

Ghana found oil and gas in 2007, and the nation started extracting these commodities in 2010. With subsequent discoveries, the nation has been able to realize a long-held dream of using oil and gas revenues to fuel its socio-economic growth. Surprisingly, the oil industry has not aided local economic growth in producing countries, especially in developed countries. This phenomenon dubbed the "paradox of abundance" or "resource curse," has become a talking point in foreign extractivism and sustainability debates (Atta-kesson, 2013). Commercial amounts of oil were discovered in Ghana's Western Area in 2007, precisely in the region's Ahanta West District. After independence, every government has prioritized the discovery of Ghana's hydrocarbon reserves.

However, an approximate hundred exploration wells were drilled in Ghana between 1898 and the late 1990s, with no major findings save for the Saltpond oil discovery in 1970. As a result, Ghana's recent oil discovery is a boon that should serve as a trigger for investment in the region (African Post, 2009). Since 2007, Ghana's government has been working on plans to take advantage of the oil discovery while still attempting to break free from the resource curse. Policy and regulatory progress on local content and local representation in all aspects of the oil and gas sector was one such approach (Sarpong, 2015). To this end, in 2010, a comprehensive framework for regulating the burgeoning oil and gas industry was created. This aimed to



ensure that Ghanaian people had a say about who owned companies in the oil and gas sector by prioritizing jobs, awarding oil blocks, oil field licenses, and oil production licenses, and awarding contracts for all oil and gas ventures. Legislative Instrument (LI 2204) - To guarantee the successful execution of the scheme, regulations Ghana's Parliament passed the Local Content and Local Participation in Petroleum Activities Act in 2013.

### **The Development of the Extractive Industry in Ghana**

Ghana made oil and gas discoveries in two deepwater blocks in 2007: Cape Three Points and Tano, which were discovered by Kosmos Energy and Tullow, respectively. Tullow operates the two findings as a unitized area known as the "Jubilee Field." The field is estimated to have recoverable reserves of about 800 million barrels of light crude oil, with an upside capacity of about 3 billion barrels, as well as large amounts of related natural gas, according to appraisals. Ghana now has the potential to reduce foreign exchange needs for oil imports, raise export earnings, and grow coal-based manufacturing thanks to the discovery of a commercial quantity of oil and gas. Ghanaians' expectations for the effect of the oil and gas discovery on the national economy and the person Ghanaian have risen dramatically.

One of the government's main growth goals is to expand the economy to achieve rapid development and industrialization. The oil and gas sector is considered to play a major role in the strong economic development of oil and gas producing countries. The production of the oil and gas industry is expected to provide rapid growth, poverty reduction, and general prosperity to Ghana's citizens. Ghanaians' active participation in oil and gas production, as

evidenced by local content<sup>1</sup> and participation, has become a major policy problem (Ministry of Energy, 2010). The oil discoveries, as in many developed countries, sparked euphoria, with the expectation that they would usher in much-needed wealth for the country's socio-economic growth and/or general economic progress. The discovery of oil has also sparked a feeling and/or expectation among indigenes, both natural and artificial, that they should be completely interested in, and enjoy the benefits of, petroleum exploitation (Sarpong, 2015). The above has been considered in the light of local material, which is commonly used in petroleum agreements. Local content, also known as domestic or national content, refers to laws that aim to resolve issues such as work and training of Ghanaian citizens, research and growth, role of local enterprises in the provision of services, and technology transfer provisions.

According to research, women are underrepresented in the majority of extractive industries. A male-dominated industry, according to the US Department of Labor, is one in which women make up less than one-fourth of the overall workforce. Traditionally, extractive industries such as oil, coal, and mining have been included in this definition. Women continue to be underrepresented in these sectors at all levels, but particularly at the top (Human Rights Report, January 2019).

In their policy tool series on Women's Economic Empowerment in Africa's Oil and Gas Sectors, the African Development Bank Group (2017) clarified that the Extractive Industries (EI) account for a large share of several African countries' public finances, but just 1% of the continent's labour force.



In addition, there are significant gender disparities in access to opportunities and resources provided by these sectors. Gender inequality seems to exist in the allocation of costs and rewards within the industry, according to evidence. Women's economic empowerment in the oil and gas sector is yet to be fully discussed. Low work growth, coupled with a skills-biased history of labour demand, helps to keep disparity at high levels (African Development Bank Group, 2017).

Gender inequalities must be discussed at the beginning of the project cycle, gender constraints must be defined, and action must be taken to completely integrate women's needs and perspectives into the project design. Gender prejudices toward women vary depending on the socio-cultural and economic circumstances. As a result, action differs based on the specific social and political background, the extent of the gender bias, and the form of behaviour directed at women (World Bank, 2006).

Women made up just 7.9% of board positions in the global 500 mining firms in 2016, according to Catalyst, a non-profit organization that promotes gender equity in the workplace. In the top 100 corporations, 94% of women were in non-executive positions. In 2009, women made up just 13.3% of Australia's oil, coal, and mining population, however by 2015, that figure had risen to 14.3%. Women made up 19.4% of the mining, quarrying, and oil and gas exploration workforce in Canada in 2015. (Human Rights Report, January 2019)

According to Ross (2008), women in the Middle East have made fewer strides against gender equality than women in any other country. Many commentators attribute this to the region's Islamic customs. However,

according to Ross (2008), the issue is the oil discovery, not Islam, and that oil development explains why women in many other countries fall behind. Oil development limits the number of women in the workforce, which has a negative impact on their political power. As a consequence, oil-producing states have patriarchal traditions, rules, and democratic structures that are unusually powerful (Ross, 2008).

Women should remain relegated to the domestic realm in certain conservative cultures, according to societal values and perceptions. Women's organisations are thus the most successful way to encourage and ensure women's engagement in project planning and delivery. It ensures that women have fair access to project knowledge, the ability to voice their opinions, and a say in decision-making. Women's input on project planning, viability, and policies that affect them is often beneficial to project accessibility (World Bank, 2006).

Gyan, (2013) found that thanks to affirmative action strategies implemented by governments, women may hold every top spot in the industry if they possess the necessary skills. According to a survey by Gyan (2013), 78.2% of respondents believe that affirmative action initiatives would lead to women occupying top roles in the oil industry. The research also found that more women studying geology, physics, or engineering at tertiary institutions would take advantage of these resources (Gyan, 2013a). Women's perceptions of a new EI project may be influenced by the effect of a previous EI project on their lives and the lives of their communities. Addressing legacy concerns as early as possible in meetings with women's organisations will help push lingering challenges to the surface, which the current initiative will need to

resolve. Past complaints are likely to be voiced throughout the consultation period, as well as any doubt (World Bank, 2006).

However, according to Ross (2008), the exploitation of oil and gas threatens to limit women's participation in the workforce and their chances of gaining political power. Liberal patriarchal systems can remain unchallenged if vast numbers of women participate in a country's economic and political existence. Petroleum, in other words, perpetuates patriarchy. This dynamic can clarify why women in mineral-rich states in the Middle East (Saudi Arabia, Kuwait, Oman, Algeria, Libya) and Latin America (Chile) have such a low level of authority (Ross, 2008). As a result, workshops must be structured such that a transparent review of the residual effects of prior business work is possible. Once legacy challenges have been accepted, it is critical to participate in a constructive discussion about the new project's potential future advantages, as well as efforts to improve the benefits and reduce the danger to women (World Bank, 2006).

Gyan (2013) found that women's subordinate positions in the oil industry are motivated by strongly rooted values, assumptions, and attitudes of women in general, which do not often lend themselves to reasoned reasoning. There are major gender gaps in access to these industries' resources and wealth. Proof often points to gender inequality in the distribution of costs and rewards within the industry. Women's economic advancement in the oil and gas sector is also mostly unexplored. Low work growth, when combined with a skills-biased labour demand trend, leads to the persistence of elevated levels of inequality (African Development Bank Group, 2017).

Although the advantages and threats of the oil and gas sector are often evaluated at the group level, their gender-specific effects are not. According to the African Development Bank Group (2017), men profit more from new employment in the sector than women. Women's economic empowerment in the oil and gas industry, on the other hand, has several potential benefits, including more sustainable development, enhanced family wellbeing, greater equity and competitiveness, strengthened corporate identities of companies as gender champions, and more wealth and jobs remaining in the host country. The oil and gas sector faces health and environmental risks, as well as issues with women's property rights and detrimental effects on culture and gender relations. These risk factors tend to impact more women than males (African Development Bank Group, 2017).

### **Gendered Challenges, Opportunities and Challenges**

The typical life cycle for oil and gas operations will last decades. Many questions must be raised when examining the value chains from a gender perspective, such as the division of labour by gender within the different stages of the industry's value chains; the proportion of men and women in the industry by activity; whether women or men are part of the formal or informal economy; whether women are included in the stages where value is added; and the distribution of men and women in the industry. Africa's natural gas reserves account for 7% of total global reserves, while oil accounts for 8%, but a variety of factors have resulted in the scant impact of the wealth generated by them on development. The shortage of local content and employment



opportunities is particularly relevant in the capital-intensive and mostly offshore oil and gas sectors (African Development Bank Group, 2017).

