UNIVERSITY OF CAPE COAST

GHANA'S OIL DISCOVERY: PROSPECTS AND CHALLENGES FOR NATIONAL DEVELOPMENT AND DIPLOMATIC RELATIONS

AARON BAKYEREYELE

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BY

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JULY 2019

DECLARATION

Candidate's Declaration

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

Candidate's Significant …………………………...Date…………………….

Name……………………………………………………….

Supervisors' Declaration

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

Principal Supervisor's Signature………………………. Date………………

Name………………………………………….

Co-Supervisor's Signature…………………..........Date…………………….

Name……………………………………………….

ABSTRACT

Oil's importance in the global economy cannot be overlooked. Gas, diesel and petrol, which are by-products of oil, fuel transportation and industrialisation globally. Due to these and many other advantages associated with oil, its discovery in many parts of the world has come with a lot of hope and expectations. However, other countries that discovered oil especially, African countries, have plunged themselves into economic doldrums and diverse diplomatic rows. This state of mixed blessings suggest that oil and gas discovery has implications on Ghana's economic development and diplomatic relations. This study therefore assessed the impacts of Ghana's oil and gas industry on Ghana's national economic development and diplomatic relations. The study is based on interviews with oil and gas institutions, senior oil company staff, government officials, staff of international companies as well as secondary sources. Qualitative methods were employed to collect the data while case study research design was used. The study also adopted Purposive and Snowball Sampling methods to select the participants while content analysis was used to analyse the data. The study revealed that the future of oil and gas in Ghana is extremely hard to forecast. On the one hand the government tries to show good will in implementing useful measures to control the oil industry. On the other hand, there is much insecurity, since there seems to be an atmosphere of secrecy surrounding contracts and contract processes as well fiscal indiscipline. The study therefore recommends that the government should ensure a broad-based political commitment to fiscal discipline by strengthening the institutions that regulate the activities of the oil and gas industry.

KEYS WORDS

Development

Prospects

Challenges

Diplomatic relations

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DEDICATION

To my late mother, Mrs. Yaa Batomaye Barka and the entire Barka family.

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LISTS OF ACRONYMS

ABFA	Annual Budget Fund Amount
AGOA	African Growth and Opportunity
APRRP	African Peacekeeping Rapid Response Partnership
BBC	British Broadcasting Corporation
BoG	Bank of Ghana
CDD	Center for Democratic Development
CDG-GH	Caucus for Democratic Governance, Ghana
CEO	Chief Executive Officer
CODEO	Coalition of Domestic Election Observers
CSO	Civil Society Organizations
E&P	Exploration and Production
ECG	Electricity Company Ghana
EITI	Extractive Industries Transparency Initiative
EO	Edusie and Owusu
EPA	Environmental Protection Agency
ESIA	Environmental and Social Impact Assessment
FDI	Foreign Direct Investment
GDP	Gross Domestic Products
GHEITI	Ghana Extractive Industries Transparency Initiative
GHF	Ghana Heritage Fund
GIPC	Ghana Investment and Promotion Centre
GNGC	Ghana National Gas Company
GNP	Gross National Product
GNPC	Ghana National Petroleum Corporation

GSF	Ghana Stabilisation Fund
IA	Independent Administrator
IOCs	International Oil Companies
IES	Institute for Energy Security
IMF	International Monetary Fund
ITLOS	International Tribunal on the Law of the Sea
LI	Legislative Instrument
MCC	Millennium Challenge Corporation
MEST	Ministry of Environment, Science and Technology
MLNR	Ministry of Land and Natural Resources
MNCOs	Multi-national Oil Companies
NORWEP	Norwegian Energy Partner
MOE	Ministry of Energy
MOFEP	Ministry of Finance and Economic Planning
MP	Member of Parliament
MPC	Mineral of Petroleum Commission
NDC	National Democratic Congress
NGOs	Non-Governmental Organisations
NOCs	National Oil Companies
NPP	New Patriotic Party
ODFID	Oil and Gas for Inclusive Development
PC	Petroleum Commission
PHF	Petroleum Holding Fund
PIAC	Public Interest and Accountability Committee
PNDC	Provisional National Défense Council

PNDCL	Provisional National Défense Council Law
PRMA	Petroleum Revenue Management Act
SDGs	Sustainable Development Goals
SESIA	Strategic Environmental and Social Impact Assessment
TEN	Tweneboa, Enyenra Ntomme
TOR	Tema Oil Refinery
UNDP	United Nation Development Programme

CHAPTER ONE

INTRODUCTION

Background to the Study

The contributions of natural resources to national economic development cannot be overemphasised (Dartey-Baah, Amponsah-Tawiah & Aratuo, 2014). History is replete with countries that have experienced economic development through the use of natural resource. Norway, Russia, United States and Botswana are some of the countries whose developments have been anchored by natural resource wealth (Ackah, 2016). Oil and gas resources in particular have played significant roles in the development of countries. Their impacts cut across all sectors of the economy and their importance in diplomatic relations cannot be underestimated. Oil and gas resources have anchored the development of many counties through uninterrupted supply of energy such as Canada and Norway (Dartey-Baah, Amponsah-Tawiah & Aratuo 2014). It has also contributed by way of additional revenue, employment and technological development.

Oil and gas resources present enormous opportunities for the economic development of low-income economies, but poor management of these resources can result in dire consequences for the foundations of the resource-endowed nation. The discovery of treasures such as petroleum in developing countries has often not only triggered jubilation but also ignited optimism of economic emancipation. However, puzzling consequences are encountered a few years into exploitation of these resources in a majority of oil rich economies (Sachs and Warner, 2001). Countries such as Nigeria, who have maintained invariably the same Gross National Product (GNP) for 40 years despite its massive petroleum resource endowments and others such as Iran and Venezuela with minus one percent growth rate for over 33 years have been cited as examples in scholarly writing (Gylfason, 2001).

The curse can plague any continent. However, Africa has become the focal point of considerable research and interest (Obi, 2014) perhaps because of the increasing amount of hydrocarbons which have been discovered on the continent in recent times (Lesourne & Ramsay 2009). Africa is a continent with a significant amount of oil, particularly in the Gulf of Guinea. As of 2007, Nigeria, Angola, Cameroon, Chad, Congo-Brazzaville, Equatorial Guinea, and Gabon were producing an estimated 5,120 million barrels per day. The Gulf of Guinea alone produces 7.1 per cent of total world production of oil (Lesourne and Ramsay, 2009, 8). Yet there are many problems on the continent, ranging from resource related conflicts to poor socio-economic development.

Between 1965 and 2000, the per capita GDP of Nigeria, the largest exporter of oil in Africa since the mid-1960s, remained around $325, although it spent over $350 billion in oil rents (Same, 2009). Oil exploration-related conflicts are common in Nigeria, leading to frequent attacks on oil installations. Between 2005 and 2008 alone, it is estimated that 500,000 barrels of oil were lost due to such attacks and their disruptive effects (Obi, 2014). In Chad, oil from the Chad-Cameroon Pipeline alone stood at 140,000 barrels per day in 2004, and by the first half of 2005, it had increased to 180,000 barrels per day. Yet, in terms of social effects at the household level, the oil seems to have had limited impact. A substantial part of the revenue goes into military spending, leaving little for social spending to benefit the 80 percent of the population who lives in poverty (Pegg, 2006).

Much of the extensive literature on the ‘resource curse’ phenomenon suggests a negative correlation between national resource endowments and economic development (Sachs & Warner 1999). The literature subsequent to Sachs and Warner has concentrated on identifying the mechanisms through which natural resource wealth impacts on growth. By this line of reasoning, natural resource abundance leads to some phenomenon that in turn affects growth (Alexeev & Conrad, 2009).

The channels through which the so-called curse is transmitted include: real exchange rate appreciation, which leads to a contraction of the nonrecourse export sector (Corden & Neary 1982); rent-seeking and corruption, which drag down growth (Mehlum et al. 2008); large swings in commodity prices that result in macroeconomic instability (van der Ploeg & Poelhekke 2010); the interaction of resource rents and government consumption (Atkinson & Hamilton 2003); volatility of discretionary government expenditure (Bleaney and Halland 2014); armed conflict to control resources (Collier & Hoeffler 2004); volatility of commodity prices and anticipation of better times (van der Ploeg 2011).

The question of oil and gas thus occupies a strategic position for cooperation or conflict in international relations because of its importance position as a source of structural power (Silverstein, 2002). The strategic place of oil and gas makes global superpowers such Europe-American, China, Japan etc. to compete for diplomatic alliance with any country that discovers it especially, African countries. This diplomatic rivalry normally takes the various forms, such as state visits and military alliance in the case of Euro-American countries, soft loan, infrastructural development aid strategic partnership in the case of China and Norway (Kirkland, 2004). For instance, the numerous conflicts in the Niger Delta in Nigeria and the numerous uprising in Syria are just few cases in mind (Bloomfield, 2008).

Nonetheless, giving the negative socio-economic impacts of petroleum resources, countries will still desire to discover oil within their territories because its presence gives hope that there can be economic transformation if the resource is properly managed. For instance, in an interview granted to the British Broadcasting Corporation, then-President of Ghana, John Agyekum Kufuor expressed his joy that the oil found would turn Ghana into an 'African Tiger' (BBC News, June 19, 2007). This optimism is also crystallised by the fact that oil still constitutes about 70% of the world's energy consumption (Energy Information Administration, 2018). Amoasah (2011) notes that liquid fuel remains the world's dominant energy source. This makes oil one of the salient economic assets, hence any country that discovers it is excited about its potentials of enhancing national economic growth and development.

Ghana celebrated its first oil when the 50th independence celebration of the country was greeted with the discovery of oil in commercial quantities by a consortium of two oil companies thus Kosmos Energy (America) and Tullow (Anglo-British) in June 2007 in Cape Three Point of the Western region of Ghana, popularly known as the 'Jubilee Field' (Gyampo, 2010). Ackah (2016) notes that the oil discovery has ignited a new wave of hope and expectations from Ghanaians. Following that euphoric moment, the President John Agyekum Kufuor appeared in public with a glass of champagne on one hand and oil on the other hand and gave an impromptu (the meeting was not scheduled, the media was summoned at an emergency meeting) speech to the media. In his speech, he states he would go down in history as the President whose tenure of office witnessed the commercial discovery of oil.

He described the discovery as ‘a shot in the arm’ that would cause Ghana ‘to fly’ and that in only five years Ghana would become an ‘African Tiger’ (BBC, 19 June, 2007). To kick start the production, Ghana hosted the National Forum on Oil and Gas Development to discussed the issues that would mould the sector so that production could start in the shortest possible time (Kumah-Abiwu, 2017). Regional meetings were also organized where government officials, Civil Society Organizations (CSO) as well as policy makers would contribute their quota to formulating laws that would regulate the sector.

The country quickly jumped into commercial oil production within a very short period in the bid to convert the oil revenue into national economic development. The production ushered in the entrance of exploratory companies from different countries. Given the negative records especially, from sub-Saharan African countries, it is thus logical that the oil and gas discovery in Ghana has implications on Ghana’s national economic development and diplomatic relations. This study therefore seeks to assess the impacts of Ghana’s oil and gas resources on national economic development and how that has influenced Ghana’s diplomatic relations with the countries from which the oil exploratory companies come. In this study, whenever oil is mentioned, it stands for both oil and gas.

Statement of the Problem

The contribution of oil and gas resources to economic development and diplomatic relations has attracted global attention in scholarly circles especially in the nineteenth and twentieth centuries where many countries especially, in Western Europe and North American countries were advancing towards industrialization (Lynn, 1997). Kumah-Abiwu (2017) notes that the importance of oil in international relations goes beyond its already outstanding position as one of the most important commodities in world trade. The works Lynn (1997) and Gelb (1988) for instance remind us about how countries like Norway, United States of America and Saudi Arabia have relied on uninterrupted supply of energy from oil and gas resources to develop their economies and how oil has created employment for these countries thereby help to boost their GDP and infrastructural development.

Humphreys, Sachs and Stiglitz (2007), Bloomfield (2008) however, noted that oil and gas resources has had negative consequences on some countries that discovered it. They indicated that oil is responsible for the upsurge of terrorist activities in Syria and the uprisings in Ukraine. Bloomfield (2008) also, added that the numerous uprisings in the Niger Delta in Nigeria, the high rate of corruption and the frequent terrorists' attacks is as a result of the oil and gas. Moreover, the conflicts in Sudan that subsequently led to its division and the murder of Muammar al Gaddafi is as a result of oil. Consequently, the discourse surrounding the oil and gas sector is not new in existing literature.

Gyampo (2010) cited examples from Nigeria to support his arguments that oil discovery has implications on democratic institutions. This normally happens where the countries from which the exploratory companies come interfere with the institutions in order to protect their interests. This they do through subtle diplomatic strategies such as, official state visits, trade relations, signing of treaties, budgetary supports etc., by so doing, manipulate the institutions in order to secure cheap supply of oil to maintain their political dominance (Oskarsson & Ottosen, 2010). This point was buttressed by Nammei (2016), when he argues that the Western countries are more relaxed on the pressure for badly ruled but resource-rich countries to democratise.

Oil plays a strategic role in both economic and social development and is one of the greatest sources of world power; the question of oil thus occupies a central role for cooperation or conflict in international relations (Humphreys, Sachs & Stiglitz, 2007). Gleaning from the literature, it is clear that Ghana's oil and gas discovery has implications on Ghana's economic development and diplomatic relations.

In June 2007, in the midst of a global food and oil crisis, the UK-based firm Tullow Oil, and its US partners Kosmos Energy and Anadarko Petroleum, announced two significant oil discoveries off Ghana's coast. Gyampo (2010) argues that with oil production projected to begin in 2010, the Ghanaian government was optimistic that this discovery would have a significantly positive effect on the economy and reduce Ghana's reliance on oil imports. As Kumah-Abiwu (2017) indicates, there was a sense among government officials and the population that Ghana had hit the jackpot. Ghana would be freed from the clutches of donors and international financial institutions to pursue a more independent, growth-based development agenda. Panford (2010 & 2017) stressed the need for a strong institutional base to help avoid the resource curse syndrome that bedevilled many African countries that discovered oil.

Despite the numerous efforts to intensify the theoretical base of the Ghana's oil and gas industry, the current literature on Ghana's oil and gas industry ignores the implications of the oil and gas discovery on Ghana's economic development and diplomatic relations. This thesis there seeks to fill this gap by providing an assessment of the impacts of Ghana's oil and gas discovery on Ghana's economic development and diplomatic relations. Moreover, Obeng-Odoom's (2016) authoritative review of the state of oil and gas research in Ghana has equally set a good scholarly tone for this thesis's central argument. As one of the leading scholars on Ghana's oil and gas sector, he provides wise counsel on the need to bolster the theoretical aspect of the fast-growing studies on Ghana's oil and gas sector.

The study therefore contributes to knowledge about Ghana's oil discovery and the ongoing discussions in the fields of development studies and global political economy regarding the political economy of natural resource management as well as the ongoing debate in terms of how Ghana can adopt sound policy options to effectively govern the oil and gas sector.

Objectives of the Study

The main objective of this study is to access the impacts of Ghana's oil and gas discovery on national economic development and how it influences Ghana's diplomatic relations with its neighbours and with the countries from which the exploratory companies come.

The specific objectives are to:

i. Examine the extent to which the regulatory framework of the oil and gas industry supports the socio-economic development of Ghana.

ii. Assess the impacts of the oil and gas sector on the economic development of Ghana.

iii. Examine the extent of sustainable development and challenges in the oil and gas sector.

iv. Ascertain how the oil and gas discovery influences Ghana's diplomatic relations.

Research Questions

i. To what extent does the regulatory framework of the oil and gas industry support the socio-economic development of Ghana?

ii. What are the impacts of the oil and gas sector on the economic development of Ghana?

iii. What are the sustainable development measures and challenges in the oil and gas sector?

iv. How does the oil and gas discovery influences Ghana's diplomatic relations?

Significance of the Study

The negative records from other African countries that discover oil and gas make this study significant in that the findings of the study will help to ascertain whether Ghana is an exception.

Knowledge on the governance of the industry will help the country to formulate effective policies to manage the industry for maximum benefits as well as identify opportunities for socio-economic development which will help to manage the huge expectations of Ghanaians concerning the oil discovery and exploration.

The study will a provide insights into impacts of the oil and gas industry which also help to address the numerous expectations of Ghanaians concerning the prospects of the oil and gas industry.

It contributes to knowledge about Ghana's oil discovery and the ongoing discussions in the fields of development studies and global political economy regarding the political economy of natural resource management as well as the ongoing debate in terms of how Ghana can adopt sound policy options to effectively govern the oil and gas sector. The study also contributes to theory building by providing a further support to strengthen the theoretical arguments.

It will also serve as a basis for further researchers who are interested in the area as well as boosting the university's profile as a research institution.

Delimitations of Study

The study will focus mainly from the discovery to the production period. More specifically, the study covers the period between 2007 to 2019, however, the contributions of the oil and gas industry to economic development covers the period of 2010 to 2019 because no production was done from 2007-2009. This will aid in knowing what has happened, what is happening and what is likely to happen. The study also covers broadly the upstream sector with limited emphasis on the midstream and downstream sector. In assessing the diplomatic relations, the study focused on US, Norway, China and Cote d'Ivoire. The study did not take into account China and UK because their impacts is still minimal.

Limitations of the Study

The conduct of the study faced certain limitations, significant among which was the unwillingness on the part of some of participants to give certain information because of security and other personal reasons. However, such information was not critical to the research key findings, hence, without which the research findings were still valid.

Again, the limited funds and required pages for the study led to a truncation of the interviews to be conducted for the study. However, the information obtained from the interviews conducted was enough to conclude on the research findings.

Definition of Terms

Development: The state of general improvement in the lives of the citizens through the provisions of quality infrastructure, education and training and quality social amenities.

Independents: Individuals who secure leases to operate oil fields.

Sustainable development: An attempt to ensure intergenerational equity in the process of exploring a country's resources.

Intergenerational equity: The process of ensuring fairness and balance in the allocation of the oil rents among current and future generations.

Diplomacy: The is a skill of dealing effectively with others countries by influencing their socio-economic and political decisions either by treaties, negotiations or any other mechanism without violence.

Organisation of the Study

The research is divided into five chapters. Chapter one deals with the introduction to the study. It covers the background to the study, statement of the problem, objectives of the study, the research questions to the study, significance of the study, limitations and delimitations of the study, definitions of keys terms and the organisation of the study. Chapter two deals with the theoretical framework and literature review while chapter three covers the methodology for the study. The fourth chapter presents the results and discussions while the last chapter covers the summary, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This study assesses the impacts of Ghana's oil and gas discovery on Ghana's national economic development and diplomatic relations. This chapter reviews related literature on the study area. The chapter first covers the theories that are used in the study; Dependency Theory, Frustration Aggression Theory and the Resources Curse Thesis. The following areas were considered in the literature review; the concept of development, the development of the oil and gas industry, the development of the oil and gas industry in Ghana, Ghana's oil and politics, oil and institutions. The last section covers oil and diplomatic relations.

Theoretical Framework

The Concept of Development and Dependency Theory

Development is viewed differently by different schools of thought because it is a multifaceted concept that has no single definition. One of the famous definitions is the one given by Edward (2011). He views development as a stage where there is an improvement in the standard of living of the populace, especially the poor, preserving traditional values, the ability to encourage grassroot participation in development process and formulating of environmentally friendly strategies. Development is defined by Todaro and Smith (2012) as a multi-dimensional process that involves major changes in social structures, popular attitudes and national institutions, as well as economic growth, reduction of inequality and eradication of absolute poverty. Immanuel (1984) on his part considers development as a measurable or describable characteristic of a society. In other words, development must be tangible and finds expression in the progress of the society.

Mandelbaum (1945), Dobb (1951), Lewis (2013) and many others who wrote immediately after the Second World War limited development to growth in Gross National Product (GNP) and total employment. However, growth in GNP without correspondent improvement in the standard of life of the citizens cannot be termed as development, hence economic variables alone are not enough in determining development. Unlike Edward, their perception of development does not take into account the distribution of the Gross National Product. It is not uncommon to find a high GNP while it is concentrated in the hands of few rich people and the poor are still poor.

Amartya Sen also viewed development as the freedom to choose any kind of life to live without any restraints and the extent to which moral values are maintained (Sen, 1985a). For the purpose of this study, development will be defined as the state of general improvement in the lives of the citizens through the provisions of quality infrastructure, education and training and quality social amenities as well as protecting the environment and traditional values.

Natural resources exploration and production in Africa especially, Sub Saharan African countries are always associated with the dependency syndrome where a bulk of the resource revenue goes to the developed countries. Ghana is not new to natural resources exploitation and production (it has produced resources like diamond, gold, bauxite and manganese); however, the available literature and evidences suggest that these abundance resources have not been translated into developmental gains through effective utilisation and fostering of good diplomatic relations. This is due partly to dependency syndrome postulated by the dependency theory where a bulk of the revenue ends in the pockets of the Western American and European countries.

Dependency is considered by Emeh (2013) as a situation where a country's economic fortune is determined by an external force by manipulating their political and socio-economic policies. The dependency school of thought was a counter reaction that sought to debunk the tendency by the Modernization Theory that held underdeveloped nations responsible for their underdevelopment (Rostow, 1960). Dependency theory blames the underdevelopment of underdeveloped countries on exploitation by the developed countries. One of such proponents is Rodney (1972) who attributes all of African woes to European's slave trade, colonialism and natural resources exploitation.