Women's economic development faces both challenges and prospects at various levels of the oil and gas supply chain. Low levels of schooling for women (as opposed to men), poverty, and fears of rape and sexual harassment are among them. Women make up a small percentage of the workers in the oil and gas industry, and their salaries and job titles are also smaller than men's, posing a threat to productivity and development at all levels (African Development Bank Group, 2017). According to a study undertaken by Ackah and Mohammed (2018), women's subordination has a number of significant implications. Women's inferior status in Africa's oil industry is inextricably tied to their lower income levels as contrasted to their male counterparts. To address this perplexing phenomenon, a collaborative initiative to develop and implement policies and strategies is needed (Ackah & Mohammed, 2018).

Compulsory provisions for subcontractors to hire local employees (including women) or businesses (including women's businesses); Incentives for the recruitment of women or the subcontracting of businesses operated by women; Promoting joint ventures and paternity leave are all examples of strategies for economic empowerment of local women in the oil and gas industry, whether as workers or entrepreneurs. Collaboration and information exchange was prioritized in attempts to penetrate women-owned companies (African Development Bank Group, 2017).

Individuals have been adversely impacted by oil and gas discoveries in some of Ghana's oil and gas communities, according to Kaku (2018), by land loss with poor compensation, a dramatic reduction in fish harvest, high



mosquito breeds, hot weather, economic distress, and a rise in the prices of products and services (Kaku, 2018). Gyasi (2012) argued that women in the sector had a poor educational record. People, on the other hand, had more qualifications in construction-related courses than women. As a result, women, such as workers and assistants, were assigned to minor positions. It was also noticed that women were underrepresented in the building sector and management roles. Women have often been refused incentives such as raises, higher pay, and paid leave, both of which could affect their decision to leave the sector (Gyasi, 2012).

Women are becoming more appealing to the sector as a result of the ongoing campaign to hire more of them. Women would undoubtedly profit from company attempts to have more jobs across the broad spectrum of extractive occupations at fair wages (Léautier, 2017). However, without a root-and-branch, an industry-wide societal transition that includes both men and women, these corporate efforts would only be able to make cosmetic improvements to the extractive industry's masculine existence.

According to Ross's (2008) research, different types of economic development may have different effects on gender ties. As economic development is the outcome of industrialization, especially the type of export-oriented output that attracts women to the labour force, the changes in gender relations that we equate with modernization should be brought about as well. Oil income, on the other hand, seldom leads to industrialization and, in reality, can hinder it by inducing the Dutch disease. Ironically, comparing the "strong" influence of industrialization-driven growth with the "poor" impact of resource extraction-driven growth shows that researchers have undervalued

the economically disruptive impacts of industrialization (Ross, 2008). This shows that academics have undervalued industrialization's economically transforming impact. As a result, a transition at the top is required, with an emphasis on the males that make up the majority of the workforce and driving behavioral change in each extractive organization. Fundamentally, until men in the oil and gas business plan to make certain improvements, the sector's gender representation is unlikely to shift significantly shortly (Léautier, 2017).

### **Gender in the Oil and Gas Industry**

Extractive companies are gradually making public commitments to integrating gender equality, integration, and economic empowerment of women into facets of their activities, realizing that women's representation and gender parity are prerequisites for achieving appropriate growth outcomes (Léautier, 2017). Extractive industries are a significant source of income for many resource-rich countries around the world, and they are critical to economic growth and social sustainability. Several experiments have shown that the extractive sectors have varying impacts on men and women in a variety of respects (Boohene & Pephrah, 2011). It's critical and try to comprehend these effects and decide what mitigation policies and programs are needed.

Furthermore, the complete socioeconomic value of resource production will only be achieved if women and girls will engage in all facets of a resource activity, and therefore economic development and social change, to the same extent as men. This necessitates the incorporation of gender equity standards into strategies and procedures relating to capital and growth (Mccoy, 2018).

Any extractives industries firms have committed to incorporating gender equality, integration, and women's economic empowerment into facets of their activities, realizing that women's representation and gender diversity is a precondition for obtaining the best growth results, whereas others have not (Léautier, 2017). Women's involvement in the oil and gas sector will be positively promoted by the government, which will offer fair opportunity to all people of the Republic of Ghana (Rhoda & Ardua, 2017).

### **Facets of Gender in the Oil and Gas Industry**

There has been a plethora of research on women and gender in the extractives industries conducted in the last five years, as well as much earlier. The more recent studies examine a wide range of topics and regional areas, and they are often unrelated to one another, though some similar trends appear from the entire body of work. Some studies focus on the detrimental impacts that women face in extractive industries project regions, while others focus on women's successful participation in the extractive industry and the decisions, they create to change their lives (Mccoy, 2018).

Men are seen as "masculine" and women are seen as "feminine," and we both believe we know what that entails. Gender is a dynamic and disputed concept that is sometimes thought to be "normal." In current use, for example, where a form requires you to tick a box showing your gender rather than your sex, 'sex' is sometimes used interchangeably with gender (Léautier, 2017). The word "sex" is often used interchangeably with "sex" in debates about gender and the extractive industries. Academics writing on women and the extractive industries tend to use the word gender to suggest that they are relating to a

societal concept rather than a biological descriptor; in fact, the majority of these studies apply only to women, with men's gender being ignored. Despite significant attempts to promote 'gender parity,' 'gender equity,' or even gender inclusion, a small number of scholars (Laplonge 2014, 2016; Mayes and Pini 2014) have recently begun to point out that this conflation of the word 'gender' with women is allowing the industry to stay strongly masculinized.

Despite the importance of the cultural comparison, the debate reverts to the essentialist role of sex as fate by focusing solely on women, rather than dealing with notions of masculinity and how all people learn to act in gendered ways, which differ depending on personality and background. He describes that rather than "doing a gender" that is thought to be a normal category, we all "do gender" in the ways we behave. According to him, "sex" is "not about what men and women are; rather, it is about what men and women do." Laplonge (2014), p. 36. This allows for a discussion about actions rather than nature, which could contribute to cultural change choices.

According to Laplonge (2014), the extractive industries, like many other extremely male-dominated workplaces, are built to favour those that operate in "hyper-masculine" ways. Those that are tough, offensive, and "blokey" will blend in and excel, while those who aren't will fail. The study has shown that women in the mining industry "always make a deliberate decision not to behave like girls while on-site." (Laplonge 2014), and female mining executives are unable to link their performance to feminism or women's rights for fear of alienating their predominantly male coworkers. Kemp et al., (2009) discovered that woman administrators in the American oil and gas industry were subconsciously discriminated toward the advancement



of women in their offices for fear of being gender-biased in favour of women. They found that in such a case, "hiring a white man for a job is the best way to show one is impartial and objective." While several of the women geoscientists they spoke with expressed a desire for more women and more opportunity in their field, the majority of them were resistant to some kind of special policies for women, fearing that it might jeopardize their roles (Kemp et al., 2009).

### **Industry Efforts**

Industry unions, multinational financial organizations, and numerous extractive companies have also worked to increase gender equity in the field during the last decade. For example, the Queensland Resources Council commissioned research on women's retention in the resource sector (Colmar Brunton Social Research 2005), the Minerals Council of Australia and the Australian Government commissioned research on women's attraction and retention in mining (Australian Government and Minerals Council of Australia 2007), and the World Bank published a report on women's attraction and retention in mining in 2007.

Several publications, including gender, direct a wide spectrum of social investment, community growth, and human rights facets of extractive industry programs. However, as Ross (2008) points out, these proposals on women in the extractive industry have not resulted in anything like racial diversity or inclusion because they do not question the industry's underlying masculinist gender structures, but rather brush over and reproduce the status quo.



### Conceptual Framework

The framework presented in Figure 1 provides a snapshot of the key variables of the study and how they are interrelated.

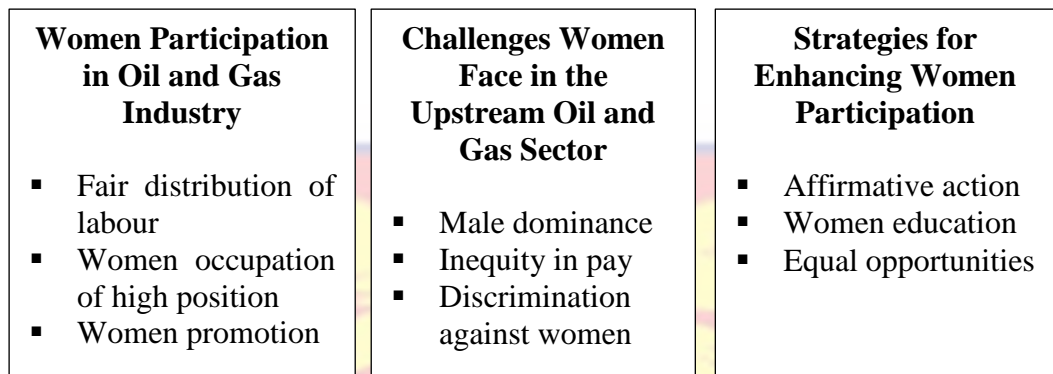


Figure 1: Conceptual Framework

Source: Field Survey (2022)

Based on the Figure, women participation in oil and gas industry was examined from the perspective of fair distribution of labour by giving females more opportunity in the oil and gas industry; women given the opportunity to occupy higher position and control affairs of firms in the upstream oil and gas sector; and the opportunity created ensure women’s promotion among others. Challenges faced by women in the upstream oil and gas industry were assessed in terms of male dominance, inequity in pay and promotion, as well as discrimination against women among others. The strategies to ensure women’s participation in the upstream oil and gas industry were looked at in terms of promoting affirmative action, women education and giving equal opportunities to women among others.