The dependency school was pioneered by Raul Presbixch, an agentive economist and the director of the United Nation Economic Commission for Latin America (Ferraro, 1996). The theory rejected the ideological postulations of the modernization school and argued that world economic is divided into developed or metropolitan and underdeveloped or periphery. Depravity from the conventional approach of the modernization school, early dependency theorists argued that Latin American was adversely affected by its trade relationship with the industrialized countries. The world production system made the satellite countries produced raw materials such as cotton, cocoa, sugar, wheat etc. for the industrialized centre and receiving in return manufactured products. Those early dependency theorists argued that instead of benefiting both partners equally according to the law of comparative advantages, the periphery was always at the receiving end of processed products.

Dependency theory considers the cause of underdevelopment in less developed countries as a product of integrating underdeveloped countries into the capitalist economic system. The capitalist economic system is dominated by the Western European and North American counties. In development studies, dependency denotes a phenomenon where a country or region depends on another country or region for their economic survival and growth. Capitalism is regarded by most development theorists such as Gunder (2008) as one of the most important cause of the dependency relationship.

It is worthy to note that dependency theory has come under several criticisms over the years. For instance, Friedmann and Wayne (1977) considers the bilateral relationship proposed by dependency theory as inconsistent with current global trend due to the emergence of other strong economics such as China, Taiwan, Japan etc. which could serve as trade partners for developing countries instead of the Western Capitalist countries. Also, Ferraro (1996) identifies another important weakness of the dependency theory. He argues that the globalization of technology has made it possible for technology to be transferred from developed countries to underdeveloped countries. This enables developing countries to transform their raw natural resources into finished product for export instead of exporting the raw materials.

Despite these weaknesses of the dependency theory, there is no gainsaying the fact that it is still relevant to this study considering the current level of technology in Sub-Saharan Africa in general and Ghana to be specific. This assertion is predicated on the fact that the country is an exporter of raw materials such as cocoa, gold, timber etc. Due to the inadequate technological know-how, the country depends on the developed countries for technology as well as markets for the oil and gas produced. Apart from the area of market, the nation is depending on foreign countries for the exploration of the oil. This goes without saying that the country will still depend largely on the developed countries in terms of technology and market. This creates the opportunity for exploitation and manipulation of indigenous socio-economic and political policies. This they do by interfering with the institutions. In essence, the dependency syndrome is very eminent in Ghana's oil and gas industry.

This line of argument is supported by a report by the Ministry of Finance and Economic Planning 2016, which indicates that out of $6 billion contracts that were between the period of 2010 to 2015, only $1 billion came to Ghanaians in the form of wages and salaries as well as the use of local goods and services. This suggests a case of exploitation, which is a key indicator of the dependency syndrome.

Frustration Aggression Theory

Frustration aggression theory posits that natural resources have the potential of breeding strain relations between countries hence can lead to conflicts thus both intra and inter conflicts if the institutions are not strong enough to help manage the sector.

There are evidences from literature that support this assertion (Collier & Hoffler, 2004). The report by the United Nations Environment Programme identifies not less than 18 natural resources related conflicts in Angola, Cambodia, the Democratic Republic of Congo, Durfur in the Sudan as well as the Middle East etc. This also resulted in the high rate of insurgency in Nigeria, the destruction of installations as well as the frequent kidnapping of expatriates' workers. The case of kidnapping rangers 100 between the period of 2006 and 2007 (Boonstra, Burke & Richard, 2008). The war in Angola was also triggered by the distribution of oil rents (Le Billon, 2001). The conflicts between Ghana and Kosmos Energy, the Maritime dispute between Ghana and Cote d'Ivoire confirms the theories of the Frustration Aggression Theory.

The Resources Curse Thesis

The resource curse is surrounded with a lot of multi-dimensional complexities in scholarly domain where views are diverged and converged (Ackah & Gyampo, 2016). The whole focus of the resource curse thesis is that countries with more natural resources perform poorly economically while those with less resources tend to perform well (Roll, 2011, 9). This line of argument was first presented by Sachs and Warner (1999) after conducting a study on the inverse relationship between countries with abundance resources and countries with less resources. This phenomenon is referred to as the 'Dutch Disease' in most of the literature (Auty, 1993 & Bloomfield, 2008). The concept of the Dutch Disease simply means that more foreign revenue inflow from natural resources causes overvaluation of a country's currency which causes a decline in manufacturing and agriculture sectors.

This usually happens when countries rely on only the natural resource(s) as the main export while neglecting the other sectors like agriculture and the manufacturing sector, which affects the long-term economic progress of the country. More importantly when democratic and other oversight institutions are weakened by leaders (Ross, 2001). The poor economic conditions normally lead to high rate of corruption, authoritarian rule and consequently civil wars (Panford, 2014).

However, this argument has been largely questioned by more recent studies. Oskarsson and Ottesen (2010) for instance debunk Ross's (2001) argument that petroleum resources hinder democracy when they argued that the multifaceted nature of democracy has not been considered in their arguments. Davis and Tilton (2005) also note that there are instances in which rich mineral endowment caused some countries to rise and develop through efficient and effective utilisation of the resources, while acknowledging that some have abused their resources. As part of the resource curse thesis, Mehlum, Moene and Torvik (2008) argue that the prevailing institutional framework that governs the particular resource sector is very paramount in determining the impact of the resource on the local economy.

The mismanagement, corruption and high rate of borrowing that characterise the oil and gas sector suggest evidence of manifestation of the resource curse thesis. It is therefore imperative that a study of this nature employs the resource curse thesis to access whether Ghana's oil found will be a curse or a blessing and how it will influence Ghana's diplomatic relations.

The Development of the Oil and Gas Industry

Oil was discovered by different people at different times. The first oil recovery dates back to 347 A.D. in the Middle East. Subsequent explorations took place in Poland and the United States in 1500s and 1800s respectively (San Joaquin Valley Geology, 2011). Initially, oil products were used for menial purposes like waterproofing, wounds protection, lights source etc.

However, as global demand and population increased by the early 1800s, there was the need for affordable light sources (Oliveira, 2007). This led to the development of small pockets of oil industries in the beginning of the nineteenth century in Eastern Europe. This development was fuelled by the advancement in extraction technology and distilling methods which increased the potential supplies of crude oil.

Trade in oil became large scale in the early 1900s due to technological development in machinery, transportation and communications. This made smaller scale industries to develop into larger scale operation (Schneyer, 2011). The United States oil industry emerged as the leading industry with larger industries. The United States oil industry emerged from the Pennsylvanian oil fields. The exploration was started by Colonel Drake in 1859. This caused a lot of companies to rush to the area to acquire lands and secure leases so that they could drill wells. This development also led to a rise in transportation businesses in the fledging oil industry such as barrel tankers, carriage and rail transportation. Formal trading exchange was established to replace the originally ad hoc negotiations (*The Economist*, 2012). Standard oil emerged as the major oil company with 90% control of the refining capacity because of its technological advantage (Yergen, 1991).

As the US oil industry was growing, there were other major operations in other parts of the world such as the Nobel brothers, the Rothschild, Royal Dutch etc. This intensified the competition with Standard Oil which had a foothold in international markets. California and Texas Standard Oil monopoly was challenged by Shell Oil due to the development of more efficient tanker ships and discovery of trade routes such as the Suez Canal

(Oliveira, 2007). This competition led to the emergence of few dominant International Oil Companies such as the Union Oil of California, Texaco and the Gulf and Sun which controlled sizeable markets.

This also brought Standard's Oil's initial 90% holding to 60% by 1911 (Yergen, 1991, 79). Standard Oil's dominance was also affected by the Supreme Court order in 1911 to dissolve its group due to over dominance of the industry. Individuals from the group developed their own companies which intensified another wave of competition.

The twentieth century saw a tremendous development in the oil and gas industry due to three key inventions. This was made possible by the development in electric bulb, automobiles and airplanes. The new development increased the demand for cleaner hydrocarbon than kerosene (Siddiqui, 2012). Few decades of the twentieth century saw International Oil Companies (IOCs) which had the financial and technological capacity as well as their access to international markets seeking for new sources of supply outside domestic supply. This quest for new reserves led to new discoveries in south America, North Africa, and South East Asia (Siddiqui, 2012, 12).

The period of the two World Wars (1914-1945) also experienced another tremendous wave of transformation in the oil and gas industry. The end of the Second World War witnessed the rise of the seven Major International Oil Companies (The Majors) or popularly known as the 'seven sisters. These companies included; Standard Oil of New York (Mobil), Anglo Persian Oil company (pb), Royal Dutch Shell, Standard Oil of California (chevron), Gulf Oil, Texaco and Standard Oil of New Jersey (Esso). These companies dominated the industry throughout the first half of the twentieth century due partly to the desire to secure enough supply for the war and also the fact that US did not suffer more causalities as compared to the other countries hence, they spearheaded the industry after the wars.

The 1960s marked the beginning of a new wave of globalisation. Global trade and economic integration took off in a way that had not been seen since the pre-Wars era, transforming the oil industry once again. Economies were booming in Europe, the US, and Asia; former European colonies gained independence; and competition amongst multinational corporations increased. Against this backdrop, new players exerted greater power in the global market and succeeded in challenging the seven sisters' oligopoly (Kobrin, 1985, 23).

By the 1970s, there was a high rate of nationalisation which pushed some of the IOCs out of business while others had to renegotiate in order to be in business (Hoyos, 2007). This period of nationalisation saw the emergence of the Independents (individuals who secure leases to operate oil fields). They competed with the powerful IOCs, especially, the seven sisters by offering better contractual terms which also gave the production nations the opportunity to demand for better returns from their resources. The seven sisters faced a major threat from the Independents. One example of such prominent Independent was Boone T. Pickens, the owner of Mesa Oil Company who advocated the takeover of weak oil majors that were not performing efficiently and doing more explorations. This also brought the hitherto fixed costs era to an end making it feasible for Independents to operate (Reddall, 2010).

The beginning of the 1980s saw another mighty transformation in the industry. This transformation was induced by the collapse of the Soviet Union and the end of the Gulf Wars as well as considerable growth in the economies of the developing countries. The collapsed of the Soviet Union led to economic liberalisation, privatisation of state-owned enterprises and barriers into entries into oil rich markets fell. Rising global growth, especially in developing Asia, increased the demand for oil resources. Nationalisation also afforded producing nations the opportunity to developed National Oil Companies (NOCs) to compete with the international companies and also to develop their own resources.

These developments drew African countries into the international oil market. Many of the oil companies turned their attention to Africa such as, Libya, Algeria, Guinea Bissau, Nigeria etc which have oil reserves. Ghana discovered its first commercial oil reserve in 2007. This ushered in a new diplomatic relation for Ghana due to the entrance of different oil companies from different countries.

A Brief History of Ghana's Oil and Gas Industry

The history of Ghana's oil exploration dates back to the late 1890s, however, no major successes were made. Attempts were made by successive governments to explore for oil in commercial quantities especially in the early 1960s, hence attempts at exploring for oil and gas is not a recent phenomenon in Ghana (Acheampong & Baah-Kumi, 2011). The first exploratory activities took place in 1896 in the offshore Tano area, present day Western region. This happened after seepages were found which suggested the presence of petroleum resources. This led to drilling of wells but the explorations did not yield much results due to little or no geological knowledge and understanding at the time. There are basically four sedimentary basins in Ghana. These include; the Western Basin, Central Basin, Eastern Basin and the Voltarian basin as indicated in figure 1 (Boateng, 2008).

Ghana's oil history can be divided into four phases differentiated chiefly by technology and political interferences. The first phase was mainly onshore (because of inadequate technological know-how) and took place between 1896 -1969. The second phase was an attempt to explore offshore Jubilee waters. The first two phases were championed by international oil companies. The third phase started with the formation of Ghana National Petroleum Corporation (GNPC) and lasted until 2000. GNPC was established to ensure that the country is represented in the exploratory activities. The fourth phase commenced with restructuring and resourcing of GNPC so that it could in collaboration with the IOCs facilitates the exploratory activities as well as participate in the production. GNPC staff were retrained with the procurement of modern equipment and gadgets. Also, GNPC was upgraded to the status of a company as a means to empower it and also make it semi-autonomous (Takyiwa, 2014).

The fourth phase commenced with the discovery of commercial quantities of oil in the Jubilee Field. The period was characterized by the entrance of companies like, Kosmos Energy, Tullow, Anadarko, EO group, Hess etc. This resulted in the discovery of the Jubilee Field3, Hyedua1, Mahogany and the Deep Water Tano basin (Boateng, 2008, 5). Production started in 2010. The companies' shares of the Jubilee field were based on their specialisations. Base on their specialisations, Anadarko receives 29.29%, Kosmos Energy 31.87%, Tullow 22.89%, Sabre Oil and EO Group receives 3.5% while GNPC receives 10%. The Voltarian Basin has been explored but no production is taking place there currently (Petroleum Commission, 2016). With the entrance of these companies, a new diplomatic relation is inevitable.

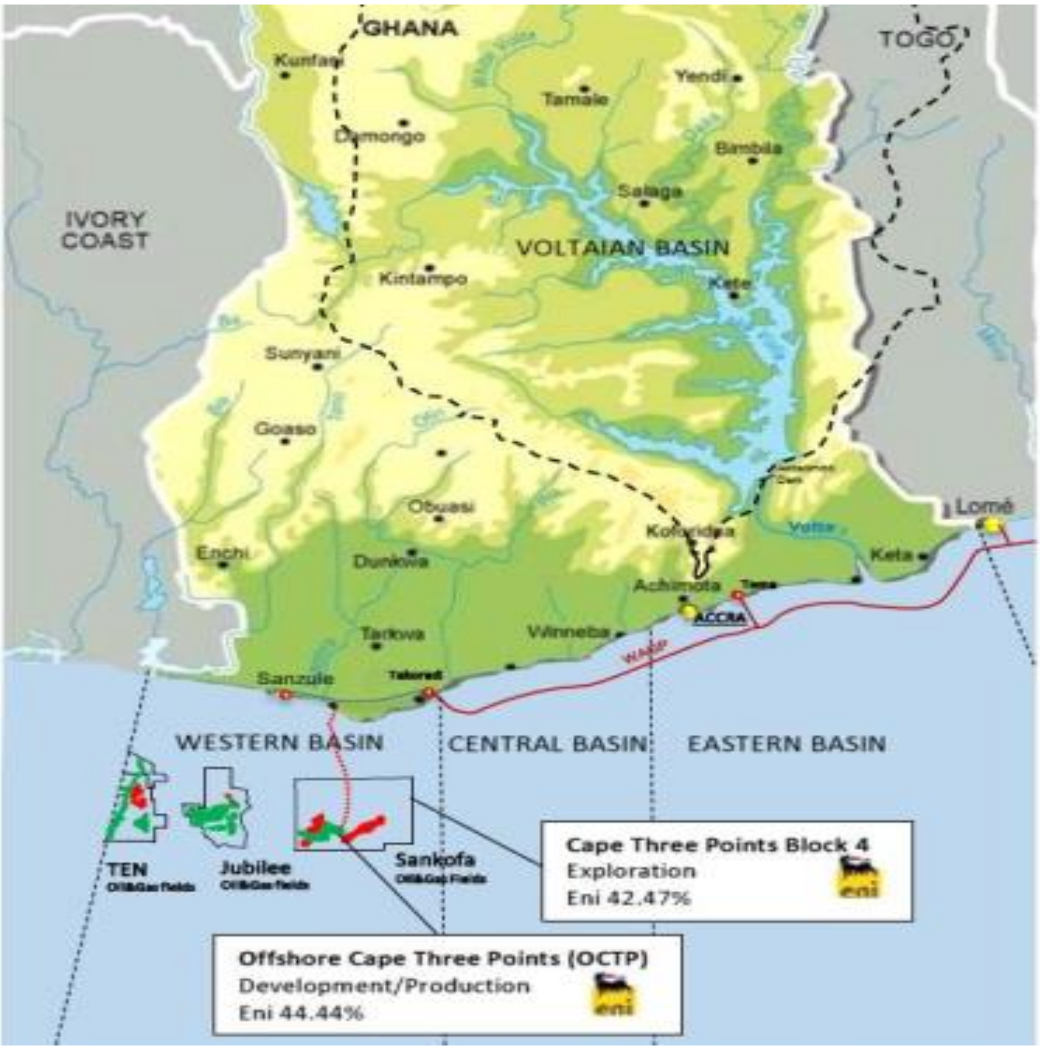

Figure 1: Map Showing Ghana's Four Sedimentary Basins

Oil and gas and Politics in Ghana

Politics plays out in every facet of society. Ackah and Gyampo (2016) argue that Ghana's politics has gone through various alterations following the commercial discovery of oil in 2007. Pockets of politisation can be seen from one political regime to the other. The first area of politisation started with the discovery itself. The New Patriotic Party (NPP) under the leadership of John Agyekum Kufuor argues that the commercial oil and gas resources were discovered during his regime. For instance, President Kufuor states that he would go down in history as the president during whose tenure of office oil was discovered. There are however other accounts that argue that the discovery was made during the era of Dr. Kwame Nkrumah and that the Tema Oil Refinery was set up by Nkrumah in response to the discovery to refine the oil.

The National Democratic Congress (NDC) also counter these arguments with the argument that the discovery was made during the time of Jerry John Rawlings when the GNPC was formed. The two dominant parties thus the NPP and NDC both try to take credit for the discovery of commercial oil resources in Ghana. Both parties played roles in the discovery and production of commercial quantities of oil in Ghana. The interesting part of this argument is that commercial discovery was made when NPP was in power but production was started during the NDC period (Obeng-Odoom, 2014).

The oil and gas issues predominated the 2008 and 2012 general elections. Both parties indicated how they would use the oil rent for the benefit of Ghana. While the NPP government stated that the oil rent will be used to support the free senior high school policy, the NDC chose infrastructural development. The issue of the oil rents was mentioned by both parties at a debate that was organised by the Institute of Economic Affairs (Panford, 2014). However positive these campaign policies may be, the sector is still too young for the magnitude of politics taking place in it. The above incidences also suggest that the government did not have a clear national policy pertaining the utilisation of the oil revenue before production started.

Oil and Gas and Democratic Institutions

As indicated earlier, natural resource abundant countries constitute both growth losers and growth winners and the main difference between the success cases and the cases of failure as indicated by most of the literature lays in the quality of the institutions. With grabber friendly institutions, more natural resources push aggregate income down, while with producer friendly institutions, more natural resources increase income. The quality of institutions determines whether the resource rents are channelled into the productive economy as well as promotes good diplomatic relations or otherwise. Whether the rents stimulate the productive economy or induce strategic jockeying among the elites depends largely on the quality of institutions (Baland & Francois, 2000; Collier & Hoeffler, 2004; Engerman & Sokoloff, 2000 & Knack, & Keefer, 1995).

Measured by institutional and political indicators resource rich countries show huge variations. Those that do well economically, also tend to score high on institutional and political indicators and vice versa. Growth winners, like Chile, Botswana, Malaysia, Norway and Thailand, ranked ahead of growth losers as Algeria, Ecuador, Mexico, Nigeria, Trinidad & Tobago, Venezuela, and Zambia (Robinson, Torvik & Verdier, 2005). Mehlum, Moene and Torvik (2005) note that the literature on the resource curse may be divided into three strands: One, where the quality of institutions are hurt by resource abundance and constitutes the intermediate causal link between resources and economic performance; another, where the institutions do not play an important role; yet another, where resources interact with the quality of institutions such that resource abundance is a blessing when institutions are good and a curse when institutions are bad.

Furthermore, ‘Black Gold’ as it is popularly known, is noted for its adverse effects on political institutions (Obeng-Odoom, 2016). Petroleum resources have negatively influenced the political institutions of many countries, especially, African countries. The Capitalist West is sometimes not critical about badly governed but oil rich countries, especially, developing countries. Gumede (2008) observed that the Western countries are more relaxed on putting pressure on oil rich countries in developing nations to democratise. Countries like Chad, Equatorial Guinea, Democratic Republic of Congo are noted for bad governance but there is no pressure on them to democratise because they are rich in natural resources. In Nigeria for instance, Bloomfield (2008) opines that just as oil has polluted the environment of the Niger Delta, so as it pollutes the institutions in Nigeria.

The news of oil discovery had threatened the stability of some governments in the developing world. For instance, in Equatorial Guinea, the news of the discovery of oil in commercial quantities resulted in an attempted coup d’état (Bloomfield, 2008). On the other hand, there are cases where the Western countries try to protect the institutions in order to protect their investments especially South Africa, Sao Tome and Principe. In either case, the impacts of oil and gas discovery on democratic institutions is eminent.

Oil and Gas and Diplomatic Relations

Silverstein (2002) note that specific kind of resources are of relevance and importance for exercising structural power while others are not and that oil and gas is one of the resources that forms a basis for structural power, hence, any country that possesses it attracts global attention. He notes that the strategic place of oil and gas makes global superpowers such Europe-American countries, China, Japan etc. to compete for diplomatic alliance with any country that discovers it especially, African countries. This diplomatic rivalry normally takes various forms. Kirkland (2004) notes that China and Japan oil diplomacy takes different approaches from others, mostly Euro-American oil interests in Africa. China and Japan do not rely on private, commercial interests to access energy resources, instead making use of state-owned enterprises to procure oil and oil products.