### Chapter Summary

This chapter discussed the theoretical foundation of the study; and highlighted the key concept in respect of women participation in the upstream oil and gas

industry. Literature covering the challenges confronting women in the upstream oil and gas sector was also reviewed in addition to the empirical evidence from prior studies. The conceptual framework describing the key variables and concepts was also presented.



## CHAPTER THREE

### RESEARCH METHODS

#### Introduction

This chapter covers the study's analysis nature, the oil and gas industry, population, and sampling, as well as the different methods and processes used to gather and analyze the results. It also considers the instruments used in the study as well as the data analysis method. The selection of these instruments, populations, and sampling techniques is based on previous testing recommendations while remaining true to the research's intent.

#### Study Area

Ghana is a rising star in the oil and gas industry, with activities in the upstream (exploration and production), midstream, and downstream industries. Since commercial volumes of oil and gas were discovered in 2007, Ghana took measures to ensure a successful oil and gas regime. As a result, after the Jubilee sector began commercial production in 2010, Ghana's total oil supply is 126,000 barrels per day (bopd), with the potential for a brief rise. As a result, foreign firms including Aker Energy, Tullow Oil, Kosmos Energy, Ente Nazionale Idrocarburi (ENI) and Springfield have developed a presence in Ghana's Oil and Gas upstream sector.

#### Research Design

A comprehensive analysis design was employed for this study. According to Bernards, (2012) descriptive analysis is a study that is used to "describe" a condition, topic, actions, or phenomena to address questions regarding who, what, why, where, and how a particular research question or

issue is connected to it. Without modifying or altering the variables, description analysis is used to observe and characterize a topic or problem of research. Punch (2013) found that observational analysis is often utilized in social science, psychology, and educational research. It can include a wealth of information that often uncovers new information or awareness that may either go overlooked or undiscovered.

The study's choice of descriptive research style, however, was to examine female positions and contributions in Ghana's oil and gas industry. It has also helped to obtain data that can quickly be translated to quantitative data. The descriptive research design was chosen primarily because it consists of a cross-sectional design that primarily uses a questionnaire or a structured interview to collect data (Bryman & Bell, 2007). It also offers proof of an actual situation or present conditions; therefore, surveys offer a more detailed view of events and attempt to clarify the perception and actions of people based on data collected at a time point.

Also, Leedy and Ormrod (2014) suggested that a condition as it is is analyzed through descriptive analysis. Therefore, descriptive research deals with interactions between non-manipulated variables. It also aims to collect data to address questions about the current status of the study subject (Nwadinigwe, 2005). It has the benefit of producing good answers from a wide range of individuals and also provides reliable and objective data collection to explain an existing phenomenon (Nwadinigwe, 2005).

### **Research Strategy**

Saunders et al., (2009) noted that the choice of a research strategy is driven by the research question(s) and priorities of a researcher, the degree of established expertise, the amount of time and other available resources, as well as his or her own philosophical basis. The study used survey research to systematically gather data through the use of questionnaire as the data collection instrument.

### **Population**

The population is described by Fraenkel and Warren (2002) as "the community to which the study's findings are intended to apply." The population consisted of women in the upstream oil and gas industry in Ghana. They were selected because they were supposed to play different positions in the industry and will be directly or indirectly influenced by all managerial decisions in the exploration of oil and gas. The population for study was two hundred and fifty (240) female's employees from the upstream companies – GNPC (56), Aker Energy (33), Tullow Oil (78), Kosmos Energy (41), Ente Nazionale Idrocarburi (19) and Springfield (13). The population is based on information gathered from the HR Departments of the various organizations.

### **Sample and Procedure for Sampling**

Sekeran (2003) notes that "sampling is the process of selecting a sufficient number of population elements to allow us to generalize certain properties or characteristics to population elements by studying the sample and understanding its properties or characteristics." Two kinds of sampling architecture are also listed in Sekeran (2003). The first is the probability model



where the likelihood is known of the elements being selected as subjects for the analysis. The latter is non-probability sampling, which applies to the sampling design of those population components that "do not have any chance of being selected as sample subjects." The research then considered convenience sampling, a type of non-probability sampling where the sample is drawn from the part of the population that is close. This is because, the researcher deemed the sample size as 'convenient' sources for the collection of the data.

### Sample Size

Per the field data collected from the HR departments of the various companies, the study estimated a population of 240, using the Yamane (1967) sample size formula.

$$n = \frac{N}{1+Ne^2} \quad n = \frac{240}{1+240(0.05^2)} = 150$$

where, **n** is the sample size, **N** is the estimated population (240) and **e** is the margin of error (5%) – and reversibly the level of confidence. The sample size is calculated as follows. From the above, the sample of the study is 150. The table below shows the distribution of Respondents per company.

*Table 1: Proportionate Distribution of Respondents*

Company	Population of Female	Sample
GNPC	56	35
Tullow	78	48
AKER	33	21
ENI	19	12
Springfield	13	8
KOSMOS	41	26
<b>Total</b>	<b>240</b>	<b>150</b>

Source: Field Data, (2019)

The study sampled 150 respondents as a representative of the entire employees occupying various managerial positions in the oil and gas companies in Ghana.

### **Research Approach**

The research approach describes how the data was gathered. This study's data was gathered through a quantitative research approach involving questionnaires. Quantitative research is a method for calculating, analyzing, and reporting relationships between variables using a numerical framework. Its purpose is to understand, evaluate, describe, and forecast a phenomenon in order to make data easier to understand. The major themes are convergent reasoning, logic, and statistics. According to Saunders & Lewis (2012), quantitative research is concerned with the application of mathematical theories to real-world problems. The method creates a connection between numerical and empirical data. This section examines the technique in light of the problem's nature, the information available about it, and the resources available for its analysis.

### **Research Instrument**

The questionnaire was used as an instrument for the collection of primary data. The study adopted the use of questionnaires because, it helped to collect relevant data, reduced bias, made the data comparable and also motivated the respondent to respond to it. The questionnaires were close-ended. This allowed no complications when one was answering the questionnaire. The study used qualitative research method. The questionnaire

was structured on a Likert scale of point 5 where 1.0 means strongly disagree and 5.0 means strongly agree. Respondents were then asked to indicate their level of agreement based on the statements. The questionnaire was divided into four sections; section A contained the demographic information of respondents, section B contained information on the participation of women in the upstream oil and gas industry; section C contained information on the challenges facing women in the oil and gas industry; while section D contained information on the strategies for enhancing women participation in the oil and gas industry.

#### **Data Collection Procedure**

The data collection period was from March to June 2020 within which period the COVID19 pandemic was alarming in Ghana. Due to this, the researcher structured an online questionnaire through google forms and the link was sent to the respondents to answer the questionnaire.

#### **Validity and Reliability**

In quantitative analysis, validity and reliability are significant concepts. Validity is used to ensure that the research tools measure exactly what they aim to measure. It also refers to the subjective evaluations of the appearance and relevance of the measuring instrument by researchers as to whether the objects in the instrument tend to be appropriate, fair, unambiguous and transparent (Oluwatayo, 2012). Using a few sample sizes of 15 respondents to identify errors and fine-tune the questionnaire before it was distributed to the respondents, a pre- test was conducted. This meant that there was no

compromise on the accuracy of the data and that the questions were both accurate and relevant. The knowledge from this approach was useful for understanding all the functions and contributions in their managerial positions that these women perform. The study further conducted a reliability test using Cronbach alpha to measure if the questions on the research instrument can be reliable.

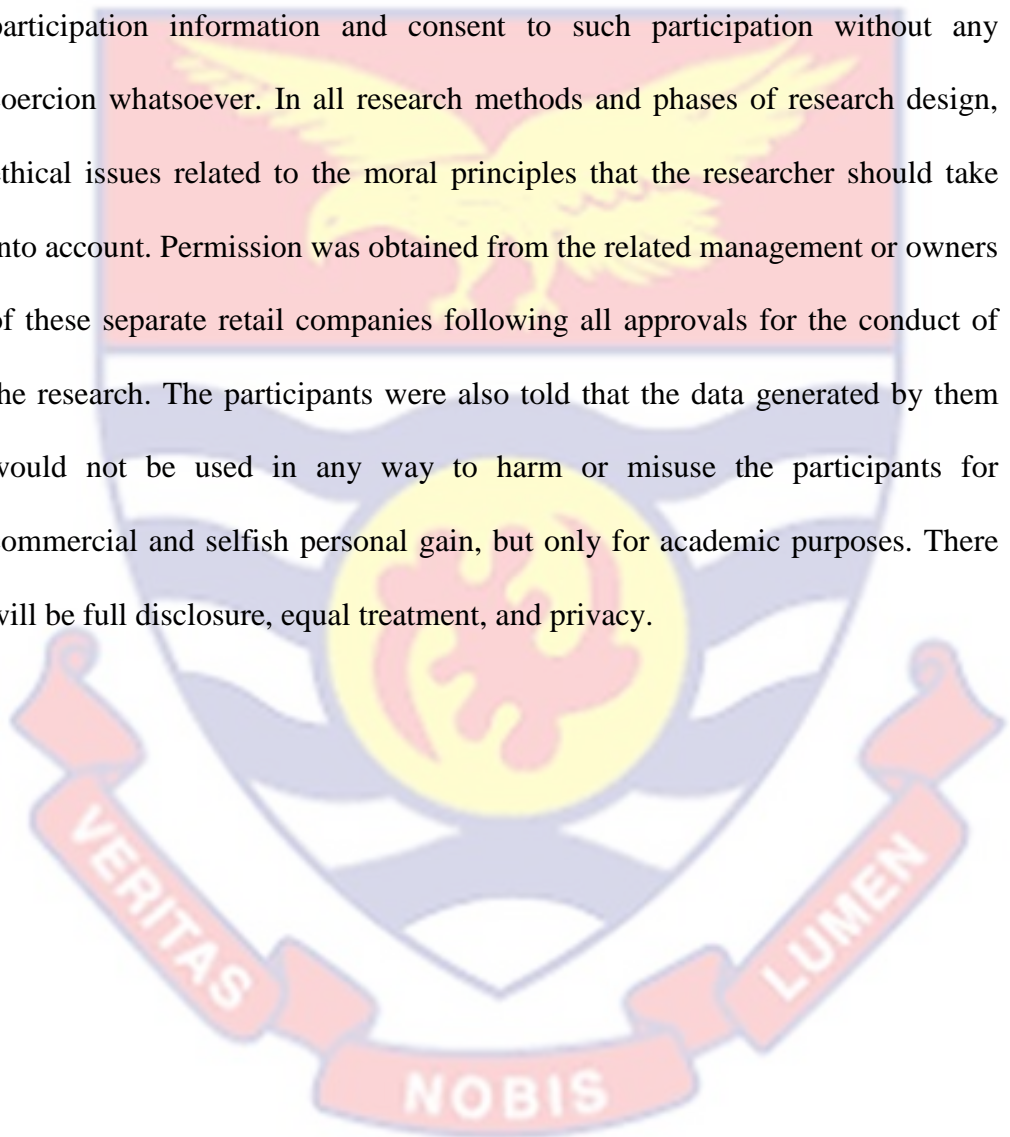
### **Data Analysis**

Descriptive statistics methods are widely used to make sense of survey results, where vast volumes of data are obtained and analyzed (Hicks, 2002). To analyze the facts obtained, the analysis used a descriptive statistical method. By first developing a coding scheme based on the range of responses provided by the respondents, the questionnaires were analyzed. For identification, the questionnaires were numbered serially, after which the answers to the different questions were given values or codes according to the coding scheme. To identify and capture the answers for the study, the Statistical Package for Social Sciences (SPSS) was used. In descriptive statistics, the results were presented using tables and figures showing the frequency and percentage of respondents who selected each alternative for a question. Tables, graphs and charts were summarized with data for easy understanding. Data were analysed using descriptive statistics. The demographic characteristic was analysed using frequencies and percentage. The research questions were analysed using mean and standard deviation.



### **Ethical considerations**

The use of humans in research experiments poses ethical issues and, according to Polit & Hungler, (2002) scientists need to be cautious about individual rights and institutional ethical guidelines. In research, ethical concern requires explaining the study to participants and offering voluntary participation information and consent to such participation without any coercion whatsoever. In all research methods and phases of research design, ethical issues related to the moral principles that the researcher should take into account. Permission was obtained from the related management or owners of these separate retail companies following all approvals for the conduct of the research. The participants were also told that the data generated by them would not be used in any way to harm or misuse the participants for commercial and selfish personal gain, but only for academic purposes. There will be full disclosure, equal treatment, and privacy.





## CHAPTER FOUR

### RESULTS AND DISCUSSIONS

#### Introduction

Chapter four of the study shows the results of the study and further discussed the findings aligning them side by side with other literature materials. In order to obtain the minimum sample size of 150, the study administered 154 questionnaires.

#### Response Rate

The researcher distributed 154 questionnaires to female employees of companies operating in the upstream oil and gas sector. However, only 150 questionnaires were retrieved successfully out of the 154 to proceed with the analytical process, which represented 97.40% of the total number of questionnaires sent. The total number of questionnaires retrieved was consistent with the minimum sample size. Table 2 shows the response rate of the study.

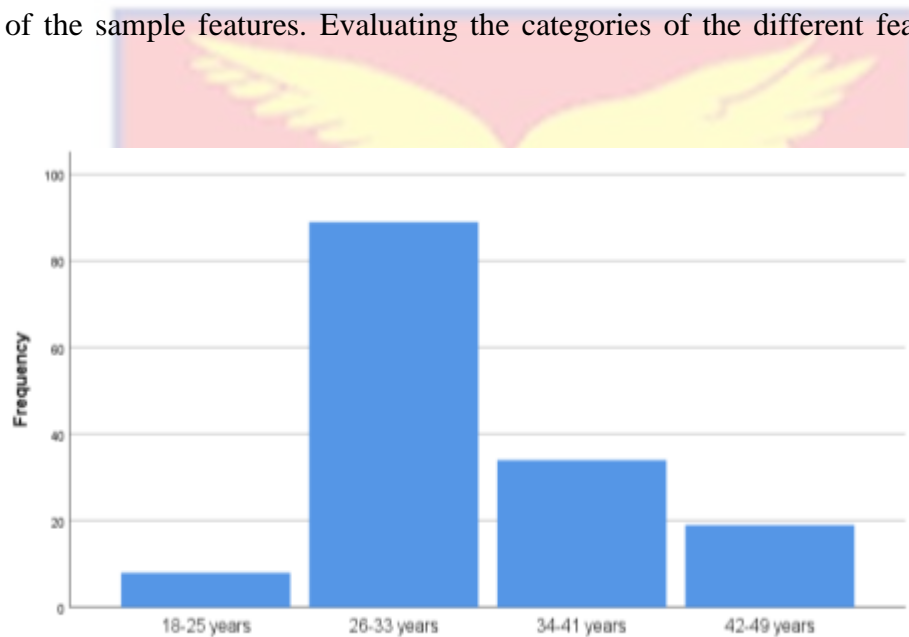
**Table 2: Response Rate**

Categories	Frequency	Percentages
Target Sample	154	100
Total responses	150	97.4
Irretrievable responses	4	2.6
Total usable responses	150	97.4

Source: Field data, Baiden (2020)

### Demographic Characteristics of Respondents

The demographic information of respondents addresses the characteristics of respondents, such as sex, age group, educational qualifications, department, organizational position, etc. As shown below, the study adopted frequency tables and figures to display and analyze the effects of the sample features. Evaluating the categories of the different features of



the responses was the rationale for using the frequency table and the figures.

*Figure 2: Age group of Respondents*

Source: Fieldwork (2020)

Figure 2 above shows the age group of the study participants. It was observed that 89 (59.3%) of the sample have the highest number between the ages of 26-33years; 34 (22.7%) were also between the ages of 34-41 years; 19 (12.7%) of the respondents were between the ages of 42-49 years while 8 of the respondents making 5.3% were between the ages of 18-25 years. This indicates that the vast majority of the respondents (82%) falls within the ages of 26-41 years which is within the active working year group. According to 2015, Labour Report by the Ghana Statistical Service, (2016) individuals of

these ages are actively in the workforce. This implies that most of the respondents have appreciable knowledge and can share their opinions on the subject matter. The implication for the result on the age distribution is that majority of the women (59.3%) were in their youthful years (26-33 years) and this means that the upstream oil and gas industry has the potential of having women be in the industry for long time. Unfortunately, only 5.3% of the women were in their early years of 18 to 25 years. This implies that women are not attracted into the upstream oil and gas industry at early stage; and this can negatively affect the development of women in the oil and gas industry.

**Table 3: Educational Level of Respondents**

Educational level	Frequency	%
Bachelor	60	40.0
Masters	82	54.7
PhD	8	5.3
Total	150	100.0

Source: Fieldwork (2020)

On the educational qualification of the respondents, the study found that most of the participants have attained formal education up to the Masters level by 54.7%. Also, 60 (40%) have attained their first degrees (Bachelors); however, 8 (5.3%) have attained formal education up to the PhD level or higher. This implies that a lot of the respondents have ample understanding of the subject matter and that they are in a good position to answer the questionnaire.

From the result in Figure 3, the study revealed that 60 (40%) of the respondents were individuals from the Project development, Operation/Production, HSEQ (Health, Safety, Environment and Quality), Mechanical engineering, Construction, Local Content and Commercial departments making up the “Others”. Also, 33 (22%) were from the Human Resource Department; respondents from the Petroleum Engineering department were 21 (14%); Procurement/Logistics department was represented by 13 (8.7%); Marketing/Advertising and Accounting/Finance both were 8 (5.3%) respectively whiles Geo Science department was 7 (4.7%). This observation stresses the fact that there is a fair distribution of ideas from the respondents having a large number of departments shared their ideas.