They court oil-producing states by offering attractive financial terms for oil projects, extending soft loans, providing development initiatives, technical expertise and economic clout to (re)build energy infrastructure as part of their overall diplomatic bargaining strategies. According to Pakenham (2003), the Japanese government supports overseas oil ventures by fronting risk money and offering loans on favourable terms for exploration and production projects, reducing the costs to Japanese companies, thereby making it possible for them to submit lower bids than could companies from countries that do not provide these subsidies. The Japanese government also offers risk insurance. targeting development aid to oil producers. In Central Asia, Japan launched the Silk Road Energy Mission to Kazakhstan, Uzbekistan, Azerbaijan, and Turkmenistan in 2002 and has intensified bilateral relations with the region through loans and development aids.

China has provided military assistance and development aid to oil exporters, most recently through its $5 billion China-Africa Development Fund. China has tried to avoid tensions with the United States by avoiding oil-producing regions with a strong U.S. corporate, diplomatic, or military presence. China also avoid countries where American citizens are more concentrated. Because of that US will always to increase its citizens in any country that has oil in order to prevent China from making inroads in those countries (Rutledge, 2006).

Kraxberger (2005) argues Euro-American diplomatic strategies follows a very subtle path. For instance, he indicates that the interests in oil and other strategic materials, such as manganese, cobalt, chrome etc, motivated the Bush administration to engaged in a series of military, economic and diplomatic activities. Diplomatically, the Bush administration orchestrated a series of shuttle diplomatic activities with visits of high-rank officials to the African oil-producing countries. For instance, in September 2002, Secretary of State, Colin Powell visited South Africa, Angola and Gabon. Two months earlier, Carlton Fulford, deputy commander of EUCOM, paid a visit to Sao Tome and Principe to discuss the safety of oil workers in the Gulf of Guinea and it was reported the possibility of establishing a US military base similar to the one in South Korea.

In the same year, president Bush hosted heads of state of 10 African oil-producing countries, including Cameroon, Equatorial Guinea, Chad, Congo and Sao Tome and Principe, for a breakfast gathering to secure their promises to back the US campaign against terrorism and protect American oil interest in their countries. In July 2003, President Bush visited five African countries; Nigeria, South Africa, Uganda, Senegal and Botswana. In the next three years, Secretary of State Condoleezza Rice and Secretary of Defense, Donald Rumsfeld also visited Africa where they promised African countries that the US would 'help' them with weapons supplies, military training and other kind of joint activities.

American oil companies benefit from these frequent official exchanges in their expansion of oil production in Africa. For instance, a tiny country, Equatorial Guinea, which used to be a laughing stock in the US suddenly drew US attention and investments when oil was discovered there in commercial quantities. Moreover, a small country like Sao Tome and Principe drew Us attention when there was an attempted coup (Kraxberger, 2005, 32). Countries like to court their diplomatic relation through their oil for development programs and the provisions regulatory and institutional support for governments to help them govern the oil and gas sectors, especially, African countries. All these diplomatic strategies are means of getting access to cheap sources of oil and outcompeting their competitors.

Chapter Summary

This chapter reviewed literature relevant to the study. Oil and gas exploration are always associated with developmental effects. The first discovery and development of oil started in the AD.347 in the Middle East. The development of the industry was made possible by the in technology and the discovery of new routes such as the Suez Canal. Ghana joined the league of oil producing countries in 2010. The history of oil and gas exploration in Ghana can be classified into four distinct phases i.e. phase I to phase IV.

Several theories of have been propounded as far development and natural resources are concerned. However, for the purpose of this study only three theory were considered in detail, namely, Dependency Theory, Frustration Aggression Theory and Resource Curse Thesis. Oil and gas exploration and production poses some economic and diplomatic challenges that necessitates the formation of institutions to deal with those issues. The last section deals with oil and diplomatic relations. The next chapter discusses the methods and procedures used in carrying out the study.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

This study seeks to assess the contributions of Ghana's oil and gas discovery to national economic development and diplomatic relations. To achieve the aim of the study, the study adopted a methodology suitable to the study. This chapter describes the methodology used in conducting the study. The chapter discusses the research perspectives, namely, a critical examination of the study area, research design, population, sample and sampling procedures, data collection instruments used, data collection procedure and data analysis plan as well as the ethical issues.

Research Design

The research design for this study was a case study research design. A case study is an in-depth study of a particular research problem rather than a sweeping statistical survey. It is often used to narrow down a very broad field of research into one or a few easily researchable examples. It is also useful for testing whether a specific theory and model actually applies to phenomenon in the real world (Spicer, 2004). The research, thus involves extensive literature review, interviews and qualitative research method to probe the research questions and arrive at the conclusions. Case study is low cost, interactive and open ended. It gives the researcher more flexibility and can adopt to changes as the research progresses. Though there are disadvantages such as, time constraints, small sample and the tendency of the interpretation to be bias, the researcher deemed it to be the right design for this study because it sets a strong foundation for exploring the ideas and variables for the analysis of the data.

The researcher employed qualitative methods to collect the data for the study. The goal of qualitative research is to understand the research topic more explicitly, from the perspective of the interviewee and to understand how and why they have arrived at this perspective. Qualitative research methodology largely depends on recounting, understanding and explaining complex or interrelated phenomena. This approach was appropriate and aligned to the reasons stated by Saunders, Lewis and Thornhill (2009) that where it is necessary for you to understand the reasons for the decisions that your research participants have taken, or to understand the reasons for their attitudes and opinions, it will be necessary for you to conduct qualitative interview.

Qualitative approach is also suitable because it permitted an in-depth exploration of participants' views. It gives a deeper understanding of the topic and helped in obtaining an edge in knowing the relevance of the study. As the data obtained through qualitative research is the interviewees own responses, it helped in gaining a broader perspective about the topic. Qualitative methods provided a deeper analysis and allows for a richer and an in-depth understanding of how to interpret phenomena (Stake, 1994). This choice was also motivated by Spicer's (2004) argument that qualitative method seeks to understand the world through interacting with, emphasising with and interpreting the actions and perceptions of people. This is in sharp contrast to quantitative research where variables are controlled and in artificial environments. These reasons informed the researcher's decision to use qualitative method to collect the data for this study.

Nevertheless, this methodology has been criticized in scholarly domain for its weaknesses. One of such criticisms is that qualitative research relies too much on the researcher's often unsystematic views about what is significant and important and often the researcher's biases could influence the research findings and interpretations (Spicer, 2004). This is found in the use of open-ended questions that are used in interview questions as well as the provision of leading questions to participants. Furthermore, it is often suggested that the scope of qualitative research is restricted to single cases. This makes it difficult to generalize the findings or replicating the findings in other similar situations. Thus, justification for knowledge gained through qualitative research is questionable taking into consideration the fact that interviews and observations derived from qualitative research are normally uncontrolled and informal.

Irrespective of these criticisms, qualitative research is recognized as an authentic means of generating scientific knowledge that does not require statistical presentations and explanations. This research relied on a number of participants and secondary materials being used in order to be able to generalize the findings.

Description of the Study Area

Ghana is located in West Africa. It is the first country south of the Sahara to gain independence from the British Crown. Ghana shares borders with Côte d'Ivoire (Ivory Coast) to the west, Burkina Faso to the north, Togo to the east and the Gulf of Guinea to the south. For administrative purposes, Ghana has been divided into sixteen regions. Ghana ranks 24th by size out of 54 countries, 14th by population and 13th by population density with area size of 238,538 sq. km. (92,100 sq. mi.). Ghana lies close to the Equator. The Equator passes through the seaport of Tema, about 24 km to the east of Accra, the capital. Its southernmost coast at Cape Three Points where the oil is discovered is 4° 30' north of the equator.

The Population is estimated at 29.4 million. In terms of education, primary and junior secondary school education is tuition-free and mandatory. The Government of Ghana's support for basic education is unequivocal. Article 39 of the constitution mandates the major tenets of the free, compulsory, universal basic education (FCUBE) initiative. The current GDP of Ghana is $47.33 billion with GDP growth rate of 5.6% and per capita GDP of $1,786 (nominal). Agriculture remains a mainstay of the economy, accounting for more than one-third of GDP and about 55% of formal employment. Ghana’s primary cash crop is cocoa, which typically provides about one-third of all export revenues. Other products include timber, coconuts and other palm products, shea nuts, and coffee.

In its international relations, Ghana is active in the United Nations and many of its specialized agencies, as well as the World Trade Organization, the Nonaligned Movement, the African Union (AU), and the Economic Community of West African States (ECOWAS). Generally, Ghana follows the consensus of the Nonaligned Movement and the AU on economic and political issues that do not directly affect its own interests. Ghana has played an increasingly active role in sub-regional affairs including prominent roles in ECOWAS and the African Union. Ghana is a critically important peacekeeping partner; it is the largest African peacekeeping contributor nation to multinational peacekeeping operations (PKO) and the sixth-largest among all peacekeeping contributing nations. Currently Ghana has 3,267 peacekeepers deployed to UN peacekeeping operations.

It has large contingents deployed in Democratic Republic of the Congo (DRC), the Darfur region of Sudan, Lebanon, Liberia, and Cote d'Ivoire, with smaller contingents deployed in Chad, Western Sahara, Kosovo, Southern Sudan, and Georgia. Ghana contributes military and police personnel to UN peacekeeping operations outside of Africa, including nearly 900 troops to the UN Interim Force in Lebanon. The United States provides military support to Ghana through a variety of programs, including the International Military Education and Training (IMET) program and the African Contingency Operations Training and Assistance (ACOTA) program.

The economy of Ghana has a diverse and rich resource base such as gold (which gave the country its first name, Gold Coast), diamond, manganese, bauxite, timber etc. Ghana joined the league of oil producing countries by the close of 2010. However, prospecting for oil and gas begun in Ghana as far back as 1897. On the basis of its geological nature, Ghana has four sedimentary basins which include the Western basin (Tano-Cape Three Points Basin), Central Basin (Saltpond Basin), Eastern Basin (Accra- Keta Basin) and Inland Voltaian Basin (Boateng, 2008). Currently, only one of the Basins is in operation, thus the Western Basin.

However, plans are underway to commerce operations in the other Basins. It is worth noting that the current operations are mainly onshore, no offshore production is taking place yet though the government is putting up plans to start offshore production.

Figure 2: Map Showing the Administrative Regions of Ghana

Population

The population of a research is the total number of all units of the phenomenon to be investigated that exists in the area of investigation which is accessible to the investigator and covers the total set of individuals, objects or experiences with familiar characteristics. The targeted population for the study was the various institutions that regulate the activities of the oil and gas sector as well as government agencies, ministries and institutions that are linked to the oil and gas industry. The staff of the IOCs as well as the rig workers also formed part of the population. These are selected because of their direct relevance to the study. The total targeted sample for the study was 38 but the number that was interviewed was 25 as indicated in Table 1. Table 1 shows the targeted population and the number of people that were interviewed.

Table 1: Targeted Sample and the Number of People Interviewed

Institutions	Targeted Number	Number Interviewed	Date of Interview
GNPC	3	2	23/05/2019
PIAC	4	3	17/05/2019
PC	3	2	03/06/2019
Ministry of Energy	2	2	10/06/2019
GNGC	3	2	13/05/2019
LCP	2	2	20/05/2019
MPC	1	1	04/04/2019
GNPC Foundation	3	1	30/05/2019
GIPC	2	2	28/05/2019
Ministry of Finance	2	2	01/06/2019
US and Norway Embassies	4	2	06/06/2019
Tullow and Kosmos Energy	4	4	12/05/2019
GHEITI	3	1	12/06/2019
OAFID	2	1	21/05/2019
TOTAL	**38**	**25**	

Sampling Procedure

Sample is the acknowledged characteristics and data, where the universe establishes the possible participants of that proportion of the number of units, chosen for the investigation. Sampling involves a careful survey of a chosen proportion of the units concerning a phenomenon, so that knowledge gained from the study by the part will be extended to the whole. It is the use of definite procedures in the selection of a part for the express purpose of obtaining from its description or estimates certain properties and characteristics of the whole (Stake, 1994).

Purposive and snowball sampling techniques were employed to select the participants for the study. Purposive sampling is when the researcher chooses subjects from a population because of their direct relevance to the research questions. Purposive sampling methods were necessary because they enabled the researcher to sample participants based on their qualities, contributions, knowledge and expertise in the area of study. Snowball on the hand is where research participants recruit other participants for a study because of the difficulty in reaching them due to their place of work or time constraints. This approach helped the researcher to reach out to characteristics within the population which were difficult to reach especially the rigs workers and the embassies which are security prone zones and gaining entrée was very tedious for the researcher.

The total sample size was 38 while the number interviewed was 25 which included the following; Ghana National Petroleum Corporation, the Ghana National Gas Company, Petroleum Commission and the Ministry of Energy. These are the institutions that regulate the exploration and production activities of the oil and gas industry; hence their views were paramount to achieving the research objectives. Furthermore, the researcher also interviewed key resource persons at the Local Content Department, Public Interest and Accountability Committee, Ghana Investment and Promotion Center and the Ministry of Finance. This choice was also informed by the fact that these institutions regulates the utilisation of the oil revenue. They provided tremendous insights on the utilisation of the oil revenue.

The researcher also had one-on-one interview with Honourable Mohammed Mutawakuli, a former official for the Mineral and Petroleum Commission, Mrs Adelaide Addo-Feming, the team leader of the Ghana Oil and Gas for Inclusive Development.

Interviews were also conducted with officials from Tullow and Kosmos Energy and some of the rig workers. Lastly, information was sought from the Ministry of Foreign Affairs, the US Embassy, the Norwegian Embassy, the Ghana Immigration Service. These were of important, especially, to achieving the fourth objective that sought to examine how the oil and gas discovery has influenced Ghana's diplomatic relations. Their views helped the researcher to examine the extent to which oi and gas influenced Ghana's diplomatic relations. The researcher also conducted interviews with some of the rig workers.

Data Collection Instruments

The main instrument used was open-ended interviews, developed by the researcher. Interviews are one of the major approaches in collecting data in qualitative research. Interview is a conversation that has a structure and a purpose determined by one party, the interviewer and the interviewee. It is also a professional interaction that goes beyond the spontaneous exchange of views as in everyday conversation; it becomes a careful questioning and listening approach with the purpose of obtaining thoroughly tested knowledge (Silverman, 2006). Compared to other methods, interviews are relatively economical in terms of time and resources.

Interviews make the participants more comfortable since it allows them to feel part of the study; it establishes participants as experts on the subject and encourages them not only to tell their story but also to share their ideas, observations and concerns. Additionally, to ensure a systematic interview process, a semi-structured interview protocol was used in collecting data for the study. An interview guide was created by the researcher to answer the research questions. An interview guide contains an initial set of questions that are to be discussed during the interview. Given that this study employed multiple groups, interview guide helped to maintain consistency in data collection and enhanced comparability of responses between the groups.

Semi-structured interviews also ensured that the researcher obtained all the information needed without forgetting the questions and at the same time gave the participants freedom to respond and illustrate concepts. This is because with semi structured interview, the researcher knew most of the questions to ask but they cannot predict the answers. Another advantage with semi structured interviews is that it allowed the researcher to stay open to new and sometimes unexpected issues that emerged during the interviews.

The study also employed documentary review. This involves official reports, books, articles and news items. Secondary information is most appropriate for comparative research in situations where data is readily available. This provided for rich and robust data and enhanced validity because the outcomes of the study were easily cross checked to ensure validity and reliability. The use of different sources of information, as well as different data gathering methods, helped to clarify and made precise the findings of the research.

Data Collection Procedures

Primary data was sought in order to get the needed information and to achieve the objectives set for the study. The primary data was gathered through interviews with the participants. Interviews were conducted over a definite period of time between March to June 2019. Participation in interview was voluntary for the participants. The various institutions were served letters of permission in March but most of the approvals came in April. For the various companies and departments and official participants, the interviews were conducted at their offices. The research site for individual participants varied, participants were met in the places which they proposed. Prior to the interviews, arrangements were made with individuals and participants as to where they felt comfortable for the interview to be held.

The rationale behind this was to ensure that participants were relaxed and comfortable, while giving them a high sense of confidentiality that would boost honest responses to interview questions. The researcher described and read the aims and purpose of the research to the participants, addressed all questions and concerns and obtained informed consent, prior to the interview. The interviews were conducted in English.

Data Processing and Analysis

Interviews were stored using a tape recorder and written in field note books. To easily reduce the whole bulk of data into analysable units, data was gathered for the un-coded questions and arranged in sequence. Content analysis approach was used to analyse the data. Content analysis is an empirical scientific method used to draw conclusions about a content in different kinds of communications such as interviews, observations, or articles. Content analysis provided insights into complex models of human thoughts and language as well as allowed for coding and categorisation. They were grouped in accordance with similar responses and finally coded in words. The data was subjected to critical analysis so that only the parts that were relevant to the research objectives were filtered. The analysis of data was done in the form of examining and categorising.

Ethical Issues

Values play a very significant role in every research process. From choosing a topic to the analysis of data from the field, there lie a lot of ethical considerations. Ethics refers to rules of conduct, or conformity to a set of principles. O'Connell and Layder (1994, 55) also consider research ethics as the conduct of researchers, as well as their responsibilities and their obligations to those involved in the research and the data itself. A starting point was getting an introductory letter from my Department. Once on the field, the letter was shown to participants and the research interest was well explained to the respondent before the interviews were conducted. It is important for researchers to get informed consent of their subjects before beginning the interview process.

With my kind of topic, it is sometimes intimidating for participants to respond to certain sensitive issues raised. As a rule of research ethic, it is imperative to find a way of using their responses without giving a clue about their identity, or even citing them. On the issue of harm of participants, the nature of my topic did not cause any panic and harm to my informants. Participants were not involved in any physical actions which could cause them physical harm. The study ensured proper protection of respondents whose lives or means of livelihood were at risk due to their responses. Prospective research participants were given as much information as were needed to make an informed decision about whether or not they wish to participate in the study as well as what their responses would be used for.

All key informants were contacted prior to the time of actual interview. This was done through introductory letters that were taken from the department and emails. On invasion of privacy, it is the responsibility of the researcher to protect and keep the identities of participants privacy. However, qualitative methodology largely invades people's privacy by intruding into their private spaces and experiences. Participants were assured of the safety of their identities being kept away from the public eye except those who wanted their names and participation to be made public. As far as possible, all the materials used (notes, diaries, tape recordings etc.) and responses obtained were treated with much confidentiality.

Chapter Summary

This chapter described the research perspectives, presents a critical examination of the study area, research design, population, sample and sampling techniques, data collection instruments used, data collection procedure and data analysis plan. Qualitative research approach was deemed appropriate for this study. The main instrument used was open-ended interviews. Participation in the interview was entirely voluntary. Interviews were conducted over a definite period of time. To easily reduce the whole bulk of data into analysable units, data were gathered for the un-coded questions and arranged in sequence. The analysis of data was done using content analysis in the form of examining and categorising. The researcher captured the data manually. The next chapter presents the results and discussion.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This study seeks to explore the impacts of Ghana's oil and gas discovery on national economic development and diplomatic relations. Qualitative methods were used to collect the data for the study. This chapter discusses the results obtained from the interviews. The analysis took into account the possible outcomes of the ideas expressed by the participants by categorising similar ideas and diverse views alike. The data was discussed under the research objectives vis-à-vis how the institutional and regulatory framework supports the economic development of Ghana, the impacts of the oil and gas sector on the economic development of Ghana, sustainable development and challenges and lastly, Ghana's diplomatic relations in the light of the oil production.

Regulatory Framework and How It Supports Economic Development

Managing an industry as complex as an oil industry requires adequate preparation vis-à-vis institutional and regulatory framework. This stems from the fact that strong and productive institutions leads to development and good diplomatic relations while weak and destructive institutions lead to resource curse and poor diplomatic relations (Gyampo, 2010). Hence, it is very necessary that Ghana should exercise some bit of caution at this stage so as not to sow any seed of mismanagement that will plunge the country into the doldrums of economic stagnation Different time periods mark different phases in the institutional development of Ghana's petroleum sector. The most important period in the institutional development of Ghana's petroleum sector is the period between 1979-2001. This period ushered in the statutory instrument that regulates the sector, aimed at framing a robust regulatory framework for the governance of the oil and gas industry (Panford, 2014).

The first attempt at regulating extractive activities in the international stage was the formation of the Extractive Industries Transparency Initiative (EITI). This was aimed at ensuring effective and efficient utilisation of extractive resources revenue. It was launched at the World Summit on Development in Johannesburg, September 2002. It sets a global standard for transparency in the extractive industries. EITI aims to enhance transparency around the generation and spending of revenues from the extractive sector to ensure prudent use of natural resource wealth for sustainable economic growth that contributes to sustainable development and poverty reduction.

The initiative encourages governments, extractive companies, International Agencies and Non-Governmental Organisations (NGOs) to work together to develop a framework to promote transparency in payments in the extractive industries. The initiative requires companies to declare what they have paid to government as extractive related payments, whilst the government through its agencies also indicate the receipts from the extractive companies. The payments and receipts are then reconciled by an Independent Administrator (IA).

A member of the GHEITI in an interview notes that the Government of Ghana formally committed itself to implementing EITI in 2003, when it signed on to the Initiative in London but it was limited to only the mining sector. The EITI Steering Committee, also known as the Ghana Extractive Industries Transparency Initiative (GHEITI) is the governing body of the EITI in Ghana. However, this did not form a major part of the regulatory apparatus of the oil and gas sector in Ghana. The initiative was extended to the oil and gas sector in September 2010. So far GHEITI has issued four reports in the Oil and Gas sector covering 2010 to 2015. Various stakeholders in the Extractive industry are represented on the committee, such as the Media, Clergy, trade Unions etc.