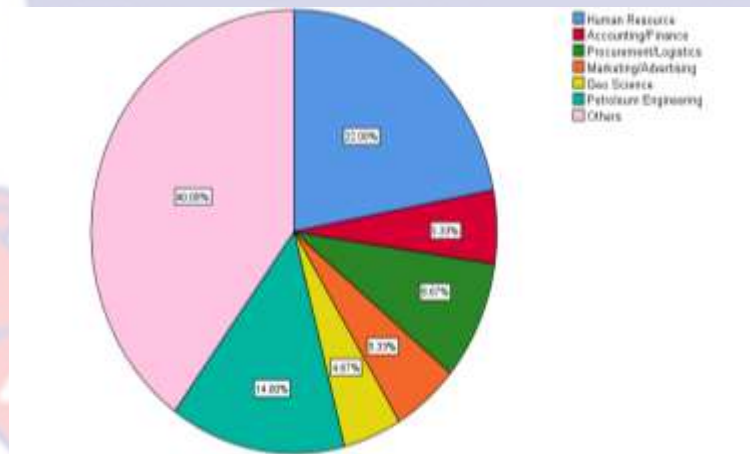


Figure 3: Department of Respondents in the organisation

Source: Fieldwork (2020)

Table 4: Position in the organization

Position	Frequency	Percent
Manager	21	14.0
Senior staff	68	45.3
Administration	20	13.3
Others	41	27.3
Total	150	100



Source: Fieldwork (2020)

The findings indicated that 68 (45.3%) of the respondents hold senior positions in their respective organizations; while 21 (14.0%) holds managerial positions in the organizations. Also, 20 (13.3%) of the participants have administrative positions while the “Other” position which includes Superintendent, Production Supervisor, Engineer, Officer and Junior Staff adds up to 41 (27.3%) of the study participants. As most of the respondents hold senior positions in their respective organizations, it is deductive that they have adequate information to share on the study.

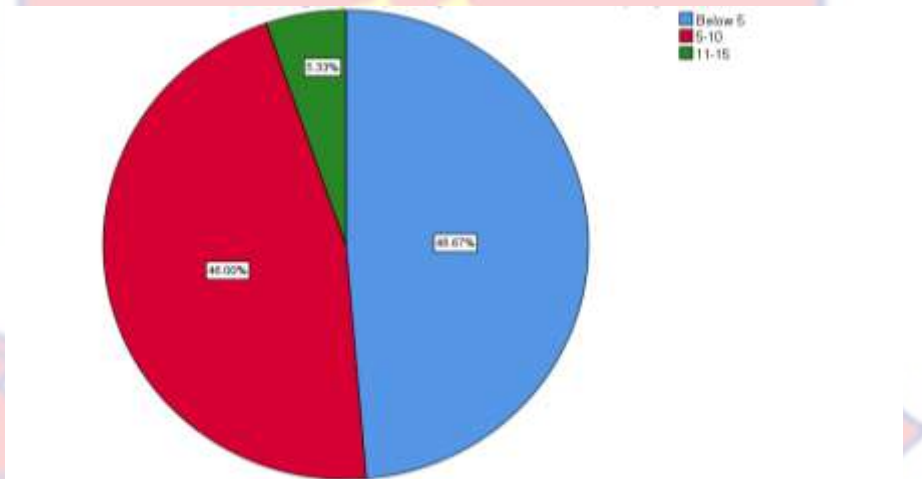


Figure 4: Number of years in the organisation.

Source: Fieldwork (2020)

The study observed that most of the participants have been with their company for five (5) years and below with 73 (48.7%); those who fall within 5-10 years of being in the organisation was 69 (46.0%) while 8 (5.3%) have been with their respective companies for 11 years and above. Knowing that the majority of the respondents (94.7%) have been with their respective companies within 1-10 years is paramount to the conclusion of the results. The relevance of this question was to find out if respondents are in the position to

answer the study questionnaire. Having been in an organisation for a couple of years, they understand the tenets and the culture in which the organisation operates. It also informs the researcher that responses from respondents are of great value.

**Objective One: Participation of Women in the Oil and Gas Industry**

**Table 5: Descriptive Statistics – Participation of Women**

<b>Objective One Questions</b>	<b>N</b>	<b>Mini</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
Women are well represented	150	1.00	5.00	2.3467	0.96924
There is a fair distribution of labour on gender in the oil and gas industry	150	1.00	5.00	2.2867	0.91473
Women occupy high positions in the industry	150	1.00	5.00	2.3800	1.03412
There exists unequal competition between women and their male counterparts	150	1.00	5.00	2.8800	1.24739
Women in the oil and gas industry are sometimes favoured through promotion instead of merit	150	1.00	5.00	2.3533	1.01092
Most women in the industry have controlling positions and can influence decision making	150	1.00	5.00	2.4200	1.01842
Most women in the Oil and Gas industry perform to management expectations	150	1.00	5.00	3.2267	1.06907
Because some women are favoured, they are not able to maintain positions when given the opportunity	150	1.00	5.00	2.3400	1.14006
Women who become bosses easily have qualms with subordinates	150	1.00	5.00	2.8667	1.48218

It looks like the spotlight is on women so when they are given the opportunity, everyone expects them to fail.	150	1.00	5.00	2.4667	1.33947
There is no support for women in the oil and gas industry	150	1.00	5.00	2.0800	1.00013
Women make personal sacrifices to attain managerial positions	150	1.00	5.00	2.9667	1.10166
Women are great bosses to work with	150	1.00	5.00	2.9400	1.10660
Women are involved in the oil and gas development processes in Ghana	150	1.00	5.00	3.0200	1.05849
There has been a great achievement for women participation in the industry	150	2.00	5.00	3.4067	0.89064

Source: Fieldwork (2020)

In assessing the participation of women, in the Oil and Gas industry, the study adopted a Likert scale of point five (5). The above table indicates responses of respondents' level of agreement on the statements about the participation of women in the Oil and Gas Industry. Using the descriptive statistics above, the minimum response was "1.0", signifying "strongly disagreed" and the maximum response was "5.0", also signifying "strongly agree". This means that there were respondents who strongly disagreed with the statements while others strongly agreed with the statements. Besides, the mean shows the average responses while the standard deviation expresses the degree with which the responses differ from the mean value for the group. Using the Likert scale, with a mean of 3.0 suggests neutrality or where the respondents neither agree nor disagree with the statements. As can be seen from table three (3) above, vast majority of the statement had a mean greater

than “2.0” but less than “3.0” ( $>2.0 < 3.0$ ) showing that at least, respondents slightly “disagree” with statements such as; Women are well represented in the oil and gas industry; there is a fair distribution of labour on gender in the oil and gas industry; Women occupy high positions in the industry; There exists unequal competition between women and their male counterparts; Women in the oil and gas industry are sometimes favoured through promotion instead of merit; Most women in the industry have controlling positions and can influence decision making, among several other statements. However, a few of the respondents neither agreed nor disagreed with the statement that women are involved in the oil and gas development processes in Ghana and that There has been a great achievement for women participation in the industry.

The findings show that women are not well represented in the Oil and Gas industry. Besides, they do not have any controlling positions hence they cannot influence decision making. Laplonge, (2014) asserts that, like many other heavily male-dominated workplaces, the extractive sectors are structured to benefit those who behave in what is described as 'hyper-masculine' ways. That is, it will blend in and excel those who are tough and forceful, and those who are not will fail to do so. Women in the industry are still disproportionately associated with male domination, and women mining managers do not like associating their performance with feminism or women's rights for fear of alienating their mostly male colleagues. Moreover, Kemp et al., (2009) in their study concluded that women managers were subconsciously discriminating against the promotion of women in their departments for fear of



appearing gender-biased in favour of women. This they do as a way of ‘protecting’ themselves from being perceived as feminist.

Gyasi, (2012) argued that the educational background of women in the industry was low. However, men had certificates in related courses than women. Women were therefore engaged in marginal roles like laborer’s and secretaries. It was also noted that generally women were underrepresented in the Oil and Gas industry and management positions. Contrastingly, the findings of this research in table two (2) show that most of the respondents hold senior positions but not managerial roles and that most of the respondents are females. By reasoning, therefore, even though most women occupy senior positions in the industry, their representation is minimal as compared to the proportionate of men that occupy positions in the industry. Additionally, motivations like promotions, increased salaries and annual leave were also denied to women which could influence their exit from the industry (Gyasi, 2012). However, Léautier, (2017) suggested that continuing efforts to recruit more women will certainly make the industry more appealing to them. The companies should also make it a priority by making more positions available to women in the full range of extractives occupations, at equal pay which will surely be of value to some women. In her report on the Comparative Analysis of Employment in Ghana’s Upstream Sector, Danquah, (2019) iterated that the last couple of years have witnessed employment figures in the upstream sector steadily gone up due to new developments and ongoing activities in the industry.