An interview with a participant from GNPC revealed that the first major step at regulating the oil and gas industry in Ghana was the formation of the Ghana National Petroleum Corporation, formed under PNDC Law 64 in June 16, 1983 and the Ghana Revenue Authority established under the Petroleum income Tax Law, 1987 (PNDC Law 188). GNPC was the forerunner to the legislative instruments that govern the petroleum sector. This law established the institutional framework for the upstream petroleum activities. This law constitutes the bedrock of petroleum legislation in Ghana. More sector-specific legislative and statutory instruments continue to increase as the sector becomes more promising. Section 2 of the statutory law, PNDC Law 64 provides the 'Objects' of GNPC. The main object of GNPC is to undertake exploration, development, production and disposal of petroleum products.

The corporation also has the shared role of ensuring that Ghana gets maximum benefits from the petroleum resources through technology transfer, capacity building, the training of nationals to acquire petroleum industry skills and technical expertise as well as ensuring sound environmental practices. PNDC Law 64 was closely followed by the Petroleum Exploration and Production Law (PNDC 84) of 1984. This law was the first law that made provisions for regulating the sector in areas of exploration and production.

This regulation has been replaced by the Petroleum Exploration and Production Act of 2016. When production started in 2010, there was the need for more regulations to be implemented. This resulted in the formation of the Petroleum Revenue Management Act (Act 815) of 2011 and the Petroleum Commission Act (Act 821) of 2016.

The Petroleum Revenue Management Act regulates the collection, allocation and management of the oil revenue that accrues from the upstream and midstream sectors. All petroleum revenues are collated into a single fund call the Petroleum Holding Fund (PHF). The Ministry of Finance and Bank of Ghana are the 'custodians of the Petroleum Holding Fund conferred on them by the Petroleum Revenue Management Act, (Act 815, Section 25-26). Section 29-40 of the Act mandates the Investment Advisory Committee to assist the Minister of Finance and the Bank of Ghana in the management of the petroleum revenue.

This Act also proposed the establishment of the two long term funds; the Ghana Heritage Fund (GHF) and the Ghana Stabilisation Fund (GSF). While the GSF serves as a buffer against price shocks, the GHF serves the needs of future generation (Act 815, Section 9). Both funds receive allocations from the Petroleum Holding Fund (PHF). This Act aims at ensuring effective and efficient utilisation of the oil revenue by ensuring that government play their role of ensuring accountability, transparency, sustainability and inter-generational equity.

Another important regulation is the Petroleum Revenue Management (Amendment) Act (Act 893). This Act was passed by Parliament on July 31, 2015 to address the limitations of Act 815 as well as the poor performance of the GHF. Section 11 of Act 815 is amended with Section 4 of the new Act, Act 893 which stipulates the percentage of the petroleum revenue that should go into each account. The Act stipulates that 70% of the petroleum revenue should go into the Annual Budget Fund Amount (ABFA), while the other 30% goes into the GSF and the GHF at a percentage determined by the Minister of Finance. Section 5 of Act 893 which is an amendment of section 12 of Act 815 also stipulates the conditions under which transfer can be done from the stabilisation fund. The conditions are; alleviating shortfalls in petroleum revenue, transfer into the Contingency fund and repayment of debt (PRMA, 2015).

The Amendment further stipulates that transfers from the stabilisation fund for the sake of alleviating revenue shortfalls shall not exceed 75% of the outstanding balance in the fund. Moreover, section 13 of Act 893 which amends section 57 of Act 815 provides provisions as to the amount of funds that should be given to PIAC from the ABFA in a measure that will ensure greater oversight, accountability and transparency of the oil rent. It is hoped that these remedial measures should in the long term address the acknowledged deficiencies which in the past, have stalled the growth of the Ghana Petroleum Funds. Initially set at US$250m at its inception, the threshold minimum amount for the stabilisation fund was reduced to US$150m in 2015 and currently stands at US $100m (*Business and Financial Times*, July 12, 2017). It may well take another period of sustained growth in oil prices for the funds to be replenished.

The Petroleum Commission Act (Act 821) is another salient attempt to regulating the sector. This Act gives birth to the Petroleum Commission of

Ghana and mandates it to regulate the upstream sector. The mission and objects of the commission are stated in section 2 of the Act. The main object of the commission is to regulate the utilisation of petroleum resources as well as to co-ordinate policies regarding the sector (Act 821, Section 2). The commission also has an additional responsibility of ensuring compliance to the regulations that governs the sector and the receipt of applications and issue of permits for petroleum activities, thus the role of a licensor (Act 821, Section 3). The commission also plays the advisory role that was initially conferred on GNPC.

One of the major efforts towards regulating the industry is the Petroleum Exploration and Production Act, 2016. This Act produced the Ghana's Hybrid Petroleum Agreements which supports an open competitive bidding in the acquisition of petroleum license as well as direct negotiation or a combination of the two. However, the Minister of Energy has the right to circumvent a bidding process and enter into direct negotiations in a prior competitive bidding agreement. The Hybrid Petroleum Agreements offer a great deal of flexibility in blending of licencing procedures, royalty payments, and produce sharing. As such, they form a tax- and royalty-based system with minority state participation (the state is represented by GNPC, which holds a 10–15% share).

The Act also stipulates areas in which the petroleum revenue should be spent on. According to the Act, the management of the petroleum resources should give priority to the agricultural sector, infrastructure and service delivery in health and education, human capital development, strengthening of institutions, rural development, environmental management and the social well-being of the physically challenged or handicapped and other disadvantaged Ghanaians. Closely related to this Act is the Petroleum Commission Fees and Charges Regulations Act, 2015 (LI2221). This Act provides the framework for determining the fees to be paid to the commission by participants in petroleum activities. Pursuant to Act 821, the Petroleum (Local Content and Local Participation) Regulations were passed in July 2013 among other things to promote the use of local expertise, goods and services, business and financing in the petroleum industry value chain and their retention in the country.

Some of the important regulations' worth noting are the Petroleum (Exploration and Production) (Health, Safety and Environment) Regulations, 2017 (LI2258), the Petroleum Exploration and Production-Data Management 2017 (LI2257), Petroleum (Exploration and Production) (General) Regulations, 2018 (LI2359). LI2258 provides the framework for regulating the negative effects of petroleum activities on health, safety and the environment. This applies to contractors, subcontractors and other players in the industry. LI2257 also regulates the reporting and management of data obtained from the conduct of petroleum activities within Ghana while LI2359 regulates the procedures and conditions for granting petroleum agreement. These include qualification requirements, terms and conditions for open negotiation and competitive rendering procedures and direct negotiations (Oil and Gas Law Review, 2017).

In the area of the environment, four institutions have been charged with the responsibility of ensuring that the oil is produced and managed in an environmentally friendly manner. These institutions are the Environmental

Protection Agency (EPA), Ministry of Land and Natural Resources (MLNR), Ministry of Energy (MOE) and the Ministry of Environment, Science and Technology (MEST). They formulate, implement and monitor all the activities relating to the environment. They coordinate in delivering their duties.

These regulations represent a milestone in the legislative framework of the oil and gas industry in the international stage. One important thing worth noting is the fact that the regulatory framework has covered every area of the oil and gas industry. A World Bank report 2017 contends that Ghana has one of the strongest regulatory frameworks in the oil and gas industry (World Bank, 2017). But the salient question worth asking is whether the robust regulatory framework has the potential to help translate the petroleum revenue into developmental gains vis-à-vis, the ability to ensure that government officials comply to the regulations governing the sector to ensure that domestic oil revenue is utilised efficiently and also to ensure compliance by the international oil companies. These arguments will be explored in the next section.

It is worth noting that every extractive sector of a country strives on sound policy, legal and regulatory environment (Panford, 2014). The governance framework of every petroleum regime represents the future as to how the resource will contribute to economic development through proper government relations and building strong links between the sector and the rest of the economy. As indicated early on, the Extractive Industries Transparency Initiative (EITI) is an important step to ensuring effective and efficient utilisation of extractive resources. The initiative was first limited to the mining sector until 2010 where there was the need to extend it to the petroleum sector.

As indicated earlier, the initiative aims at helping countries to make effective use of their resources by ensuring transparency through making available all receipts from international oil companies and the international oil companies will also make available all payments made to the local governments to be reconciled by an Independent Administrator. However, a lot of deficiencies were observed in the EITI in that its mandates are not compulsory for members to comply and there is also absence of legal apparatus backing up the enforcement of EITI demands. The ensuing quote captures the reality better:

> *Ghana can decide to comply to the obligations of the initiative or not. This makes the initiative an ineffective tool in helping to manage the petroleum sector in Ghana. This accounts for the outright refusal of government to publish contracts that were signed with the oil companies (Interview, GHEITI official, June 2, 2019).*

It is also important to note that Ghana still lacks critical legislative instruments (LI) and regulations in the oil and gas industry. Some of the laws are not comprehensive and up-to-date because some were passed when Ghana was not a commercial oil producer and they are still not amended. The regulatory framework is inadequate in dealing with a sector as complex as the oil and gas industry. This point was well-espoused by a participant when he noted that:

> *Ghana still does not have a complete complement of the governance apparatus required for the efficient management of the oil sector; the outstanding instruments necessary for regulating the sector have not been put in place.*

By outstanding instruments, he meant four things, namely:

> *Regulations to the Exploration and Production (E&P) Act 2016 (Act 919), work progress on the digital cadastral system which supposed to be done by the Petroleum Commission, the delay in finalising the metering regulations and parliamentary approval and the uncompleted work on the Strategic Environmental Impacts Assessment (Interview, Ghana Institute of Governance and Security official, May 23, 2019).*

Panford (2018) shares the same concern when he argues that PNDCL Law 64 and PNDCL Law 84 deserve special attention and immediate replacement. PNDCL Law 64 statutorily created the GNPC and allowed it to acquire a 10 percent stake in all Ghanaian oil fields and regulate the industry's activities using the Model Petroleum Agreement (MPA) (2000). After nine years of commercial oil production, PNDCL 84 is still the main law for oil-related operations. One of the major causes of this regulatory deficiencies is that Ghana rush into its oil production without strong regulatory framework in place. Uganda discovered commercial oil reserves in 2006 however, production never started until 2018. To buttressed this assertion, a participant argued that:

> *The quest for oil rent by political parties has triggered Ghana to quickly commence commercial production without strong and effective legislative and institutional arrangements in place before successive governments secure deals with international oil companies and subsequent production (Interview, PC official, May 23, 2019).*

This argument was further confirmed by a World Bank report that Ghana started oil production at a time when technical skills was in acute shortage along the value chain as well as considerable inadequate capacity requirements of state institutions that would guarantee efficient management of the sector (World Bank, 2010). Gary (2009) made similar observations when he notes that the NPP's second term in office (2004-2008) was punctuated with concerns that were privately expressed. One of these concerns was that the government of Ghana's desperation for quick cash, pushed the Jubilee consortium to do a 'quick and dirty' plans in order to cut corners to quickly exploit the site in order to take advantage of the oil revenue.

This desperation did not end after the NPP tenure of office. The NDC took over from the NPP in January 2009 and did everything possible to ensure that oil revenues were available in time to assist them to secure another tenure of office for the second time in 2012. This rush in production resulted in unproductivity in fiscal policies as well as unregulated framework environment. Even though the commercial discoveries in 2007 triggered the need for properly regulating the sector, this was not done until 2011 thus a year after production had started where parliament made efforts to restructure the dual commercial and regulatory mandate of the GNPC. The following statements gleaned from an interview reflect the point better:

> *Desperation for their first oil despite numerous warnings from stakeholders and concern citizens alike to at least extend the production to the first quarter of 2011 made government to turn deaf ears to the views of the citizens and went ahead to produce the first oil in 2010 and at the end of the day the country benefits nothing from the first oil produced (Interview, Energy Ministry official, 27 May 2019)*

In the light of this weakness of state capacity, the low revenue received in 2011 and 2012 from the oil industry becomes more understandable. The low revenue returns in 2011 and 2012 thus UD$444 million and US$541million respectively was a direct result of the weaknesses of state capacity to establish and enforce higher taxation rates on the oil companies (PIAC, 2014). The international oil companies took advantage of the weaknesses in the institutions and regulatory framework and duped the nation of all the first oil that was drilled in the Jubilee Field. This stems from the fact that the law regulating the collection of taxes and revenues was passed in 2014 four years after production had started. This reflects van der Ploeg (2011) assertion that weak institutions negatively affect a country's share of resource rent.

The findings about limited autonomy and funding is equally revealing. The study reveals that the PC, which regulates the issue of licenses to the oil companies has limited autonomy to take independent decisions. It was observed that there have been numerous interventions in the affairs of the Petroleum Commission especially, from the Ministry of Energy. For instance, contracts that were opened to competitive bidding by the commission were circumvented by the Energy Ministry to enter into direct negotiation. A classic example is the AGM deal. This deal is discussed in details in subsequent pages. This is a sign of the manifestation of the resource curse thesis. This supports Mehlum et al. (2006) argument that oil and gas resources leads to rent-seeking and corruption by political leaders which drag down economic development.

On the issue of underfunding of the institutions responsible for enforcing the regulations, PIAC 2015 and 2017 reports revealed that PIAC is inadequately funded in a manner that affects the execution of its core mandates (PIAC, 2015 & 2017). The reports state that PIAC was not given funds for any of its planned programmes and activities in 2015 and 2017 which brought the operations of the committee to a standstill for about six months. This is the institution that regulates the utilisation of the oil revenue to ensure transparency and accountability in the disbursement of the oil revenue. With governance gaps, corruption and mismanagement will be inevitable.

Another teething challenge in the regulatory framework is the lack of political consensus pertaining the utilisation of the oil revenue. For instance, despite the governments' efforts through the Petroleum Revenue Management Act (PRMA) to safeguard Ghana against the Dutch Disease by ensuring efficient revenue allocation and efforts to prevent the oil revenue from being used as collateral for loans, it became a bone of contention when the bill was presented to parliament especially, clause 5 of the bill that did not support the use of the Petroleum Holding Fund as collateral for loans. When the bill got to parliament it became a political tug of war between the two major parties in the country namely, NPP and NDC. A member of parliament from the ruling NDC government at the time proposed that the clause should be amended to allow for collateralisation of the oil revenue.

This amendment was upheld in a vote and the voting followed strictly party lines. At the end of the day, the NDC which had the majority in parliament won the vote and that gave the ruling NDC the green light to use the future revenue from oil to secure loans. A major lapse of this regulation is that the Minister of Finance can evade public scrutiny because the PRMA has not made provisions as to the amount that should be collateralised by the minister. A participant bemoaned that:

> *This flaw in the PRMA gave rise to the $3 billion oil-backed loan given to Ghana by the China Development Bank because of the laxity created by the law which creates room for the government to borrow outside the transparent and accountable framework (Interview, PC official, June 12, 2019).*

This point reflects a section of the resource curse thesis. A fundamental insight from the resource curse literature is that, in economic terms, the implicit discount rate used by politicians may exceed the rate of interest by the probability of the politicians being removed from office. Hence if a political faction expects to be expelled from office in the near future, it will extract oil or minerals much faster than is socially optimal and will also borrow against future oil revenues (van der Ploeg, 2011).

Apart from domestic challenges in the regulatory framework, the role of international actors in shaping the institutions and regulatory framework for Ghana's oil and gas industry cannot be overemphasised. The development of the regulatory framework for the oil and gas sector of Ghana received inputs from international actors because most of the explorations are done by international oil companies. These international actors for instance Norway, claim to impact knowledge of best practices but in essence it is a way of creating good will which will place them in a favourable position so as to participate commercially in the fledging oil and gas industry. The laws and policies that are developed and established are rated high in terms of international best practice, however, they are framed in ways that suit the framers to create room for the liberalisation of the sector. This hidden motive instigated the reduction in the composition and roles of GNPC as a NOC. A participant had this to say in connection to this:

About 60% of what we call regulatory framework in the oil and gas sector is a photocopy of Norway's regulatory apparatus. GNPC was deemed as too powerful and amorphous by the international community hence needed to be restructured to fit for purpose. This was a way of opening the sector up so that they could contribute to the governance of the sector. This led to the transformation of GNPC into a NOC and the reduction in the regulatory roles of GNPC (Interview with GNPC official).

The influences of these players are teething challenges to deal with due to the power relations. This power relations stem from unequal playing ground in terms of technical expertise, financial capacity, negotiating tools etc. The IOCs have extensive experiences and high technical capacity in the oil and gas sector as well as an advantage of better understanding of economic rents and the value of the oil. The unequal technical know-how and financial capacity position the international actors in a place of advantage to influence decisions at the negotiating table. This argument was supported by a participant when he indicated that:

These influences result in the formulation of weak and difficulty-to-enforce regulations that give the international actors the opportunity to get cheap deals and contracts (telephone discussions with MOE official, Accra, 3 June, 2019).

These interferences lay the foundation for the dependency syndrome where the natural resource endowed countries depend on the global superpowers for policy formulations by so doing creates a permanent bilateral relation between the developing and developed countries. It also creates room for exploitation.

One major effect of this weak regulatory framework is that it has granted international oil companies the opportunity to violate domestic laws without any punitive measures taken against them. PNDC Law 84 which provides the regulatory framework that governs the sector is too porous, hence, incapable of providing proper regulation for the sector. The dispute over the spillage of toxins by Kosmos Energy in its operational area is one the areas in which the regulatory framework proved incapable. Ghanaian government attempted to exact penalty against the company, however, PNDC Law 84 could not back up claims. Besides, there was also a dispute with the same Kosmos Energy over the disclosure of proprietary data to third parties without the express approval of GNPC. This action also required punitive measures against Kosmos Energy. The government tried to exact penalties but again PNDC Law 84 could not provide any legal basis to exact penalty.

Moreover, the regulatory framework has not made provision for right to first refusal by the government of Ghana in case a company tries to sell off its stake without the express approval of the government of Ghana. Normally, in such a case, the government of Ghana supposed to give its first acceptance before such a transaction can take place. For instance, the right to the claim of first refusal when Kosmos Energy sought to sell its stake in Jubilee was denied because the right to first refusal was unsupported by PNDC Law 84. What this implies is that companies can sell off their stake at any time whether the government agrees or not which can cause financial loss to the country. One of the consequences was outlined by a participant when he said that:

> *The government of Ghana lose millions of dollars when the EO Group of companies sold their stake in the Jubilee Field and made millions of profits (Interview, Energy and Mineral Commission official, June 4, 2019).*

This regulatory and institutional deficiency does not exclude the gas sector. It was observed that the lack of clarity about some aspects of the institutional structure of the gas sector continues to be an issue of major concern. This stems from the fact that there is no clear distinction between the role of GNPC and GNGC in the gas sector. Though pockets of roles and responsibilities punctuate the sector as defined by law through legislative and institutional decisions, it was observed that there has been consistent failure to fulfil the legislative intentions in practice. This implies that there is an institutional gap in the institutional structure of the gas sector.

From the burgeoning arguments, it is clear that though the government has made great efforts to regulate the activities of the oil and gas industry in Ghana, the regulatory framework is not without challenges. Though the regulatory framework has covered every area of the sector, it is not capable of meeting the diverse challenges associated with the oil and gas sector. Moreover, though there are institutions that are also put in place to enforce these regulations enforcement of the regulations is a daunting challenge, coupled with interference from political parties and the international community among others.

The available evidence suggests that the institutional and regulatory framework may not be able to help the oil and gas sector contribute meaningfully to economic development. This has affected the impacts of the oil and gas sector on the economic development of Ghana. The next section examines the impacts of the oil and gas sector on the national economic development of Ghana.

Impacts of the Oil and Gas Sector on Ghana's Economic Development

Oil and gas resources have contributed in many diverse ways to the development and advancement of many economies. A classic example as indicated early on is the case of Norway (Dartey-Baah, Amponsah-Tawiah & Aratuo, 2014). Gross Domestic Product is expected to increase while revenues are also expected to be sizeable through FDI. The world Bank report pecked the estimate at US$1 billion per year from the period of 2011 to 2023, which represent about 5% of GDP (World Bank, 2009). Revenue is expected to accrue from the ABFA for the financing of developmental projects like health, education, agriculture and the provisions of jobs for the youth, which can contribute to the diversification of the economy. There is also hope that government will extract some benefits from the natural gas which is a by-product of the oil production.

There is also hope that the oil and gas industry will lead to technology sharing from the IOCs and other Corporate Social Responsibilities from the IOCs that could boost the development of the country. The impacts of the oil and gas on economic development is viewed in two phases, namely, the benefits from domestic oil activities vis-a-vis, technological development, contribution to government revenue, infrastructure and employment; and the second part deals with other trickle-down benefits that are associated with the oil and gas industry.

Benefits from Domestic Oil Activities

One of the areas that the oil and gas industry have impacted greatly is the area of training and skills acquisition. GNPC, as a Jubilee Field partner and Ghana's NOC, seeks to ensure that more value-added goods and services are provided through the utilisation of Ghanaian human and material resources. It plans to achieve these goals by closing the gap between the industry requirements and the existing training schemes. An interview with an official revealed that:

> *GNPC involves in many training programs, such as collaborating with the rig workers to train fourteen sample catchers. These technicians make it feasible for GNPC to participate in Exploration, Development and Production (EDP). GNPC has also collaborated with Tullow to train fourteen midlevel senior geoscientists and other professionals to add to the pool of those in the industry called petrotechnicals (Interview, GNPC official, Tema, 5 April 2019).*

Furthermore, and more importantly is the addition to the supply of local talent for oil and gas in other ways, GNPC offers scholarships for students in undergraduate and postgraduate levels to place more Ghanaians into the pipeline for future deployment. In 2019, GNPC has offered scholarship to 200 Ghanaians to study Medicine in Cuba. These comprised both undergraduates and postgraduates' students. It also collaborates with Schlumberger Technical Services and other companies to provide in-house training for workers while partnering with SAM TECH, a local company, to create computer software to increase the amount of domestic-information and communication technology experts for oil and gas.

GNPC funds have been used to train government officials in petroleum-related fields to boost the public sector's capacity to oversee the exploitation of oil and gas. To enhance broad local participation, especially, by indigenous tradesmen and entrepreneurs, GNPC established a fabrication plant to train local personnel and support indigenous enterprises to bid for oil and gas contracts (GNPC, November 22, 2018).

The oil and gas sector has added to government revenue in the form of tax, royalties and Foreign Direct Investment inflow. Revenue from the oil and gas sector have been allocated to what is term as 'priority areas.' These include; agriculture modernisation, capacity building, expenditure and amortisation of loans for oil and gas infrastructure and road and other infrastructure. In 2017, the priority areas were revised to reflect the Government of Ghana's medium-term development strategy and policy objectives. This revision was in line with Section 21(6) of the PRMA. The revised areas are agriculture, physical infrastructure and service delivery in education and health and road, rail and other critical infrastructure development. Figure three (3) and Table two (2) shows the total revenue received from the oil and gas sector in the form of tax, royalties and others, and the amount expended on each of the priority areas from 2011-2018 respectively.

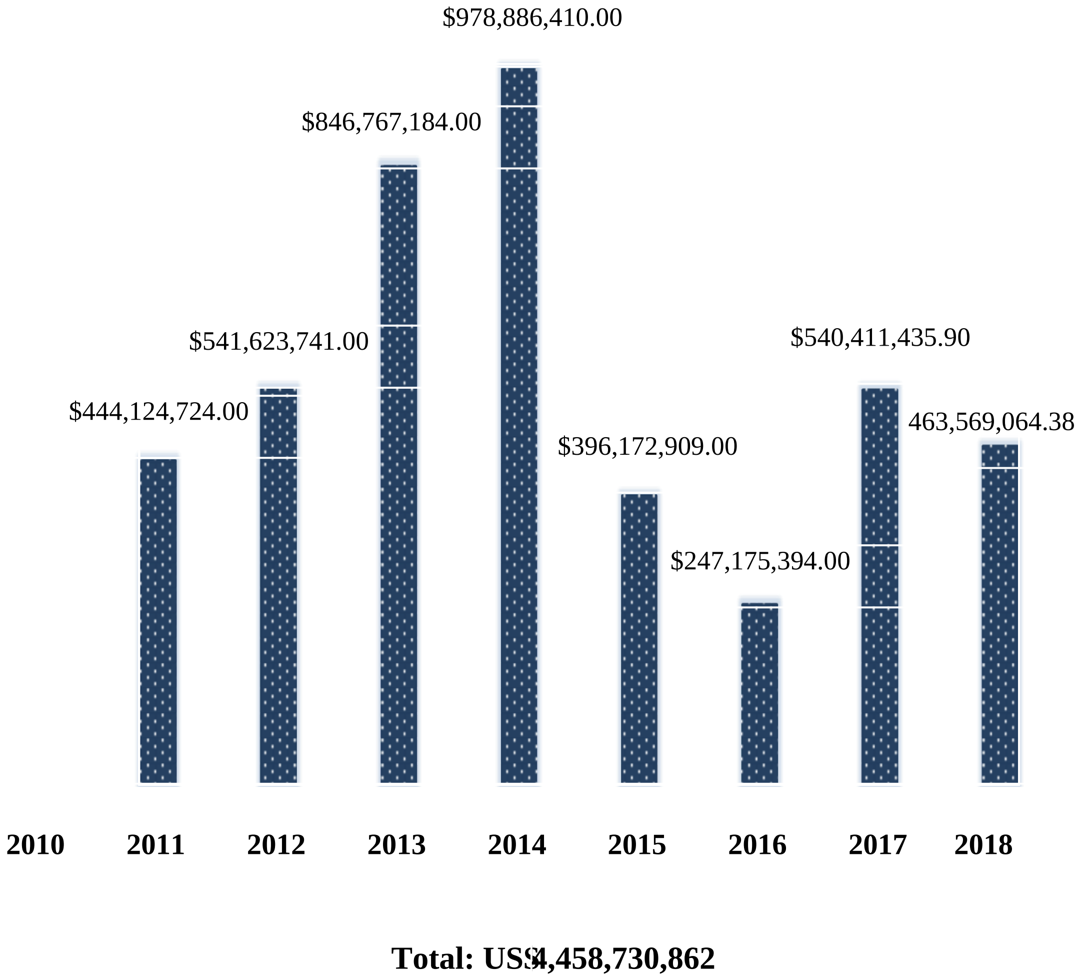

Figure 3: Petroleum Revenue for 2010-2018 (PIAC, 2018)

Table 2: Distribution of ABFA to Priority Areas, 2011-2018

Priority Areas	**2011**	**2012**	**2013**	**2014**	**2017**	**2018**	**Total**
	Amount (GH¢	**(GH¢)**	**(GH¢)**	**(GH¢)**	**(GH¢)**	**(GH¢)**	**(GH¢)**
Amortisation of Loans for Oil and Gas Infrastructure	20,000,000	100,000,000	137,920,847	421,005,419	-	-	678,926,266
Agriculture Modernisation	13,147,652	72,471,824	13,604,329	269,848,985	-	-	369,072,790
Road and Other Infrastructure	13,147,652	72,471,824	13,604,329	269,848,985	13,147,652	72,471,824	454,692,266
Capacity Building (including Oil and Gas	750,000	111,959,738	-	132,893,097			245,602,835
Physical infrastructure and service delivery in education	-	-	-		465,913,085.00	417,045,522.97	882,958,607.97
Physical infrastructure and service delivery in health	-	-	-	-	50,000,000.00	11,265,085.38	61,265,085.38
Total	261,539,420	516,834,831	543,782,682	549,400,109	658,543,841.2	1,202,308,483.35	5,385,035,700.7

Source: PIAC (2018)

The contribution of the oil and gas industry to Gross Domestic Product (GDP) has been phenomenal. Ghana experienced one of the strongest growth numbers in the world at 14.4 percent in 2011, up from 8 percent in 2010, according to the Ghana Statistical Service (GSS). Ghana's GDP growth hit 8.5 percent in 2017, attributed to strong performance in the oil and gas sector as well as significant growth in the country's industrial sector.

In terms of infrastructure, the country can boast of strategic investments such as the Atuabo gas facility which is now contributing to Liquid Petroleum Gas (LPG) consumption in Ghana. According to the Ministry of Finance and Economic Planning, between 60 and 65 percent of domestic LPG consumption comes from the Atuabo gas plant which has a major effect on demand for foreign currency used to import such products into the country (MOFEP, 2018). It is a remarkable achievement, using proceeds from the petroleum revenues to build the gas plant. The Atuabo gas processing plant had provided jobs for many within the catchment area, and for both technical and non-technical people in the oil and gas sector. The sector has helped in the training of technical people for the industry, so Ghana can also boast of strategic human resource that should help the country become self-sustainable in terms of their sole engagement in the sector.

Trickle-down Benefits from the oil and gas industry

Ghana has benefited in no small way from other trickle-down benefits, thus apart from the revenue that accrues to the state from the oil and gas industry directly. These do not include only those from the oil companies but benefits that are enjoyed indirectly as a result of the oil production. For instance, as the leading Jubilee Field operator, Tullow has created an induction for indigenous artisans and train or educate Ghanaians for promotion to management and supervisory positions. Tullow led the Jubilee partners to build the first-of-its-kind training facility at Takoradi Technical University which started in 2012 to train Ghanaians in areas relating to oil and gas. In addition, it awarded scholarships to fifty Ghanaians for postgraduate training in geosciences, marine sciences, engineering, environmental study, forestry, and hospitality through the British Council (Tullow, January 26, 2018).

Another contribution is Kosmos Innovation Centre. As part of its Corporate Social Responsibilities activities, Kosmos Energy has established an innovation centre aim at equipping Ghanaians with business ideas and capacity building. Beneficiaries are taken through a nation-wide tour so that they can identify challenges in the agricultural sector so as to proffer solutions to those challenges. Those with good business plans are provided with financial support up to $50,000 to build their businesses. Existing businesses are also provided with support to boost their businesses. Moreover, opportunities are provided for Ghanaians to partner with foreign companies in businesses as well as explorations. This program has been going on for the past four years and so far about 200 Ghanaians have benefited from the initiative. Interview with some of the beneficiaries revealed that the program has helped many Ghanaians in many respects, especially, in job creation.

It was observed that US support for Ghana intensified especially, in the area of elections from 2008 and specifically, the 2016 elections. This was done to ensure that the elections would be conducted peacefully in order to safeguard their investments in Ghana especially, in the oil and gas sector. USAID and the State Department provided $7.4 million in program support for Ghana's 2016 election, including $2 million channelled through the local non-governmental Center for Democratic Development (CDD). It supported civic education and election monitoring activities by the civil society Coalition of Domestic Election Observers (CODEO), which also conducted a Parallel Vote Tabulation (PVT, i.e., a random sampling of polling station results used to verify the accuracy of official election results).

Moreover, in 2016, US provided technical assistance to Ghana’s Electoral Commission and conflict prevention efforts, including a $1.2 million UN Development Program as a conflict prevention initiative (MOFEP, 2016). A participant noted that US-supported CODEO PVTs in 2008, 2012 and 2016 appeared to contribute to public trust in those close elections. A case in mind was the 2016 election when the US Ambassador to Ghana ran to the office of the Presidency when the election results were delayed. This was a way of avoiding any violence that could affect their investments (Ghana News Agency, December 7, 2016). These assistances are geared at ensuring security in the election outcomes in order to protect their investments in Ghana, especially, in the oil and gas sector where their investments are massive.

Another notable development was that Ghana is eligible for US African Growth and Opportunity Act (AGOA) duty-free trade benefits in 2015 though the proportion of Ghanaian exports to the United States benefitting from AGOA tariff preferences varies considerably (3% in 2015 and 42% in 2017). This was as a result of oil and gas production. Annual Foreign Direct Investment (FDI) has generally grown in recent years, especially in the petroleum sector. According to the UN Conference on Trade and

Development, FDI flows into Ghana averaged $3.3 billion annually in 2014, 2016, and 2018 while FDI stock averaged $26.5 billion (UNTAD, 2019).

Good governance is crucial to private sector development. Norway provides capacity building in key state sectors in Ghana through its 'Oil for Development Programme' and follows up with regular political dialogue on the implementation of the improved policies and regulations in the oil and gas sector. The Embassy cooperates closely with Norfund, Norway's Development Finance Institution to provide financial support to Ghanaians entrepreneurs. They established a regional office in Ghana in 2018 to offer expertise in the oil and gas industry. The Embassy regularly collates experiences from Norwegian oil companies operating in Ghana and actively engages in political dialogue with the Government of Ghana and other relevant partners to improve the environment for doing business.

Despite these contributions to economic development, there are, however, not without challenges. One of such challenges is misappropriation of oil revenue on the part of leaders. PIAC (2018) report states that some of the payments that were expected to go into the Ghana Petroleum Holding Fund (PHF) went into other unidentified areas. Apart from this, it is also observed that most of the surface rentals went into government Non-Tax Revenue Account which was not accounted for in the PHF.

On June 21, 2019 PIAC disclosed that monies from the oil fund that were meant for developmental purposes were used to pay delayed salaries of government workers. This discloser was made by Mr. Kwame Jantuah, the Vice Chairman of PIAC. He indicated that 'Oil monies have been allocated for projects, we get to the grounds and the projects are not there'. He stated that 'we are told the monies are used to pay delayed salaries and nothing is done'. He mentioned that six projects were supposed to be executed in the three Northern regions of Ghana thus Upper West, Upper East and Northern regions but when they inspected the projects, 50% of the projects were non-existent (Dadzie, 2018).

Apart from the misappropriation of the oil revenue, there are also challenges in the contract provisions or petroleum contracts. A classic example of such contracting deficiencies is the AGM petroleum deal mentioned earlier. This deal was signed with the Norwegian oil company, Aker Energy in 2013 and renegotiated in 2019. In relation to this deal, a former CEO of GNPC, Alexander Kofi Messah Mould stated that 'anybody who approved this has caused financial loss to the state. If anybody approves this, he is either useless and does not understand the basis of financing, or there is a benefit' (Ghanaweb, May 11, 2019).

He said this at a Public Forum on the '$30 billion State Capture in Ghana's Oil industry' organized by the Caucus for Democratic Governance, Ghana (CDG-GH. The initial agreement gave the Ghana a 49% stake but the renegotiation downsized Ghana's share from an initial 49% to 18%. Mould again stated that 'so my question to them is what information made them change the deal that many of us don't understand, that changed government's 49% share to 18% percent? I'm puzzled'. Apart from Alexander Mould, other officials also expressed concerns about the deal. A former top official of Standard Chartered Bank in both New York and Ghana described the accelerated way in which the deal was signed as 'shameful'. The deal was pushed through parliament in an emergency recall of Parliament and subsequent approval without due diligence.

The chairman of the Public Interest and Accountability Committee also regrets the recent questionable contracts and contracts reviews saying ‘you don’t renegotiate contract in a week’ in relation to the same deal. Dr. Manteaw was particularly worried about the discretionary powers given to Minster of Energy stating that it opens him up for corruption and bribery. Mr. Franklin Cudjoe, president of the policy think tank, IMANI-Africa, also described the whole renegotiation process as an ‘Economic sabotage’ aimed at short-changing Ghana because to him the process did not make sense. Paa Kwesi Anaman, the Executive Director of Institute for Energy Security (IES) in connection to the same contract, expressed disappointment over a new trend in the oil sector where ‘faceless’, ‘shapeless’ and ‘formless’ companies spring up ostensibly to dupe the state in contracts.

The Member of Parliament (MP) for North Tongu Constituency, Samuel Okudzeto Ablakwa says that copies of the deal were not even printed for all the 275 MPs to peruse so they could consult experts before voting. He says that many MPs did not see the document yet voted in line because ‘this is what the President wants’ he said (Ghanaweb, May 11, 2019).

The same concern was expressed by Panford (2017) when he argued that the quest for quick Foreign Direct Income made the government to lease out contracts at cheap prices that after a decade of oil production no significant change is experienced in the real-life situation of Ghanaian. The $1.25-1.4 billion estimates which was based on a daily production of 120,000bpd has never been materialise. The highest output so far has been 114,000 barrels per day. Ghana's revenues from the oil and gas sector in some instances have always been half of the estimated revenue (PIAC, 2018).

Another area that demands attention is the area of Local Content Participation. Ghana's regulatory framework has made enough provision for local content in specific requirements in the Petroleum (Local Content and Local Participation) Regulation 2013 LL2204. According to the regulations, the use of local goods and services should increase from 10% at the beginning of operation to 50% in five years of operation and 60-90% after ten years. In the area of employment and training, intake into managerial positions is supposed to increase from 30% at the start to 50-60% after five years of operation and 70-80% after ten years. Provision is made for general workers, technical staff and non-skilled workers. In this regard, the law stipulates that 80% should be local people from the beginning of contract, 90% after five years and 100% after ten years (LI2204, Section 2).

The local content provision has seen some level of commitment in terms of numbers. Information from the Ministry of Finance and Economic Planning (MOFEP) shows that 840 out of 1500 workers in 2012 were Ghanaians while in 2014, out 7000 workers in the oil and gas industry, 5600 were Ghanaians representing 80%. Also, in 2017, out of the 474 business entities that registered with the Petroleum Commission, 321 representing 67.72% were Ghanaians, 102 were foreign and 46 were jointly owned (MOFEP, 2018). From the numerical point of view, this data looks appealing but in terms of real revenue accruing to these local workers the data is so disappointing. The Ministry of Finance and Economic Planning 2018 report states that out of $6,242 billion contracts that were issued from 2010-2015, only a meagre of $1 billion went to Ghanaians which represents only 16%. The implication of this phenomenon is that Ghana gets only $16 in the form of local goods and services, salaries/wages out of every $100 spent on the oil and gas sector of Ghana (MOFEP, 2018). An interview with a petroleum engineer at Takoradi, Wetherford is more revealing on this issue:

> *The minimum wage is used to pay us despite our tedious work. This is caused by the weak regulation and enforcement system that is unable to cater for the interest of Ghanaians. The local Content Law should contain the salary packages because the petroleum sector comes with its own risks and labour and it is an exploitation to receive the amount of pay that is given to us (Interview, Petroleum Engineer, May 3, 2019).*

He however fails to disclose the amount of salaries they are paid for security reasons. In line with this argument, a participant also noted that:

> *In formulating the local content law, the emphasis was so much on numbers not on the value hence, you can find the percentage required in numerical terms but if you take their aggregate pay it is not up to 2% of one of the expatriates (Interview, Local Content official).*

A very important local content item that needs a careful attention is local refinery. It was observed that Ghana has not been able to refine the oil that is produced locally. All the crude oil including the nation’s share is sold at international markets. A member of the Ghana Investment and Promotion Centre argues that the reason for this is that Tema Oil Refinery (TOR) is not efficient and that crude oil from Ghana is not technically compatible with

Tema Oil Refinery physical plant, hence, it will make no economic sense for GNPC to give their share of the oil to TOR. He stated that:

> *While other refineries are refining over millions of barrels a day, TOR refines 26,000 barrels a day. If GNPC should give their share of the crude oil to TOR, they cannot pay back within the 60 days stipulated by the law. Besides, it cannot compete internationally considering its output per day. So, it is better for GNPC to sell its share of the oil at the international markets than to give it to TOR (Interview, official, Ghana Investment and Promotion Centre).*

In terms of financial capacity, he indicated that:

> *TOR is not financially strong to process the crude oil for GNPC. TOR has not been able to pay its workers for last month (thus May, 2019) and today is the 12 day of the month (June). What is the guarantee that if they are given the nation's share of the oil, they can process it? (Interview, Ghana Investment and Promotion Centre official, June 12, 2019).*

However, Mr Osei Isaac, Managing Director of TOR disagree with this argument on the grounds that TOR had refined TEN crude oil in the past which gave Ghana good yields in terms of finished products so refining crude oil from Jubilee and Sankofa should not be a problem for the refinery and that TOR boilers were designed to process light sweet crude which is drilled in Ghana. He argues that the good yields from TEN crude oil couples with a special financial arrangement that would cover such transactions would mean quicker payback period. This will also create a synergy between the upstream and downstream sectors of the oil and gas sector (Ghanaweb, 11 May, 2019).

It is not in the best interest of a nation to have a national refinery that lacks technical and financial capacity to produce to meet national demand not to talk about competing internationally.

The impact of the oil and gas industry on employment has been abysmal in relation to the potentials of generating more jobs for Ghanaians. According to energy and labour experts, the multi-billion petroleum sector holds a great key to solving the unemployment situation by providing a wide range of very lucrative, professional, skilled and unskilled jobs. As it is known, the petroleum sector value chain cuts across all the sectors of the economy: agriculture (food services), transportation services, professional services (legal, insurance, accounting, management and engineering), hospitality services (accommodation), logistic supply and metal fabrication and welding services among others. These sectors if well-developed can provide meaningful jobs for the teeming youth coming out of school each year.

The huge potential of the oil and gas industry is obviously not unrecognized by the authorities and that might have informed the relatively quick passage of the Local Content and Participation Legislative Instrument. The clear aim is to promote the use of locally made goods and services and also define local content targets across 10 main upstream supply chain sectors within the oil and gas value-chain to create massive job opportunities for Ghanaians. Each year a conference on local content and participation is organised by the Petroleum Commission, ostensibly to deepen the participation of Ghanaians. However, participation by local companies in these areas remains low. The ensuing quote from an interview captures this reality very explicitly;

> *In spite of the vast opportunities available, local participation is very low due to high barriers of entry. There are more foreigners than local companies in the upstream sector for a number of reasons. One is capability; today, as we speak, we don't have the capability and it also takes a long time to build the capability, up to ten years. We just don't have the financial muscle to get into that space, while you have the foreign companies, who have been doing this for years. Activities such as well drilling services are in high demand and attract the highest capital expenditure across the upstream value chain. However, existing capacity of local suppliers to service the sector is low due to high requirements in skills, capital and technology. This is the area which creates more employment and business opportunities (Interview, PC official).*

Meanwhile, another participant noted that;

> *Local capacity exists in the transportation and supply, IT and communications areas, yet, these areas do not create many job opportunities. But even in these areas, we share the spoils with foreign interests. The complaints about lack of capacity and inadequate capital by local companies and individuals have remained the same a decade after the discovery of the resource (Interview, PC official).*

Much as one concedes that these are real challenges, but for these complaints to remain with us even after a decade suggests some lack of seriousness to address them. Considering how worried Ghana seems to be about the worsening unemployment situation and the employment potential of the oil and gas industry, one would have expected a strong effort to address the challenges in order to enable more local content and participation, which will give the country the jobs so badly needed. This worry is reflected in the numerous interventions made by the government of Ghana to curb the unemployment situation in Ghana, such as the Youth Employment Program, the Nation Builders Corps etc.