**Objective Two: Challenges Facing Women in The Oil & Gas Industry**

**Table 6: Descriptive Table 3 Statistics – Challenges facing women**

Statement	N	Mini	Max	Mean	SD
Male dominance in the industry poses stress	150	1.00	5.00	2.6600	1.01552
Women are less encouraged in the industry as compared to their fellow men	150	1.00	5.00	2.6467	1.37151
Women are paid less as compared to their fellow men	150	1.00	5.00	1.8600	1.11746
There is growing discrimination against women in the oil and gas industry	150	1.00	5.00	1.6800	1.01214
There is sexual and gender violence against women in the oil and gas industry	150	1.00	5.00	1.9667	1.08940
Women are not involved in decision making in the industry	150	1.00	5.00	2.2600	1.15526
Women are viewed to be less intelligent as compared to their fellow men, so their views are undermined	150	1.00	5.00	2.4467	1.46336
Women are discriminated against after pregnancy and maternity	150	1.00	5.00	2.9867	1.55864
Women in the industry struggle for equal pay	150	1.00	5.00	2.1933	1.18546
Women are given fewer leadership positions	150	1.00	5.00	2.7667	1.43034
Women are often ignored when making critical decisions.	150	1.00	5.00	2.3000	1.51834

Source: Fieldwork (2020)

In order to ascertain the various challenges women face while performing their duties in the Oil and Gas industry, the study adopted a Likert scale of point 5 for respondents to choose from strongly disagree, as “1.0” to

strongly agree, as “5.0”. The statements in the questionnaire were asked in a negative way to find out the perspective of the respondents whether the contribution and participation of women in the industry have deliberately been downplayed. As it can be seen from Table 4 above, all responses had a mean equal to or greater than “1.0” but less than “3.0” ( $=>1.0<3.0$ ) showing that at least, respondents “disagreed” with the statements of the questionnaire. Respondents asserted that male dominance in the industry does not pose stress to the female counterparts in the industry. Besides, women in the industry are not being paid less as compared to their fellow men, neither is there growing discrimination against women in the Oil and Gas industry. Also, respondents explained that there is no sexual and gender violence against women in the oil and gas industry and that women are involved in decision making in the industry, nevertheless, their representation is not as high as their male counterparts.

Moreover, the study participants “disagreed” with statements such as; *Women are viewed to be less intelligent as compared to their fellow men so their views are undermined; Women are discriminated against after pregnancy and maternity; Women in the industry struggle for equal pay and that Women are given fewer leadership positions.* Respondents were of the view that women are not ignored when making critical decisions.

Interestingly, the revelation of this finding contrast with several studies that have been carried out by some institutions and scholars as such. For instance in her study, Gyasi, (2012) concluded that the educational background of women was low as compared to their male counterparts, therefore women were underrepresented in the industry and management

positions. Also, Scott et al., (2013) in their study on ‘Extracting lessons on gender in the oil and gas sector: A survey and analysis of the gendered impacts of onshore oil and gas production in three developing countries, concluded that there are many, perceived gendered inequalities of opportunity and risk in the Oil and Gas sector, however, these perceived inequalities would become more benign if they were counteracted by efforts to systematize the economic empowerment of women. In a related study on diversity and inclusiveness in the oil and gas industry McCoy, (2018) gathered data on 236 responses from 35 countries of which 59% were females. McCoy, (2018) asserted that 62% of the respondents agree they are facing a looming talent crisis; 73% agree that they need to do more to attract, retain and promote women into leadership positions; 64% agree they need to fundamentally change their business model to survive and thrive and only 11% of the top Oil and Gas senior executives were women. As cited by Ross, (2008) women have made less progress toward gender equality in the Oil and Gas industry and this has resulted in their poor representation.

However, as the findings of this study suggest, women are being treated fairly in the Ghanaian Oil and Gas Industry and even though they are underrepresented, women’s contribution in the sector has not been undermined. Notwithstanding, respondents disagree with Ackah & Mohammed, (2018) who suggested that it should be mandatory requirements for companies or subcontractors to employ women or women-owned firms, and also incentives should be made available by governments and other stakeholders to be given to companies who subcontract women-owned firms. The respondents suggested that women should rather be empowered to take up



more challenging positions. The continued drive to hire more women makes them more desirable to the industry. Eftimie et al ( 2009) argued that, since 2007, industry associations, foreign financial institutions and various extractive firms have taken steps aimed at enhancing the gender diversity in the mining sector to attract and maintain women in the mining sector over the past decade. He clarified that a broad range of social investment, community development and human rights aspects of extractive industry projects are guided by several publications, including gender, among other subjects. These initiatives on women in the extractive industry, however, as Ross (2008) has pointed out, have not accomplished anything like sexual justice or equality because they do not question the industry's underlying masculinist gender structures, but gloss over and reproduce the status quo.

**Objective Three: Strategies for Enhancing Women’s Participation**

**Table 7: Descriptive Statistics –Enhancing Women’s Participation**

<b>Statement</b>	<b>N</b>	<b>Mini</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Deviation</b>
There should be more affirmative action’s policies	150	1.00	5.00	3.6800	0.97154
Capacity building for women must be encouraged	150	2.00	5.00	3.9867	.95529
The government must focus on women education to enhance their capacity	150	2.00	5.00	3.7333	1.04056
Mentoring programmes for females aspiring to hold leadership positions in the oil and gas industry must be encouraged	150	1.00	5.00	3.9733	1.30022
Women must be given equal opportunities as their male counterparts	150	1.00	5.00	3.8467	1.19134
People must be conscientize about stereotyping women	150	1.00	5.00	3.6600	1.31501
Certain societal norms and beliefs in the Ghanaian culture against	150	1.00	5.00	3.6533	1.27436

women must be done with Incentives must be given to employers who employ more women in the oil and gas industry	150	1.00	5.00	2.7267	1.25798
It must be mandatory for employers to employ more women	150	1.00	5.00	2.6000	1.15857
It must be compulsory for subcontractors to employ more women	150	1.00	5.00	2.8133	1.15501
There should be a support system to help women who have been discriminated against in the oil and gas industry	150	2.00	5.00	3.8667	1.13319
Women must be educated to take leadership positions in the oil and gas industry	150	2.00	5.00	3.7667	1.07701
The oil and gas industry must be made friendly to attract more women.	150	2.00	5.00	3.3733	1.06530

Source: Fieldwork (2020)

In the light of the contribution by Léautier, (2017) who argued that recognizing that women's participation and gender equity are prerequisites for achieving acceptable development outcomes and that extractives industry companies can increasingly make public commitments to incorporating gender equality, inclusion, and women's economic empowerment into aspects of their operations, one of the study's goals was to identify strategies that are effective in achieving these goals. Table 7 above indicates the responses on strategies to enhance women's participation. Using the Likert scale, 3.0 and above but less than 4.0 ( $=>3.0<4.0$ ) indicates neutrality or where the respondents neither agree nor disagree with the statements. The finding shows that respondents averagely accepted or strongly accepted the statements; There should be more affirmative action's policies; Capacity building for women must be encouraged; The government must focus on women education to enhance their capacity; Mentoring programs for females aspiring to hold leadership

positions in the oil and gas industry must be encouraged; Women must be given equal opportunities as their male counterparts; People must be conscientize on stereotyping women; Certain societal norms and beliefs in the Ghanaian culture against women must be done with. It is obvious from the above that support systems should be put in place to ensure that women are not been discriminated against in the Oil and Gas industry as the industry has been described as “hyper-masculine” and seems to favour male representation to the detriment of females (Laplonge, 2014). Also, respondents suggested that a deliberate attempt should be taken to educate women and empower them to take up leadership positions in the oil and gas industry. Other strategies such as making the Oil and Gas industry-friendly to attract more women were also suggested by respondents.

In a recent study, Mccoy, (2018) asserted that the full socioeconomic value of resource production can only be achieved if women and girls can engage in all facets of resource operation as thoroughly as men and, ultimately economic growth and social progress. It demands that gender equity values are incorporated in policies and procedures that are extended to capital and related growth (Mccoy, 2018). Emphasizing more on gender equity, most of the respondents disagree (on a scale of 2.0 and above but less than 3.0) that incentives must be given to employers who employ more women in the oil and gas industry. They indicated that although it should not be necessary for employers or subcontractors to hire more people, all women and men should be treated equally, based on their respective preferences and skills. This may entail fair care or differential treatment that is deemed comparable in terms of privileges, rewards, commitments, and opportunities. Mayes and Pini (2014)

went on to say that conflating the terms "sex" and "sex" allows the business to stay deeply masculinized amid significant attempts to reach "gender equity," "gender diversity," and even "gender equality." Instead of concentrating on "sex," they think the business can concentrate on realistic tactics that would subtly inspire women to force them to take on the same commanding positions as their male colleagues. Empowering women in the oil and gas industry would be a huge step forward for women stakeholders, not just in terms of growing prosperity, decreasing poverty, and promoting favourable conditions for long-term development, but also in terms of improving the development effectiveness of oil, gas, and mining operations for communities and countries in general (World Bank, 2006).

The results also should that women were not fairly represented in the upstream oil and gas industry as majority of the women are not engaged in decision making. This finding is contrary to the tenets to stakeholder theory which posits that organisations exist to advance the interest of all stakeholders including women in the context of this study. Also, the finding is contrary to the liberal feminist theory which lays much emphasis on the participation of women on issues of national concern such as oil and gas related issues.