The other leg of the challenge is enforcement of the local content regulations particularly for Joint Venture (JV) companies. Players in the industry are all blaming the Petroleum Commission (PC) for failing to execute its mandate appropriately. Interacting with some local companies, a major issue that kept coming up was the sharing of the scope of work under contracts. In undertaking projects as subcontractors for the main Operators (International Oil Companies), it is a requirement to state the scope of work and how it is divided between the partners at the time of tender submission; it is also a requirement to ensure that this agreed scope of work is actually carried out by the JV; it is the responsibility of the Operator to see to it that these requirements are carried out as enshrined in the Petroleum Agreements.

Lastly, it is the role of GNPC as the business owner, and PC as regulator, to ensure that the Operators carry out their duties and that the sub-contractors of these operators follow the rules of engagement and the award conditions. Enforcement of these requires will certainly deepen local participation and create more job opportunities for citizens. But it appears the enforcement is lacking. In an interview, an official conceded that;

In practice many subcontractors under the watch of the Operators (International Oil Companies), the national oil company (GNPC), and Regulator (Petroleum Commission) flout this rule of engagement; the excuse is simple......because they can! ((Interview, PC official).

There however are indications that the current management of the PC is desirous of deepening local content and participation but that must be quickly backed by real action, otherwise the value will remain the same and in the abundance of water, Ghana will remain thirsty.

One of the popular arguments in the literature is that Ghana's good democratic dividends and strong parliament is a leverage against the resource curse (Gyimah-Boadi & Prempeh, 2012; Gyamfi, 2010). This optimism was strengthened when the President's Office capacity building accounted for 1% of oil revenue in 2011. However, this hope was thwarted when the President's Office capacity building amounted for 22% of the oil revenue in 2012, a very crucial election year thus $111million in real monetary terms while allocations for infrastructure was very minimal with the less privilege regions receiving less while the allocations also reflected political considerations (MOFEP, 2012).

This strengthens Atkinson and Hamilton (2003) and Bleaney and Halland (2014) position that natural resources create 'rents', and political elites compete for their control. According to this line of thinking, natural resource wealth provides incentives for administrations to stay in power at any cost—by bribing voters, supporting patronage-based and unproductive investments, encouraging a shift from productive entrepreneurial activity to unproductive rent-seeking, weakening institutions, and resisting efforts to further accountability, transparency, and modernization. Corruption imposes a fiscal burden on the economy through the waste of resources that could otherwise have been more productively spent or saved.

In this sense, the case study of Ghana complements and extends what can be learned about the resource curse from econometric analysis. Ghana has a good record of democratic governance, with a free press, rule of law. Therefore, one would have expected Ghana to be on the list of sub-Saharan African countries able to avoid the natural resource curse. However, even before oil production began in 2011 and increasingly thereafter, Ghana found itself embroiled in all the problems of the curse. In August 2014 it requested a bailout from the IMF. As was noted above, the debt relief that Ghana obtained under the HIPC initiative, and the accompanying fiscal policy stance, had reduced the country's debt burden significantly. By the end of 2008, Ghana's total public debt stood at GH₵9.5 billion (some 30 percent of GDP). With the onset of oil production, however, the public debt stock rose dramatically to GH₵76.1 billion (67.1 percent of GDP) by the end of 2014 (Bank of Ghana, May 2019).

Such large-scale borrowing made possible by the large expected oil revenues had the effect of crowding out the private sector, which was increasingly unable to borrow to finance its growth. Risk-free treasury bill rates of 10.6 percent in 2007 when the oil discovery was made, rose to around 25 percent ahead of the 2008 elections, before dipping and returning yet again to around 25 percent by 2014. Bank lending rates, at approximately 30 percent in 2014, were also on the rise due to increasing public debt (UNCTAD, 2014). At 67 percent of GDP, by 2015 Ghana's debt stock had crossed the critical 60 per cent level, which is of particular concern in developing countries with limited access to capital flows. In fact, Ghana's debt by then was right back on the unsustainable track that had led to its HIPC relief.

While the discovery of oil initially boosted economic growth, real GDP growth in Ghana, notwithstanding, from the onset of oil production, GDP has declined significantly since 2011. Data from the Ghana Statistical Service (Government of Ghana 2011) show that real GDP growth increased from 8.4 per cent (without oil) in 2008 to 15 percent in 2011 (when it ranked among the highest in the world). Since 2011, however, real GDP growth (including oil) has slowed down to 7.9 percent in 2012 and to an all-time low, 3.5 percent in 2016.

It is worth nothing that the government hope of benefitting from natural gas in the form of plastics and fertilizers and the creation of jobs for the indigenes has also been marred by the absence of the necessary infrastructure hence the gas has been flared despite a 'no-flaring policy'. Ghana still spent a lot of money on Energy to the point that government has to increase electricity tax by 11.7%. It is interesting to know that a country that produces oil and gas pays $40m every month as well as stockpile of debt at the Energy Ministry which stood at $2.4 billion (Ghana News Agency, December 5, 2017). From the above arguments, it can be deduced that the oil and gas sector has contributed less as compared to other sectors. Although oil has generated additional revenue for government to spend on development projects, increased export and improved trade balance, the contribution so far is minimal in terms of employment and poverty reduction.

Sustainable Development and Challenges

One of the major challenges of many resource rich countries is the ability to explore the resources in a sustainable manner to benefit present and future generations. Sustainable development is viewed differently by different development pundits and concern organisations in order to make it feasible and relevant to human needs. In the midst of the numerous definitions and ideas one definition remains universally accepted and understandable, thus the definition offered by the Brundtland report in 1987. Sustainable development according to this report is the kind of progress that guarantee the socio-economic needs of the current generation as well as the needs of the future generation (future generation refers to the period where the oil resources are completely depleted).

In other words, sustainable development is an attempt to ensure intergenerational equity in the process of exploring a country's resources. Intergenerational equity is ensuring fairness and balance in the allocation of the oil rents among current and future generation. Once oil is a non-renewal resource, the concept of sustainable development is very key and requires critical attention. Ghana's projected oil reserve is expected to reach its maximum within the shortest possible time (American Geological Survey Report, 2013). The relevance of sustainability was also entrenched when a United Nation Development Programme (UNDP) Report, 2015 outlined 17 Sustainable Development Goals (SDGs). Revenue from oil and gas can help to meet some of the Sustainable Development Goals (SDGs) as indicated by the in the UNDP Report. Especially, goal seven and nine that seek to offer affordable energy and infrastructural development.

The government of Ghana has put measures in place to ensure that the petroleum resources are managed prudently to ensure sustainable development. One of such measures is the Petroleum Revenue Management Bill that was passed in the early days of 2011. This aims at utilisation the oil rents in a well-regulated environment to avoid abuse. One of the core features of the bill is to split the petroleum revenue into two. These include two long term funds (GSF and the GHF) and the Annual Budget Fund Amount for short term use. The stabilisation fund serves as a buffer against oil price variability, while the heritage fund is intended to serve the needs of the future generation when the resources are depleted.

During periods of high prices, the stabilisation fund will be used to cushion the prices but if the price drops below certain threshold, the money can be transferred by a percentage to the ABFA. This percentage is determined by the Minister of Finance after consultation with the Bank of Ghana and the Advisory Committee. If the fund reaches a certain threshold, a percentage of the fund can be transferred to the ABFA to run government activities. The bill suggests that 70% of the oil revenue will go into the ABFA for the government while the other 30% will go into the long-term funds. The 30% is supposed to be divided between the two long term funds where the stabilisation fund receives at least 21% and the heritage fund will receive at least 9%.

The Minister of Finance suggests the exact percentages but parliament takes the last decision. A participant noted that:

If this is truly pursued, sustainable development can be realised because the impact can be felt by the current generation once the oil revenues can sustain public expenditure as well as takes care of future generations (Interview, Local Content official).

A participant also noted that the government of Ghana is not sorely relying on the oil revenue to fund the activities of the state. This stems from the fact that oil revenue does not constitute a major part of the annual budget of the country (never make up to 20 to 25%). This is a positive assessment because it means that there is no overreliance on the oil rent like the case of Nigeria where oil rent constitutes about 50% of the government annual budget. Despite the need for money by government to meet the developmental needs of its citizens, the issue of loans also comes with its' own risks. The law requires the use of the oil revenue for loan for certain developmental areas but only from the ABFA but not from the GSF and GHF and that it should not be used for loan more than ten years.

The oil and gas priority areas is another sustainable measure. The government through the PRMA has given priority to the following areas in the distribution of the oil revenue to reflect the Government of Ghana's medium-term and long-term term development strategy and policy objectives. The priority areas are agriculture, physical infrastructure and service delivery in education, physical infrastructure and service delivery in health, and road, rail and other critical infrastructure development. All these areas reflect medium and long-term development plans that benefit both the current and the future generation, especially, the Free Senior High School system introduced by the government.

Despite these steps taken by the government to ensuring that sustainable development is achieved, this is not without challenges. One of the challenges is the slow pace at which the GSF is growing. It was observed that the stabilisation fund is now building up though the government has received considerable amount of funds from the oil industry hence may be unable to buffer for major price shocks. Moreover, it was observed that:

> *The stabilisation fund is the only mechanism that has been put in place to cushion prices shocks and the fund is now building up. What this implies is that Ghana can suffer a major loss in case of any major price shock within this period (Interview, Local Content official).*

Another concern is that oversight institutions like the audit service which supposed to serve as checks on the use of the oil revenue in order to check corruption are grossly under staffed, inadequately funded and periodic interference by political parties in the discharge of their duties due to the winner takes all nature of the Ghanaian politics. Corruption is one of the cankers that affects sustainable development, hence, any attempt by a country to compromise on the mechanisms to checks corruption is deadly. A participant noted that the administrative arena where contracts are awarded and where recruitments take place is one of the breeding grounds for corruption.

He noted that two instances are apparent in which the potential for corruption do exist; a fiercely competitive bidding environment where the different players attempt to alter the playing field to favour their intended contestant. This normally takes place in very sophisticated forms, either by directly bribing the officer in charge or putting background companies to take up all the bidding documents. From the outside this appears like due process is followed, meanwhile any figure who wins represents the interests of the of the intended party. The other instance is where state funds are diverted to unimportant projects where budgets are blown up in order to direct the excess funds to individual pockets. In this regard, if the oversight institutions are not formidable enough, corruption is inevitable.

Another major challenge to ensuring sustainable development in the oil and gas sector is the frequent reversal in government policies and leadership when there is change of government from one political party to the other. While Ghana is always applauded for its successful and amicable changeover of regimes these transitions are always accompanied by drastic changes in economic policies and removal and replacement of important personnel in state-owned enterprises. For instance, the Ghana National Petroleum Corporation (GNPC) has been an integral part of Ghana's petroleum industry since its establishment in 1983. The positions in GNPC, particularly, the role of Chief Executive Officer (CEO), has always been allocated to people close to the President.

For instance, Tsatsu Tsikata served as the Chief Executive Officer from 1988 to 2000, but when the NPP came to power he was convicted of misappropriating state funds. He was however, released from prison, with his conviction overturned, when the NDC returned to power in 2009 and was made an advisor to the President. While in power between 2001 and 2008, the NPP initiated major structural changes to the oil and gas industry, including GNPC. The alleged closed ties between GNPC and the Rawlings government increased incentives for the NPP to restructure the entire corporation.

Downsizing led to 9 out of 10 GNPC employees being removed. Private capital was injected and the GNPC was transformed into a commercial upstream operator in 2002. NPP removed GNPC's regulatory mandate for both upstream and downstream sectors (Hickey, Abdulai, Izama & Mohan, 2015).

However, when the NDC came to power again in 2009, the GNPC saw heavy investment in recruitment and capacity-building. Technical and political personnel were rehired into the corporation. NDC did not revert the changes regarding GNPC's regulatory mandate, but re-established the corporation's strong position in the industry. With Tsikata released from prison, the party started investigation of the EO Group and Kosmos, which will be discussed into details later. The strategic reversals that occur when there is a change in government limit the long-term technical and financial stability of the corporation. Moreover, it is inimical in a country and industry with a limited number of experienced technical and managerial personnel.

The Ghana National Gas Company (GNGC) is not left out in this menace. As a limited liability company, it was established in June 2011 and made a subsidiary of GNPC in 2015 to construct and operate the Western Corridor Gas Infrastructure Development Project as well as the Atuabo Gas Processing Plant located in Nzemaland in Ghana's Western Region. The processing plant was delayed for months due to the government's failure to pay the main contractor, the Chinese National Petroleum Company, Sinopec. The first gas was produced in November 2014 (MOFEP, 2015). GNGC supplies a range of companies with gas products. The largest customer is the Volta River Authority, a state-owned company that generates electricity for

Ghana's national electricity grid. The Volta River Authority supplies electricity to state-owned Electricity Company Ghana. Participation in this supply chain has restricted GNGC's cash flow.

The Volta River Authority is reported to owe GNGC US$500 million, which they have stated that they would not be able to pay unless the Electricity Company Ghana (ECG) pays its outstanding debt. The Electricity Company Ghana in turn blames Ghanaian consumers for lack of payment for electricity bills. The financial difficulties experienced at GNGC have delayed further development of the Atuabo Gas Processing Plant and restricted GNGC's capacity to take on new projects. With the latest change in government, the NPP is now reviewing and investigating the deals that were made between the NDC government and the independent power producers (Myjoyonline, 2017). The former Minister of Power, Kwabena Donkor, has been subjected to police investigations when the NPP took over power. President Mahama created the post of Minister of Power to tackle the power shortage in Ghana (*The New Crusading Guide*, January 27, 2018).

Shortly after coming into office, the NPP government merged the Ministry of Power with Energy and Petroleum and started investigations. One power purchase was referred as the 'Ameri Energy deal'. The President's investigation committee concluded that the price of this deal, which included the purchase of 10 gas turbines, had been 'bloated' with approximately US$150 million when compared to an equivalent Turkish deal (*The New Crusading Guide*, January 27, 2018). The NPP government has appointed new management at the GNGC and replaced a few nonmanagerial positions. Their first challenge was to recover the debt from state-owned institutions and continue the development of the Atuabo Gas Processing Plant. The challenges have to be addressed at the same time as the new managers, some with limited experience in the sector, receive training regarding the gas projects.

This project also suggests some elements of financial indiscipline. The biggest project thus far undertaken in the oil and gas sector is the Atuabo gas project of the Ghana National Gas Company (GNGC). This US$850 million investment, which is financed with a loan from the China Development Bank, has been collateralized with Ghana's oil revenues. In addition, public funds of US$140 million have been used to capitalize the GNGC (ACEP, 2014a). In spite of this, parliament has had no role in the approval of the investment programme of the GNGC, whereas the Ghana National Petroleum Company, the national oil company, must have its investment programme approved by parliament (ACEP, 2014a). This state of affairs creates room for possible fiscal indiscipline, as contracts of this nature evade value-for-money audits and other scrutiny. The continued overhaul of state-owned corporations every 8 years limits the long-term technical and financial prospects of Ghana's petroleum corporations which ultimately affects the sustainability of the industry.

Although prioritisation of petroleum revenue expenditure has focused on areas under the purview of medium-term and long-term development programme, these have not captured critical aspects of the energy value chain including efficient petroleum prices, increased access to petroleum products, economic diversification and transparency particularly in the award of oil blocks. Even though the Petroleum Revenue Management Act prescribes important scaling-up features such as stabilisation buffers and external savings, the limitations placed by the Act and discretion granted to the Finance Minister have reduced the ability to accumulate significant buffers to cater for shocks given the country's petroleum production profile. This provides an avenue for random spending in periods of oil revenue surge.

Another challenge in the industry is the lack of supervision and disregard for financial laws. It was observed that there is lack of supervision and disregard for financial laws regulating the oil and gas industry. For instance, the Public Financial Management Act requires that when monies are allocated for projects, entities of state who implement these projects by the close of the year must report to the Ministry of Finance and the Ministry of Finance will intend report to PIAC with expenditure returns (Act 815, Section 15). But according to PIAC official, many of these agencies do not submit their expenditure returns as compelled, but the Ministry of Finance continues to allocate monies to these implementing agencies. PIAC (2017) report revealed that GH₵403 million unspent money was unaccounted for.

Also, PIAC's 2018 report points to budget non-compliance on the part of the Ministry of Finance. In two years, budgeted but unspent and unaccounted for oil money amounted to GH₵652, 292,311.00 (PIAC, 2018). The other reason is lack of proper supervisory arrangement, mostly because projects are often contracted from Accra without the fore-knowledge of the beneficiary entities and these create opportunities for shoddy works or some instance no implementation of the projects at all. When you budget and don't spend, it speaks of a certain lack of budget compliance because in reporting to PIAC, whenever there is unspent money, the government must provide an explanation. The citizens demand to know why the monies that were allocated were not utilised and allocated. The public needs to know why the ministry in spite of the availability of the funds, did not use the money.

The Finance Ministry confirmed the figures in a meeting with PIAC on April 18, 2019 in which they explained that the money is in a single treasury account. This recurrent development speaks of the continued lack of budget compliance whiles government go around borrowing funds for state projects like the loans to construct the Terminal 3 of the Kotoka International Airport. If the Kotoka International Airport's Terminal 3 cost $350 million (MOFEP, 2017) to build, then the 2018 revenue could have built almost three of its kind. If there is money sitting in an account and yet government goes around borrowing money, I do not think it speaks well of how the government is managing the oil resources of the country and this will go a long way to affect the sustainability in the oil and gas industry.

Figure 4 shows the programmed ABFA by Priority Areas for 2018 and actual expenditure as at the end 2018. From figure 4, the expenditure for the various Priority Areas are agriculture (7%), physical infrastructure and service delivery in education (81%), physical infrastructure and service delivery in health (10%), and road, rail and other critical infrastructure development (15%).

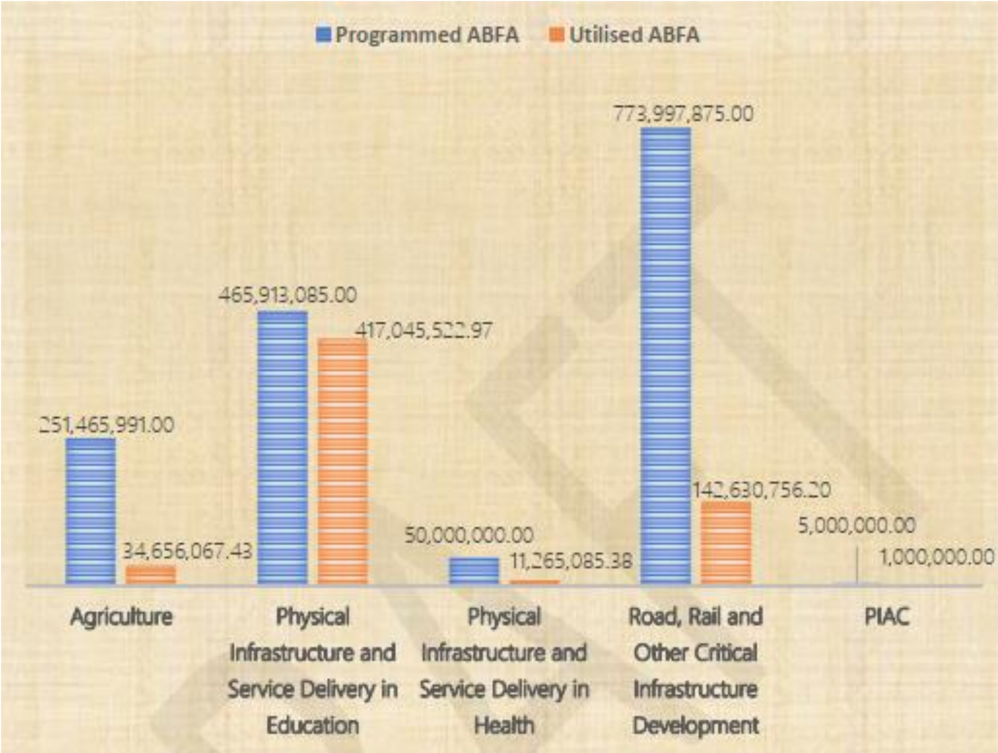

Figure 4: Programmed ABFA by Priority Areas for 2018 and actual expenditure as at the end 2018 (PIAC, 2018)

Another major sustainable development issue that is under critical attack is environmental sustainability. As indicated early on, four institutions have been charged with the responsibility of ensuring that the oil is produced and managed in an environmentally friendly manner. These institutions are the Environmental Protection Agency (EPA), Ministry of Land and Natural Resources (MLNR), Ministry of Energy (MOE) and the Ministry of Environment, Science and Technology (MEST). While the state has put in place elaborate guidelines such as the National Oil Spillage Contingency Plan (Government of Ghana, 2010), and the National Oil Spill Response Dispersant Use Policy (Government of Ghana, 2009), there is an inherent problem of trying to be essentially curative, not preventive.

A participant noted that the agencies in charge of prophylactic management are sometimes rendered structurally ineffective. For instance, GNPC finds itself in a conflict of interest situation because it is simultaneously an oil broker and a regulator of the industry for effective ecological management. In fairness to the state, it has put forward the Offshore Petroleum (Marine Pollution Prevention and Control) Regulations, 2010, which contains a lengthy list of what is required to be in place before it grants oil companies the right to drill, including imposing stringent requirements on the use of modern oil equipment such as sludge tanks and oil filtering equipment (regulations 16 and 17). Yet, there is a strong basis to suspect that the institutions mandated to ensure that these environmental standards are implemented have rather weak systems in place to enforce their own prescriptions.

EPA, in particular, is poorly resourced and lacks the key instruments to put the plan into effect. For instance, the researcher's tour of the western regional office in June 2019 found that Ghana's Environmental Protection Agency (EPA) had only one official qualified person to head an internationally certified laboratory. This office has four small units for noise, air and other pollution and one Toyota pickup truck, purchased with World Bank funds. As if these were not enough handicaps, EPA officials visit oil fields by hitching for rides (or "lifts") on Multi-national Oil Companies (MNCOs) aircraft. A danger inherent in these prevailing circumstances is that if companies pollute the environment, Ghana may face serious legal obstacles because effective environmental laws enforcement is very weak.

In the face of these institutional weaknesses, the state tends to depend on the goodwill of the oil companies to self-regulate. The industry must be committed to ensuring that the marine environment in which it operates is managed sustainably for future generations. There are important challenges with this policy stance. It is difficult to uncritically accept that the oil companies will impose on themselves stringent environmental standards that would increase the cost of production. The spillage of toxins in some of the operational areas explains these institutional weaknesses. One of such activities is the discharge of toxins by Kosmos Energy in their operational areas despite a non-spillage law.

Ghanaian's story in part reflects the insights provided by the literature on the political economy of development and more specifically the political economy of the resource curse. The immediate cause of the lack of fiscal and monetary discipline in Ghana can be found in policy decisions. Importantly, Ghana's story allows us to move beyond vague notions of 'institutional quality', measured by aggregate indexes, when considering the resource curse and how to address it. The Ghanaian experience confirms that there are specific institutional checks and balances that must be upheld if a country is to avoid the resource curse. Gleaning from these arguments, it is evident that the area of sustainability requires some catching ups despite the efforts made the government. There is the need to improve on transparency, local content participation and environment protection measures.

Oil and Gas and Ghana's Diplomatic Relations

As indicated in the literature, oil and gas has implications on a country's diplomatic relations especially African countries. These take different forms such as making use of state-owned enterprises by offering oil projects, providing and extending soft loans, providing development initiatives, technical expertise and economic clout to (re)build energy infrastructure as part of their overall diplomatic bargaining strategies (Kirkland, 2004); state visits, signing of treaties and agreements (Kraxberger, 2005). In some cases, some of these diplomatic strategies have led to a diplomatic row between countries in the form of inter and intra conflicts (Bloomfield, 2008). Some of these diplomatic implications have surfaced following the discovery of commercial quantities of oil and gas in Ghana, especially the countries from which the exploratory companies come.

The first diplomatic implication was the near diplomatic row between the Ghanaian government and Kosmos Energy, an American oil company. Kosmos Energy has had an uneasy experience in Ghana when Ghana discovered oil in commercial quantities. The change in government from the NPP to NDC in 2009 led to a corruption investigation into Kosmos Energy's entry into Ghana through its relationship with the EO Group, a Ghanaian petroleum company based in US. The EO Group initiated Kosmos Energy's entrance into Ghana. In return, the EO Group received a 3.5 percent stake in the Jubilee field. Kosmos Energy's also intended to cover the initial cost for the EO Group to participate in the exploration and development (Boynton, 2013). The transition in government and the high stakes in the new oil and gas industry created unexpected problems for Kosmos Energy.

Kosmos Energy had courted a good relationship with the political party in power in Ghana and as such took a large risk with regards to the oil and gas industry. In December 2008, the NPP lost the presidential election to the NDC. A police investigation was launched into the relationship between the EO Group and government officials. Both the Ghanaian government and the US Department of Justice were involved in the criminal investigations. The individuals in the EO Group were alleged to have had a close political connection with the NPP government and mediated the relationship with Kosmos Energy. In addition to misuse of political connections, accusations of forging signatures and documents were made. The police questioned all the Jubilee partners, and there was a government order to the Bank of Ghana to freeze accounts for Kosmos Energy and affiliated individuals (*Wikeleaks*, 2009).

Political intervention was to be expected in Ghana with a change of government. However, international continuance gave the investigations further momentum. In October 2009, Anadarko filed a complaint about Kosmos Energy's compliance under the Foreign Corrupt Practices Act at the US Department of Justice for possible violations in connection with securing licensing, exploration and production agreements (Boynton, 2013, 2). Anadarko had been working with Kosmos Energy since the start of developing the Jubilee field. Kosmos Energy fired Owusu as its country representative in Ghana. In October 2009, Kosmos Energy confirmed plans to sell its stake in the Jubilee field, worth an estimated US$4 billion to ExxonMobil (*New York Times*, October, 2010).

The tension started when the government of Ghana announced that it would not approve Kosmos Energy's sale of the Jubilee shares. In 2010–11 controversy and competition over Kosmos Energy's share roiled discussions of the Jubilee field because Kosmos Energy had entered into a private binding agreement to sell its share to ExxonMobil for $4 billion. GNPC claimed right of first refusal in its capacity as the sovereign owner of the oil resource, but Kosmos Energy held fast to its right to sell its property according to its own interests. GNPC official, in an interview, noted that the legal standing of the Kosmos Energy–ExxonMobil deal remained obscure, in part because the arrangements between the companies had been negotiated in back-room deals and in part because the Ghanaian state had not finalized the Petroleum Revenue Management Act and therefore did not have a legally valid mandate for the management of oil resources at Jubilee. Kosmos Energy also, claimed that this was purposefully done because GNPC wanted to acquire Kosmos's Energy shares at a cheaper price.

Meanwhile, other contenders jumped into the fray, attempting to persuade the government of Ghana to enter into partnerships to bid for the Kosmos stake. Several major oil companies such as British Petroleum, Chevron, and Shell, petroleum companies from India and China bid for the shares. Most prominently, the Chinese National Offshore Oil Corporation (CNOOC) emerged as the leading contender to partner with GNPC to buy out the Kosmos Energy share, offering Ghana $5 billion in a cash settlement and as typical of Chinese diplomacy, they offered to add $2 billion in concessionary loans. Although the GNPC/CNOOC partnership offered Kosmos Energy $5 billion to secure its share, exceeding ExxonMobil's offer by $1 billion, Kosmos Energy, to the disbelief of many Ghanaian observers, rejected the bid and opted to raise funds to continue its own exploration and development of oil resources in the Gulf of Guinea.

Trying to save the company's reputation and distance itself from the corruption accusations, Kosmos Energy's board of directors removed Musselman and Owusu. With the two original front men of the Jubilee discovery out of the picture, Kosmos Energy amended its relationship with the

Ghanaian government (*New York Times*, 2010). In August 2010, Kosmos Energy stated that they would not sell their Jubilee shares to ExxonMobil or anyone else and instead would continue with offshore exploration and development with the Jubilee partners. In December 2010, the Ghanaian government and Kosmos Energy signed a truce agreement (*Financial Times*, 2010). The US Department of Justice stated in April 2011 that it would not take action in regards to Kosmos Energy and the EO Group (Oil and Gas Review, 2011).

Again, a fine was imposed on the same Kosmos Energy for its alleged responsibility in three oil drilling-related pollution incidents as well as revealing over 50 exploratory concessions data to third party without the express approval of GNPC but Kosmos Energy had contested the legal basis for the fine and the fine was revoked.

Though speculations still remain on whether any corruption actually took place during Kosmos Energy's entry into Ghana and though the controversies were settled amicably, it was not without consequences on the two countries' diplomatic relations. The near diplomatic row that ensued between the government of Ghana and the USA Embassy in Accra following the latter's' refusal to grant Visas to the Minister of Energy, Dr Oteng Adjei and Mr Atto Ahwoi (Board chairman of GNPC) on March 27 and May 7, 2010 respectively, is a case in point. The two were scheduled to travel to the USA on official oil related assignment. Earlier in the same year, a senior official of GNPC was also denied visa (*Daily Graphic*, June 12, 2010).

When the US Embassy was asked whether their action was a response to GNPC position on the Kosmos Energy's incident, the response was 'US law prohibits the Embassy from commenting on individual visa cases'. The GNPC official also reported to have told insiders that a consular office at the US embassy told him that GNPC was 'Anti-American'. These diplomatic wrangling would not have taken without the discovery of oil and gas.

As the literature suggests, one of US's diplomatic mechanisms is state visits. Ghana has witnessed series of US state visits following the discovery of oil and gas in Ghana. A year after the commercial discovery of oil thus 2008, then-President George W. Bush visited Ghana to showcase US aid programs on trade, entrepreneurship, health, education and Ghana's first Millennium Challenge Corporation (MCC) compact which is typical of US oil diplomatic strategy was signed. Then in 2009, then-President Barrack Obama also visited Ghana to highlight the nation as a democratic model for other African countries. Ghana signed a second MCC compact focused on the electrical power sector. Besides, Ghana was also selected to join the Obama Administration' s African Peacekeeping Rapid Response Partnership (APRRP) and its Security Governance Initiative (SGI), both launched in 2014.

Moreover, in early 2018, the two countries signed an updated Status of Forces Agreements (SOFA, a type of agreement governing bilateral defence cooperation and the rights and privileges of US troops stationed in partner countries). The State Department described the agreement as a routine update of the terms governing US-Ghanaian defence cooperation. Ratification of the SOFA by Ghana's parliament, however, proved controversial. It was preceded by press accounts suggesting that the United States wanted to establish one or more military bases in Ghana, an allegation that the State Department refuted. This suggestion was not out of order once the US has done similar thing in

South Korea and attempted a similar thing in Sao Tome and Principe. These visits and military cooperation reflect US diplomatic strategies to get what they want.

However, there have been attempts to refute the assertion that Ghana-US relations is deepening because of the commercial discovery of oil. A participant noted that the relations between Ghana and US keeps deepening from the time Ghana gained independence and it is expected to deepen further as the two countries continue to share resources and ideas. An official has this to say when asked about whether the oil has affected Ghana-US relations:

> *The United States and Ghana share a long history promoting democracy, human rights and the rule of law and Ghana is a model for its' peers throughout Africa. There have always been people-people relations and cooperation with or without oil (Interview with a US Embassy official).*

Furthermore, information from the Ghana Immigration Service also strengthens Rutledge (2005) argument that US will always want to increase its members in any country that has oil in order to deter China. Americans continue to lead in the number of immigrants' inflow from other countries into Ghana especially, the oil and gas industry has the highest number of Americans concentration among the expatriate firms. For instance, the inflow of Americans increased from 14,164 in 2011 to 18,679 in 2014 and to 59874 in 2018 (Ghana Immigration Service Report, 2011, 2014 & 2018). In buttressing this argument, an official of the Immigration Services argued that:

> *It is easy for American citizens to come to Ghana than any other country. Securing residents permits for Americans keeps increasing*

over the past seven years (Interview with a Ghana Immigration Service official).

Apart from Ghana's diplomatic relation with the US, Ghana's relations with Norway is also improving due to the oil and gas exploration. Norway is noted for its' good credentials in terms of oil exploration and production. Norway has courted good relations with many countries through their Norwegian Agency for Development Cooperation. Ghana's relations with Norway witnessed an improvement following the commercial discovery when Ghana signed a Strategic Partnership with Norway in 2008 to share expertise and technology in areas relating to the oil and gas industry. This is what an official of the Norwegian Embassy had to say:

Promoting Norwegian commercial interests and contributing to private sector development in Ghana is a key task for the Embassy. More than 50 Norwegian owned, affiliated or partly owned companies currently operate in Ghana over the past seven years, in close cooperation with Ghanaian partners and joint ventures. The main areas of interest are oil and gas exploration and production, oil service, renewable energy and maritime sector in general (Interview with a Norway Embassy official).

Norway Embassy provides timely business intelligence and advisory services by offering information on key policies, public programmes and regulations such as local content provisions over the past seven years. They have also created platforms for the Norwegian business community in Ghana to meet and interact among themselves and with Ghanaian stakeholders. For instance, in June 2019 Aker Energy, a Norwegian Holding company got approval from the government of Ghana to take over Hess Ghana stake in the Deepwater Tano Cape Three Points block. Norway has sponsored 40 members of the Petroleum Commission to participate for the first time in the 2019 Offshore Norwegian Seas Conference in Norway to learn varying ways on how to be innovative in the oil and gas industry.

The commercial discovery of oil also witnessed Chinese diplomatic bargains. For instance, in September 2010, in the run-up to the commercial lifting of oil at Jubilee, China hosted Ghanaian President Mills in Beijing, where they negotiated state-to-state deals that surpassed agreements confirmed in previous China–Africa summits. China's ExIm Bank pledged a $10.4 billion funding package to support infrastructural development in Ghana and a $3 billion loan was extended by the China Development Bank to develop Ghana's oil and gas sector. With fanfare that echoed their shared history of struggle for independence and nonalignment, Ghana and China proclaimed 2010 the "Golden Jubilee" of their partnership, celebrating the diplomatic relations that they had established in 1960 (*China Daily*, 2010).

Just six months after China and Ghana announced the slate of bilateral deals in Beijing, reports circulated in the Ghanaian press with headlines like this one in the *Daily Guide:* "Ghana Surrenders Oil to China." According to that article, a loan agreement put before Ghanaian Parliament in March 2011 would "mortgage Ghana's oil for a loan of $1.8 billion" and "surrender all the concessional rights and intellectual property of the Ghana National Petroleum Corporation, including the seismic surveys and maps as well as exploration, development and production assets… to the Industrial and Commercial Bank of China" (*Daily Guide,* 2010).

Apart from the impart of the oil on Ghana's diplomatic relations with the counties from which the oil companies emanate, it also has effects on intra-African diplomatic relations. The first clear impact is the maritime border dispute between Ghana and Côte d'Ivoire which resulted from a long-term disagreement regarding the direction of the azimuth line dividing the two countries' territorial waters, exclusive economic zones and portions of the continental shelf. The TEN fields, developed by Tullow Oil Ghana, located in Ghana's Western Basin on the border with Côte d'Ivoire, is the area that Côte d'Ivoire in September 2011 claimed as part of its exclusive economic zone. After a series of bilateral negotiations that did not yield meaningful results, Ghana turned to the International Tribunal of the Law of the Sea (ITLOS) in November 2014.

The Ghanaian government asked the tribunal to determine the precise geographical coordinates of the maritime boundary between the two countries (ITLOS, 2014). The Ghanaian government argued that there had always been a tacit agreement regarding the location and direction of the maritime boundary. As such, Ghana wanted ITLOS to affirm the customary equidistance boundary as the two countries' maritime border. Ghana presented the records of oil concessions, seismic surveys and exploration, and drilling activities from both Ghana and Côte d'Ivoire to demonstrate the use of the boundary for approximately 50 years (ITLOS, 2015). Tullow Oil, operator of the TEN fields, submitted a statement to the Tribunal explaining their operations in Côte d'Ivoire since 1997 and involvement in several projects in the country.

Tullow used its Ivorian experience to support the government of Ghana's claim about the consistent use of the maritime border that placed the TEN fields on the Ghanaian side. The maps produced by Tullow showed no overlap between Ghana's blocks and Côte d'Ivoire's blocks. Côte d'Ivoire pointed out that Tullow was a commercial entity and was not mandated to establish maritime boundaries on behalf of the state (ITLOS, 2015). Côte d'Ivoire maintained that the maritime boundary between the two countries was still to be delimited, as there had been no formal or tacit agreement on it. The maps provided by Ghana were discounted by Côte d'Ivoire as not authoritative. Côte d'Ivoire asked ITLOS to declare that the activities carried out by Ghana had violated Côte d'Ivoire sovereign rights over its continental shelf and to facilitate compensation payments for the damages resulting from that violation.

The tribunal made an interim ruling in April 2015 that Tullow and Ghana could continue to develop the TEN fields, under the condition that no new wells would be drilled in the disputed area (ITLOS, 2015). In its final judgment on 23 September 2017, the tribunal rejected Ghana's claim that there had been a tacit agreement between the two countries that constituted the delimitation of the maritime border. It ruled, however, that the single maritime border between the two countries started at the landmark BP 55+. The border that the tribunal determined placed the TEN fields on the Ghanaian side. Therefore, the tribunal found that Ghana did not violate Côte d'Ivoire's exclusive sovereign rights and that the TEN fields were in Ghana's exclusive economic zone (ITLOS, 2017). Figure 4 shows the maritime boundaries after the ITLOS ruling in 2017.

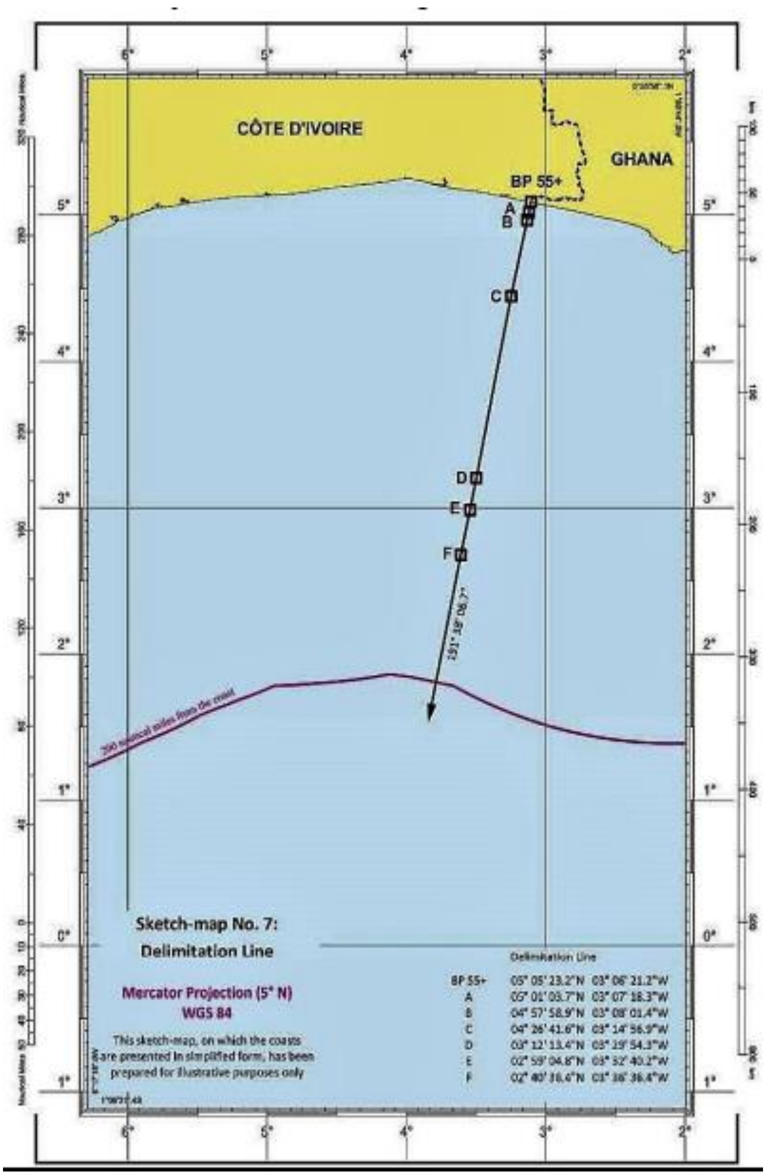

Figure 5: Maritime boundary after the ITLOS ruling (ITLOS: 2017)

While the 3-year-long border dispute at ITLOS was eventually resolved in Ghana's favour, the case demonstrates how the oil find has affected Ghana's diplomatic relations with its neighbours. Commenting on this issue, a participant contends that it was an encounter that redefined the two countries' diplomatic relations after the Nkrumah's era. An official of Tullow Ghana noted further that:

> *It just highlights political risks and it's not a good thing for Cote d'Ivoire; it is not a good thing for Ghana and it is not a good thing for Africa in general that you have these sorts of disputes made public. These disputes would have been settled in private (Interview with Tullow Oil official).*

It must be noted that the decision of the Special Chamber must be seen as a victory for Ghana and Cote d'Ivoire, West Africa and for Africa as a whole. The agreement by the Parties to be bound by the decision of the Special Chamber is a step in the right direction towards peaceful coexistence which strengthens the basis for future partnerships in the oil and gas industry.

Ghana signed a new strategic partnership cooperation with Cote d'Ivoire known as the Strategic Partnership Agreement after the ITLOS verdict to form a Joint Committee for the Implementation of the ITLOS judgement. The agreement covers areas of Defence and Security, Cocoa and Cashew and other strategic crops as well as maritime cooperation. Pursuant to this agreement, Ghana signed unto the Abidjan Declaration to address the challenges of the oil and gas sector. The financial losses to both Ghana and Tullow would have been severe if the tribunal had ruled in favour of Côte d'Ivoire. The border dispute should hopefully lead to the demarcation of the remaining borders between Ghana and its neighbours. Oil and gas explorations to the east risk claims to land by Togo, as the borders have not been officially demarcated. These developments support the literature that oil and gas has diplomatic implications on countries that discover it especially, African counties.