## CHAPTER FIVE

### SUMMARY, CONCLUSIONS, AND RECOMMENDATION

#### Introduction

The study aimed at assessing the participation of women in the oil and gas industry in Ghana: examining the opportunities and challenges that pertains to the industry and thereby suggesting strategies on how to empower women in the industry. This chapter of the thesis presents a summary of the entire work, makes conclusions and presents constructive recommendations for policymakers and other stakeholders.

#### Summary

The researcher adopted a quantitative research method, using a cross-sectional framework to arrive at the findings of the study. The population of the study comprised women who found themselves in the upstream oil and gas industry. They were chosen because they are expected to be having various roles playing in the industry and would directly or indirectly be affected by the oil and gas exploration. The study adopted convenience sampling under the non-probability sampling method.

The data collection period was from March to June 2020 within which period the COVID19 pandemic was alarming in Ghana. Due to this, the researcher structured an online questionnaire through google forms and the link was sent to the respondents to answer the questionnaire. The study collected data from 150 female employees as a representative of the entire employees in the upstream oil and gas companies in Ghana. This was

conducted in the six oil and gas companies in Ghana's upstream oil and gas sector.

A pre-test was conducted using 15 respondents from the companies under the study to detect errors and fine-tune the questionnaire before it was administered to the respondents. This ensured that the quality of the data was not compromised and the questions were valid. The data from this method was useful for understanding all the roles and contributions these women play in their managerial positions. The data obtained were analyzed using SPSS version 25. The results were then displayed using frequency tables, bar graphs, pie charts as well as descriptive statistics tables for simple comparison and comprehension.

The findings of the study show that the vast majority of the respondents (82%) falls within the ages of 26-41 years which is within the active working year group. This means that most of the respondents have significant expertise and can express their views on the topic. On the educational qualification of the respondents, the study found that most of the participants have attained formal education up to the Masters level. Additionally, the data collection was done across several departments stressing the fact that there is a fair distribution of ideas from the respondents having a large number of departments shared their ideas. The findings also indicated that the majority of the participants (45.3%) of the respondents hold senior positions in their respective organizations. The study observed that most of the participants (97.4%) have been with their respective companies within 1-10 years. Having been in an organization for a couple of years, they understand

the tenets and the culture in which the organization operates. It also informs the researcher that responses from respondents are of immense value.

Furthermore, the study found that women are not well represented in the oil and gas sector and that the respondents believe there is no fair distribution of labour on gender roles. Also, a lot of women do not occupy high positions in the industry, however, they believe there exists equal competition between women and their male counterparts even though the majority of them allude to the fact that there is no fair distribution of labour in their respective companies. Also, a few of the respondents neither agreed nor disagreed that women are involved in the oil and gas development processes in Ghana and that there has been a great achievement for women participation in the industry. The findings show that women are not well represented in the Oil and Gas industry. Besides, they do not have any controlling positions hence they cannot influence decision making. The study observed that women in the industry are still disproportionately associated with male domination.

The study also revealed that generally, women were underrepresented in the Oil and Gas industry and management positions. Notwithstanding, the findings of this research shows that most of the respondents hold senior positions but not managerial roles and that most of the respondents are females. By reasoning, therefore, even though most women occupy senior positions in the industry, their representation is minimal as compared to the proportionate of men that occupy positions in the industry.

In other to ascertain the various Challenges women, face whiles performing their duties in the Oil and Gas industry, asserted that male dominance in the industry does not pose stress to the female counterparts in

the industry. Besides, women in the industry are not being paid less as compared to their fellow men hence there is no pay inequity in the upstream Oil and Gas industry. Also, respondents explained that there is no sexual and gender violence against women in the oil and gas industry and that women are involved in decision making in the industry, nevertheless, their representation is not as high as their male counterparts.

The revelation of this finding contrast with several studies that have been carried out by some institutions and scholars as such. For instance, Scott et al., (2013) in their study on ‘Extracting lessons on gender in the oil and gas sector: A survey and analysis of the gendered impacts of onshore oil and gas production in three developing countries, concluded that there are many, perceived gendered inequalities of opportunity and risk in the Oil and Gas sector, however, these perceived inequalities would become more benign if they were counteracted by efforts to systematize the economic empowerment of women. Mccoy, (2018) asserted that most women in the Oil and Gas sector are facing a looming talent crisis while 73% agree that they need to do more to attract, retain and promote women into leadership positions. As cited by Ross, (2008) women have made less progress toward gender equality in the Oil and Gas industry and this has resulted in their poor representation. However, as the findings of this study suggest, women are being treated fairly in the Ghanaian Oil and Gas Industry and even though they are underrepresented, women’s contribution in the sector has not been undermined. The respondents suggested that women should rather be empowered to take up more challenging positions.



The finding also suggested that more affirmative action's policies and capacity building for women must be encouraged, the government must also focus on women education to enhance their capacity. Respondents also suggested mentoring programs for females aspiring to hold leadership positions in the oil and gas industry must be encouraged. People must be conscientize of stereotyping women besides certain societal norms and beliefs in the Ghanaian culture against women must be done away with. Also, respondents suggested that a deliberate attempt should be taken to educate women and empower them to take up leadership positions in the oil and gas industry. Other strategies such as making the Oil and Gas industry-friendly to attract more women were also suggested by respondents. Emphasizing more on gender equity, respondents disagree that incentives must be given to employers who employ more women in the oil and gas industry. They suggested that it should not be mandatory for employers or subcontractors to employ more women, however, there should be fairness of treatment for both women and men, according to their respective needs and abilities. This may include equal treatment or treatment that is different, but is considered equivalent in terms of rights, benefits, obligations, and opportunities.

### **Conclusions**

The main purpose of the study was to ascertain the participation of women in the upstream Oil and Gas industry in Ghana. In other to arrive at the goal of the research, the study adopted three key specific objectives. These objectives are; to assess the participation of women in Oil and Gas development processes in Ghana; to ascertain various Challenges women, face

whiles undertaking their contributions in the Oil and Gas industry and to suggest strategies for enhancing women's participation in the oil sector.

The study found that women are involved in decision making in the upstream oil and gas industry in Ghana, however, their representation at the senior executive level is very low so most often their views are not been taken as men dominate in numbers. There are also, instances that women that hold positions tend to be stricter than their male counterparts so that they will not be viewed as feminist eventually, this perception affects the desire for others to support them to hold leadership positions in the future. It was also observed that women are subtly discriminated against for the mere reason that the industry is male-dominated and that only women who are "tough" can work there. As a result of this, most of the women in the industry hold positions related to administrative and secretaryship.

The findings show that women in the upstream Oil and Gas industry in Ghana do not face severe challenges as compared to other countries. Women in the Ghanaian upstream Oil and Gas industry do not struggle for equal pay and are not viewed as less intelligent, however, they are disproportionately represented in decision making. Additionally, there is no sexual and or gender-based violence and discrimination against women in the industry. The study gathered that the main challenge in the Ghanaian Oil and Gas Industry is that women are less represented, and this sometimes transcends into decision making which may be biased towards women.

In light of the above, respondents suggested that there is a need for people to be conscientize of stereotyping women especially in the industry that the job is for men only. Also, certain societal norms and beliefs in the

Ghanaian culture against women must be done away with. Besides, the strategy of empowering women through mentorship, where programs are structured and tailored toward young women aspiring to hold leadership positions in the oil and gas industry must be rolled out by stakeholders.

### **Recommendations**

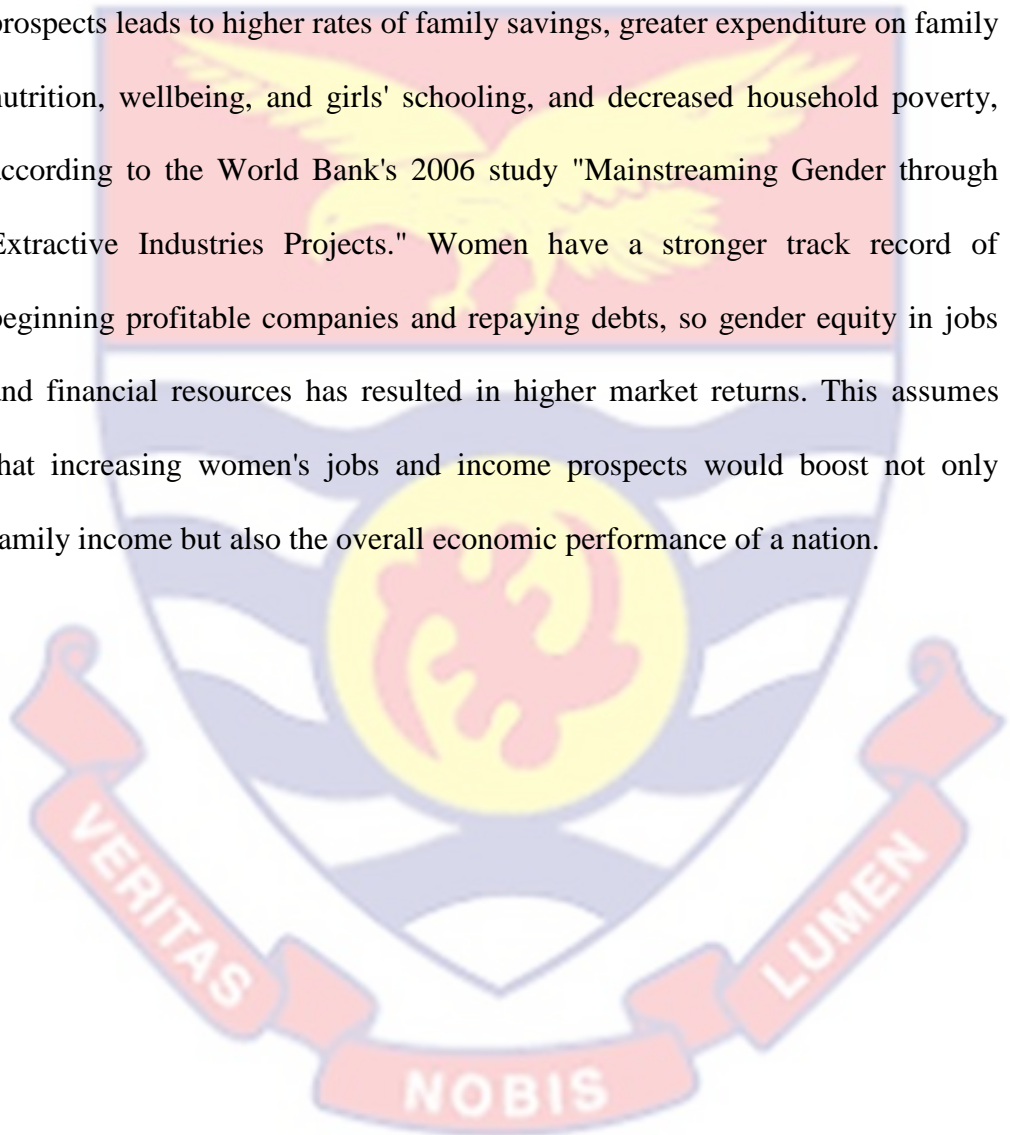
The study suggests that support programs be set in place to ensure that women are not discriminated against in the Oil and Gas sector, which has been characterized as "hyper-masculine" and seems to favor male representation at the expense of females, based on the results. Companies should therefore render it a focus by the number of jobs open to women across the wide spectrum of extractive professions, at fair wages, which would undoubtedly be of benefit to certain women.

Stakeholders and politicians working together to create competitive and equitable processes in Ghana's oil and gas sector can greatly reduce gender disparity concerns around how practices will help men and women more fairly. Despite the lack of proof of gender inequality in Ghana's oil and gas sector, steps may be put in place to solve the problem in the future. Addressing gender bias concerns would not only boost the sector's success, but will also boost growth and reduce poverty.

Women's social and economic empowerment, according to studies, leads to prosperity, poverty reduction, and long-term sustainability. Women often find themselves working in industries with low wages and little jobs due to a lack of intellectual capital, connections to economic services, and a role in decision-making. As a result, the report suggests that a concerted effort be

made to train women and encourage them to assume leadership roles in the oil and gas industry.

Gender disparities in jobs and earnings cause inefficiencies in the general economy, lead to poverty, and decrease men, women, and children's well-being. According to a rising body of proof, the women's economic prospects leads to higher rates of family savings, greater expenditure on family nutrition, wellbeing, and girls' schooling, and decreased household poverty, according to the World Bank's 2006 study "Mainstreaming Gender through Extractive Industries Projects." Women have a stronger track record of beginning profitable companies and repaying debts, so gender equity in jobs and financial resources has resulted in higher market returns. This assumes that increasing women's jobs and income prospects would boost not only family income but also the overall economic performance of a nation.





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## APPENDIX 1: QUESTIONNAIRE

Dear Respondent,

I am a graduate student at the **University of Cape Coast**.

I am conducting a research titled: “*Assessing the Participation of Women in The Oil and Gas Industry: Opportunities and Challenges*”. This is in partial fulfilment for the completion of my degree. I hereby request your assistance in filling the provided questionnaire. This questionnaire is intended for the collection of data to help me on my chosen topic. This exercise is strictly for academic purposes only. Please be rest assured that your anonymity is guaranteed. Whatever information you give will be treated with the highest level of confidentiality.

Thank you for your support.

### **Section A: Demographic Characteristics**

1. Age (yrs.) 18 – 25 [ ] 26 – 33 [ ] 34 – 41 [ ] 42 – 49 [ ]  
50 and above [ ]
2. Department \_\_\_\_\_
3. Position in the organisation \_\_\_\_\_
4. How long (in years) have you worked in this company?  
Below 5 [ ] 5 – 10 [ ] 11 – 15 [ ] 16 – 20 [ ] – 25 [ ] 26– 30 [ ] 31 and above [ ]

### **SECTION B: ASSESSING PARTICIPATION OF WOMEN.**

Kindly use a 5-point scale measuring from “**1=Strongly Disagree**” to “**5=Strongly Agree**” to provide responses to the items under To assess the participation of women in upstream Oil and Gas development processes in Ghana.

*as it pertains*

<b>FACTORS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
MnA1. Women are well represented in the oil and gas industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA2. There is fair distribution of labour on gender in the oil and gas industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA3. Women occupy high positions in the industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA4. There exists unequal competition between women and their male counterparts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA5. Women in the oil and gas industry are sometimes favoured through promotion instead of merit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA6. Most women in the industry have controlling positions and can influence decision making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA7. Most women in the Oil and Gas industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

perform to management expectations					
MnA8. Because some women are favoured, they are not able to maintain positions when given the opportunity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA9. Women who become bosses easily have qualms with subordinates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA10. It looks like the spotlight is on women so when they are given the opportunity, everyone expects them to fail.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA11. There is no support for women in the oil and gas industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA12. Women make personal sacrifices to attain managerial positions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA13. Women are great bosses to work with.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
MnA14. Women are involved in the oil and					



gas development processes in Ghana.					
MnA15. There has been a great achievement for women participation in the industry					

**SECTION C: CHALLENGES FACING WOMEN IN THE O&G INDUSTRY**

Kindly use a 5-point scale measuring from “1=Strongly Disagree” to “5=Strongly Agree” to provide responses to the items under 2. To analyze the Challenges women, face in the upstream Oil and Gas sector.

<b>FACTORS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
MnA16. Male dominance in the industry poses stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA17. Women are less encouraged in the industry as compared to their fellow men	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA18. Women are paid less as compared to their fellow men	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA19. There is a growing discrimination against	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

women in the oil and gas industry					
MnA20. There is sexual and gender violence against women in the oil and gas industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA21. Women are not involved in decision making in the industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA22. Women are viewed to be less intelligent as compared to their fellow men so their views are undermined	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA23. Women are discriminated after pregnancy and maternity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA24. Women in the industry struggle for equal pay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA25. Women are given fewer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

leadership positions					
MnA26. Women are often ignored when making critical decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION D: STRATEGIES FOR ENHANCING WOMEN’S PARTICIPATION.**

*Kindly use a 5-point scale measuring from “1=Strongly Disagree” to “5=Strongly Agree” to provide responses to the items under 2. To suggest strategies for enhancing women’s participation in the oil sector as it pertains*

<b>FACTORS</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
MnA27. There should be more affirmative actions policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA28. Capacity building for women must be encouraged	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA29. The government must focus on women education to enhance their capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA30. Mentoring programmes for females aspiring to hold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

leadership positions in the oil and gas industry must be encouraged					
MnA31. Women must be given equal opportunities as their male counterparts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA32. People must be conscientize on stereotyping women	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA33. Certain societal norms and believes in the Ghanaian culture against women must be done with	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA34. Incentives must be given to employers who employ more women in the oil and gas industry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MnA35. It must be mandatory for employers to employ more women	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



<p>MnA36. It must be compulsory for subcontractors to employ more women</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>MnA37. There should be a support system to help women who have been discriminated against in the oil and gas industry</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>MnA38. Women must be educated to take leadership positions in the oil and gas industry</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>MnA39. The oil and gas industry must be made friendly to attract more women.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**APPENDIX 1: ALL LEVELS OF EMPLOYMENT UPSTREAM IN GHANA 2018-2019**

(4a)

Category

Year

2018

				% of	
	Female	Male	Total	females	
Technical staff	289	1155	1,444.00	20%	
Management staff	37	148	185.00	20%	
Other	86	343	429.00	20%	
	M-				
	T-Staff	Staff	O-Staff	2,058.00	
Female	289	37	86	70%	
Male	1155	148	343	9%	Female
Total	1444	185	429	21%	Male

(4b)

Year

2019

Female Male Total % of females

306	1225		
		1,531.00	20%

35	138	173.00	20%
333	331	664.00	50%

M-

T-Staff	Staff	O-Staff
306	35	333
1225	138	331

(4c)

	Female	Male	Total	% (females)	(Department)
Production	11	43	54	20%	6%
Drilling	7	30	37	19%	4%
Maintenance	37	148	185	20%	22%
NDT	25	98	123	20%	15%
Rigging	15	58	73	21%	9%
Well service	15	61	76	20%	9%
Rope access	11	44	55	20%	7%
Welding	23	90	113	20%	14%
Marine services	23	94	117	20%	14%
<b>Total</b>			<b>833</b>		