Chapter Summary

This chapter basically presents the results and discussion. The data was analysed to meet the demands of the objectives of the study by analysing each research objective with the data gathered. The first section assessed how the regulatory framework of the oil and gas industry supports the economic development of Ghana. It was observed that despite the efforts made at regulating the sector, the enforcement has become a challenge which affects the contribution of the oil to national economic development. Though the government has gained some revenue from the industry as well as other affiliated benefits, it was observed that the industry has not contributed enough to economic development and the sustainable measures that are put in place are not enough to ensure sustainable development in the oil and gas industry as a result of diverse challenges. It was also revealed that the oil and gas discovery has had both negative and positive implications on Ghana's diplomatic relations.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter contains a summary of the findings and main conclusions of the study. It also provides recommendations for consideration of government and institutions in ensuring efficient management of the oil resources as well as recommendations for future researchers. The purpose of this study has been to assess the impacts of Ghana's oil and gas discovery on national economic development and diplomatic relations.

Summary of Research Findings

In order to achieve the main purpose of the study, the study set out four objectives. The first objective was to examine the extent to which the regulatory framework of the oil and gas industry supports the socio-economic development of Ghana and the second was to assess the impacts of the oil and gas sector on the economic development of Ghana. The third and fourth objectives were to examine the extent of sustainable development challenges and the extent to which the oil and gas production influence Ghana's diplomatic relations respectively.

In order to find answers to the research objectives, the researcher conducted one-on-one interviews with a total of 25 participants. These included officials at the Ghana National Petroleum Corporation, the Ghana National Gas Company, Petroleum Commission, the Ministry of Energy and the Finance Ministry. Furthermore, the study also drew upon interviews of key resource persons at the Local Content Department, Public Interest and Accountability Committee, Ghana Investment and Promotion Centre, Environmental Protection Agency as well as the Ministry for Environment Science and Technology.

The researcher also had one-on-one interview with Honourable Mohammed Mutawakuli, a former official for the Mineral and Petroleum Commission, Mrs Adelaide Addo-Feming, the team leader of the Ghana Oil and Gas for Inclusive Development. Lastly, the researcher also conducted interviews with officials from, the Ministry of Foreign Affairs, the US Embassy, the Norwegian Embassy, the Ghana Immigration Service, Tullow Oil and Kosmos Energy and some of the rig workers. These were chosen because of their relevance to achieving the research objectives.

Purposive and snowball sampling techniques were employed to select the research participants. These sampling methods were necessary because they enabled the study to sample participants based on their qualities, contributions, knowledge and expertise in the area of study. Content analysis approach was used to analyse the data from the participants. This approach allowed the study to examine or analyse the data with regards to the established conventional activities associated with the oil and gas industry. Case study research design was employed to conduct the study. Qualitive method was also employed to collect the data for the study.

The study revealed that though the government has made effort to regulate the oil and gas industry through passing of regulations and establishment of institutions, the institutions have not been adequately resourced to execute their responsibilities effectively. Most of the institutions are not independent from political infiltrations. Partisan politics have also, affected the operations of the institutions. Some of the regulations are also difficult to enforce because of the impact of the international community in formulating the regulations.

The study further revealed that the oil and gas industry has not contributed meaningfully to the economic development of Ghana though there have been some impacts such as contributions to government revenue, GDP, employment, technology transfer and training, the impacts so far has been abysmal. Despite a decade of oil production, public debt keeps increasing, while the GDP keeps reducing, unemployment is still high, many Ghanaians have not got the requisite skills to operate in key managerial portfolios etc. The study demonstrated that Ghana oil reserves will not last long before total depletion but not enough sustainable measures have been put in place to ensure sustainable development of the oil and gas resources. The only sustainable measures are the two long term funds thus, the GSF and GHF which currently are growing very slowly and the assertion that the oil revenue does not constitutes a major part of government budget. Ghana cannot talk about sustainability because the revenue is not even enough to service the current generation, let alone leaving some for future generations. The financial indiscipline, misappropriation and the environmental flaws account for this menace.

Lastly, due to the strategic position of oil and gas in international relations, the study discovered that some diplomatic implications have been experienced in Ghana's due to the commercial discovery of oil and gas. The diplomatic row between Ghana and Kosmos Energy and the US embassy, the state visits form US, Chinese oil-backed loan, the maritime dispute between

Ghana and Code d'Ivoire, Ghana and Norway Strategic Partnerships which aimed at sharing expertise are the few cases in mind.

Conclusions

The future of oil and gas in Ghana is extremely hard to forecast. On the one hand the government tries to show good will in implementing useful measures to control the oil industry. On the other hand, there is much insecurity about the reliability since there seems to be an atmosphere of secrecy surrounding contracts and contract processes. Fiscal discipline was given low priority, as parties focused on winning the elections. As a consequence, the public finances deteriorated, debt returned to unsustainable levels, current account deficits ballooned, foreign exchange reserves dwindled, the exchange rate depreciated rapidly, interest rates rose and real GDP growth declined. These are the hallmarks of a resource curse.

Further, there seem to be a strong commitment to ecological sustainability, even if this commitment is not matched by capacity. The jarring tensions and contradictions in the cleavage between the oil sector and socio-ecological conditions in Ghana pose several problems for orthodox economists who use the notion of resource curse for analysis. The frame says little or nothing about power relations. The study demonstrates that not all segments of society are necessarily blessed or hurt in the same way. Further, blessings and curses can co-exist, co-relate, and co-evolve. Moreover, the so-called 'good governance' factor seems to hold the potential to curb the tensions and contradictions that envelop resource extraction elsewhere in Africa. Yet, a paradox arises, the very claim that Ghana's experience is expected to be different because of its abiding faith in 'good governance' implies a point of similarity with other African countries.

The case of Ghana also, provides limited support for some versions of the resource curse hypothesis, but ultimately tells a simpler story of insufficient fiscal and monetary discipline resulting from challenges to policymaking. It is also consistent with Atkinson and Hamilton (2003), who conclude that the combination of natural resource rents and high government consumption provides an explanation for the curse, and with Collier and Hoeffler (2004), who argue that the combination of rents from the extractive industries and open democratic systems is associated with slower growth unless there are enough checks and balances. Ghana's large increase in sovereign debt after the discovery of oil reflects the concerns of Mansoorian (1991), who suggests that an abundance of natural resources may encourage countries to assume unsustainable levels of debt.

Ghana's story is also not primarily one of reduced growth resulting from externally generated causes such as Dutch disease (if foreign exchange is not sufficiently sterilized) and oil revenue volatility, although the precipitous fall in oil prices that started in 2014 has generated additional problems. But it does correspond well with arguments from the political economy of oil surveyed by Kirkland (2004) when he argues that oil and gas attracts the attention of global superpowers who attempt to court diplomatic relation with those countries. By so doing they manipulate economic and political decisions to their favour. This is an element of the dependency syndrome since they made under developing countries to be dependent on them for their economic fortunes, thereby creates room for exploitation.

Ghanaian story in part also reflects the insights provided by the literature on the political economy of development and more specifically the political economy of the resource curse. Importantly, the Ghanaian experience confirms that there are specific institutional checks and balances that must be upheld if a country is to avoid the resource curse. Ultimately, these factors are likely to be critical in determining whether the discovery of natural resources will adversely affect economic growth or not. The impact of the oil and gas industry on economic has been a mixed blessing. This stems from the fact the issue of indebtedness remains a daunting challenge since there are only little save guards against unsustainable borrowing and to assure the proper deployment of the acquired loans.

The maritime dispute between Ghana and Cote d'Ivoire and the dispute between Ghana and Kosmos Energy also confirmed the literature on the Frustration Aggression theorists' assertion that natural resources has the potential of breeding strain relations between countries and different entities within the country. The near diplomatic row between top GNPC officials and the US embassy also strengthens the position of the Frustration Aggression theory.

On the positive side, the rather peaceful civic culture which could help prevent open and violent conflicts as is the case of other countries such as Nigeria, the former Sudan, Guinea-Bissau etc. Also, the county is taking into account the high volatility of oil prices and does not overly rely on the oil revenues.

One emerging trend is that GNPC is pursuing a 6-year initial exploration phase of the Voltarian basin on a stand-alone basis. GNPC is growing to become an integrated energy company with assets in the mid and downstream sectors as it creates a market of upstream gas resources. Several opportunities exist in the upstream and value chain business of the industry with opportunities for joint venture partnerships as well as investments in the gas and power infrastructure.

Recommendations

The government should ensure a broad-based political commitment to fiscal discipline as opposed to a reliance on fiscal rules, full and real (as opposed to nominal). The government should adopt a long-term national development plan which must be compiled with the help of all stake holders (parties, ministries, civil society organizations) in order to use future incomes (especially from the oil production) wisely for the future development of the country. The utilization of the money should be socially and regionally just so that parts of the population will not get the impression that they are not getting a piece of the ‘pie’ in order to avoid any form of Aggression from parties that may feel cheated in the distribution of the national cake.

The government should also make the necessary effort to officially delineates the boundary between Ghana and Togo to avoid any future dispute when the production finally starts in that area once the case of Ghana supports the literature of the Frustration Aggression theory.

The government should pursue improvements in the governance in ways that are feasible and plausible to their specific context rather than trying to replicate the so-called best functioning models from a country from the superpowers. The reforms to be made to current institutions should focus on changes that are concrete or realistic and can be sustained as opposed to changes that are indeterminate and comprehensive. It is true that even the bestconceived institutional blueprints cannot turn Ghana's oil and gas sector into that of Norway in one fell swoop. However, recognizing the context dependence of oil reform will help countries like Ghana to undertake reform options that are concrete, realistic and that produce measurable and sustainable improvement. This will help to avoid the manipulation of the institutions by the superpowers thereby lessoning the chances of the dependency syndrome.

Civil society organizations should advocate for more transparency and accountability in the oil and gas industry.

The media has to be a 'watchdog' in order to expose corrupt and irresponsible acts by government officials and other stakeholders. The media should be as neutral as possible to ensure investigative journalism and non-biased news coverage. This will ensure transparency and accountability in the utilisation of the oil revenue.

The Environment Protection Agency should ensure proper checks and balances on the oil companies. If environmental pollution occurs, the companies should either give adequate compensation to the affected local communities or they should ensure that the pollution is cleared.

The oil companies should give young people the opportunity for internships and trainings as this will boost local content participation.

The Public Interest and Accountability Committee has to be adequately resourced to enable the committee perform its functions effectively.

The GHEITI should insist on it 'Publish what you pay and Publish What You Earn' mechanisms to enhance transparency and control of oil and gas revenues. This will help create public confidence and trust that petroleum revenues are openly and transparently managed, thus breaking the yoke of oil revenue as government secrecy which results in mismanagement and embezzlement which can lead to conflict. With transparency and accountability coupled with participation by the civil society, productive institutions can be built and strengthened.

There is scope to improve government take if the expected legislative revisions guide against open ended exemptions, allowances, withholding taxes and cost recovery measures that further compromise the progressivity of the fiscal regime.

Recommendations for Further Researchers

The purpose of the study was to explore the contributions of Ghana's oil and gas discovery to national economic development and diplomatic relations. In the course of my readings and fieldwork for this study, I stumbled upon some themes and areas where I think further research will be worthwhile. First, I noticed that not a lot of work has been done on the role of civil society organizations in Ghana's oil discovery and how they can help to strengthen Ghana's diplomatic relations. CSOs are emerging as one of the potent stakeholders in Ghana's oil industry. Their contributions to the discourse on oil and gas and diplomatic relations cannot be ignored hence I call for further research in this area.

Further research can also be conducted on the role of the media in ensuring transparency and accountability in the oil and gas sector.

REFERENCES

ACEP (2014a). Ghana Gas Report, May 2014. *Accra: Africa Centre for Energy Policy.*

Acheampong, I. K. & Baah-Kumi, B. (2011). The Dutch disease in the context of Ghana's oil and gas find: the plausible economic effects on the Ghanaian economy. *Indian Development Review*, *9*(2). 239-254.

Ackah, I. & Gyampo. R. (2016). Politics of Oil and Gas in Ghana. *Insight on Africa 8* (2), 131–41.

Ackah, I. (2016). Determinants of natural gas demand in Ghana. *OPEC Energy Review*, *38*(3), 272-295.

Alexeev, M. and Conrad, R. (2009) *The Elusive Curse of Oil.* Terry Sanford Institute of Public Policy Working Paper Series. San05-07.

American Geological Survey World Energy Assessment Team (2013). Geological survey world petroleum assessment. Denver: USGS.

Amoasah, G. (2010). *The potential impacts of oil and gas exploration and production on the Coastal zone of Ghana: an ecosystem services approach.* (MSc Thesis, Department of Environmental Sciences). Wageningen University, The Netherlands.

Atkinson, G. and Hamilton, K. (2003). Savings, growth and the resource curse hypothesis. *World Development*, *31*(11), 1793–1807.

Auty, R. M. (1993). *Resource Abundance and Economic Development*. New York: Oxford University Press.

Baland, J. M. & Francois, p. (2000). Rent-seeking and resource booms. *Journal of Development Economics*, *61*(12), 527-542.

Bank of Ghana (May, 2019). Petroleum Holding Fund and Ghana Petroleum Fund, Semi Annual Report.

BBC (June 18, 2007). UK's Tullow uncovers oil in Ghana.

Bleaney, M. and Halland, H. (2014). Natural Resource Exports, Fiscal Policy Volatility and Growth. *Scottish Journal of Political Economy, 61*(5)

Bloomfield, S. (2008). The Niger Delta: The Curse of Black Gold. *The Independent.* http://www.independent.co.uk/news/world/africa/the-niger-delta-the-curse-of-the-black-gold882384.html. Accessed on 17th October, 2018.

Boateng, M. O. (2008). Oil Exploration and Production in Ghana. *National Forum on Oil and Gas Development, 3*(9), 56-70.

Boonstra, J. Burke, E. & Richard, Y. (2008). *The Politics of Energy: Comparing Azerbaijan, Nigeria and Saudi Arabia,* FRIDE 68 working paper.

Boynton, R. (2013). Big men: Everyone wants to be big. [video documentary]: http://bigmenthemovie.com. Accessed on 8 April, 2019.

British Broadcasting Corporation (June 19, 2007). Ghana will be an African Tiger. http://news.bbc.co.uk/2/hi/africa/6766527.stm. 13/09/2018.

Business and Financial Times (July 12, 2017). Economy to miss out on potential oil revenue from oil Voltaian basin (Ghana).

China Daily (September 14, 2010). Ghana Leader Lauds China Relations (Editorial). 23.http://www.chinadaily.com.cn/china/2010-09/23/content 11338934.htm.

Collier, P. & Hoeffler, A. (2004). *Greed and Grievance in Civil War.* Policy Research Working Paper 2355. Washington DC: World Bank.

Corden, M. Neary, P. (1982). Booming sector and de-industrialisation in a small open economy. *Economic Journal*, *92* (368) 825–848.

Dadzie M. J. (2018). Jubilee Field, 'Ten Project' and The Dying Whales. *The New Crusading Guide, 10th February 2015 Edition*. http://www.modernghana.com/news/597701/1/jubileefield-ten-project-the-dying-whales.html. Accessed on May 2, 2018.

Daily Graphic (June 12, 2010). American Embassy denies visa to for Ghanaian officials.

Daily Guide (June 12, 2010). Ghana surrenders oil to China.

Dartey-Baah, K., & Amponsah-Tawiah, K. (2014). Rent-seeking resource and institutional challenges in Ghana's nascent oil economy. *International journal of law and management*, *56*(6), 363-386.

Davis, G., & Tilton, J. (2005). The resource curse. *Natural Resources Forum, 29*(3), 233–242.

Dobb, M. H. (1951). *Some aspects of economic development*. Delhi: Delhi School of Economics.

Edward, B. B. (2011). The concept of sustainable economic development. *Environmental conservation, 14*(2), 101-110.

Emeh, I. E. J. (2013). Dependency theory and Africa's underdevelopment: a paradigm shift from pseudo-intellectualism: the Nigerian perspective. *International journal of African and Asian studies*, 1(4), 11-16.

Engerman, S. L. & K. L. Sokoloff, K. L. (2000). Institutions, factor endowments, and paths of development in the New World. *Journal of Economic Perspectives 14*(3), 217-232.

Ferraro, V. (1996). *Dependency Theory: An Introduction.* South Hadley: Mount Holyoke.

Financial Times (Deceber 15, 2010). Ghana and Kosmos sign truce agreement. https://www.ft.com/content/bb643772-0d2e-11e0-82ff-00144feabdc0. accessed. Accessed on 8 April, 2019.

Friedmann, H. & Wayne, J. (1977). Dependency theory: a critique. *The Canadian journal of sociology*, *2*(4), 399-416.

Gary, I. (2008). *Ghana's big test: Oil's challenge to Democratic development*. Washington DC: ISODEC/OXFAM.

Gelb, A. (1988). *Oil windfalls: Blessing or curse?* London: Oxford university.

Ghana Immigration Service (2018). *2018* Migration to and fro Ghana (compilation from 2011 to 2018).

Ghana National Petroleum Corporation (December 16, 2019). GNPC awards scholarships to 200 students. www.gnpcghana.com/operations.html. Accessed on 12 September, 2018.

Ghana National Petroleum Corporation (November 22, 2018). GNPC establishes a fabrication plant www.gnpcghana.com/operations.html. Accessed on 12 September, 2018

Ghana News Agency (December 5, 2017). Development impact of oil questionable. http://www.ghananewsagency.com/GhanaHomePage/business/. Accessed on June 12, 2019.

Ghanaweb (May 11, 2019). Ex-GNPC boss cites financial loss in petroleum deals. www.ghanaweb.com/GhanaHomePage/NewsArchive/artikel.php?ID=178643. Accessed on June 23, 2019.

Gumede, W. (2008). Angola: blood oil and Western hypocrisy. *Insight on Africa, 5(12), 23-40).*

Gunder, A. F. (1972). *Capitalism and underdevelopment in Latin America. Historical studies of Chile and Brazil.* New York: Monthly Review Press.

Gyampo. R. E. V. (2010). Politics of Oil and Gas in Ghana. *Insight on Africa 8* (2). 131–41. https://doi.org/10.1177/0975087816655015.

Gyimah-Boadi, E., & Prempeh, H. K. (2012). Oil, politics, and Ghana's democracy. *Journal* of *Democracy*, *23*(3), 94-108.

Gylfason, T. (2001). A Mixed Blessing. *Macroeconomic Dynamics 3* (02), 204–225

Hickey, S., Abdulai, A. G. Izama, A. & Mohan, G. (2015). The Politics of Governing Oil Effectively: A Comparative Study of Two New Oil-rich States in Africa. *Effective States and Inclusive Development* (ESID) *Working Paper*, (54).

Hoyos, C. (2007). The New seven sisters: oil and gas giants dwarf western rivals. *The Financial Times*, 13 March, 2007. Available at: http://dx.doi.org/10.1108/IJLMA-11-2012-0037. (accessed 15 September 2018).

Humphreys, M., Sachs, J. D., & Stiglitz, J. E. (Eds.). (2007). *Escaping the resource curse*. Columbia University Press.

Immanuel, W. C. (1984). The development of the concept of development. *Sociological theory,* 2, 102-116.

International Tribunal for the Law of the Sea (March 18, 2015). Statement of Paul McDade on behalf of Tullow Oil.

International Tribunal for the Law of the Sea (September 23, 2017). Dispute concerning delimitation of maritime boundary between Ghana and Côte d'Ivoire in the Atlantic Ocean: Final verdict in Ghana's favour. https://www.itlos.org/fileadmin/itlos/documents/cases/case_no.23_merits/C23_Judgment_23.09.2017_corr.pdf. Accessed on 8 May, 2019.

Kirkland G. (2004). Leave no continent behind: US national security interests in Africa. *America Enterprise Institute for Public Policy Research, 23*(6).

Knack, S. & Keefer, P. (1995). Institutions and economic performance: cross-country tests using alternative institutional measures. *Economics and Politics 7*(3), 207-227.

Kobrin, S. (1985). Diffusion as an Explanation of Oil Nationalization: Or the domino Effect Rides Again. *Journal of Conflict Resolution, 2*(45), 5.

Kraxberger, B. M. (2005). The United States and Africa: Shifting geopolitics in an age of terror. *Africa Today*, 52(1), 46-68.

Kumah-Abiwu, F. (2017). Democratic institutions, natural resource Governance, and Ghana's oil wealth. *Social Sciences*, *6*(21), 1-13

Le Billon, P. (2001). Angola's Political Economy of War: The role of oil and diamonds, 1975-2000. *African Affairs, 100* (398), 55-80.

Lesourne, J. and Ramsay, W., (2009). Governance of oil in Africa: unfinished business. *Journal of Farm Economics, 33* (3), 389–396.

Lewis, W. A. (2013). *The theory of economic growth.* London: Routledge.

Lynn, T. k. (1997). *The paradox of plenty: oil boom and Petro states*. California: California University Press.

Mandelbaum, M. K. (1945). *The industrialisation of backward areas*. Oxford: Blackwell

Mehlum, H., Moene, K., & Torvik, R. (2008). Institutions and the resource curse. In R. Congleton, A. Hillman, & K. Andreas (Eds), *40 years of research on rent seeking* (pp. 245–264). Berlin: Springer.

Ministry of Finance and Economic Planning (2012). Reconciliation Report on Petroleum Holding Funds

Ministry of Finance and Economic Planning (2015). 2016 Annual Report on Petroleum Funds.

Ministry of Finance and Economic Planning (2018). Annual and Reconciliation Report on Petroleum Holding Funds.

Modern Ghana (March 8, 2010). Anadarko's romance with Tsikata exposed. https://www.modernghana.com/news/266758/anadarkos-romance-withtsikata-exposed.html. accessed. Accessed on 8 April, 2019.

Nammei, B. L. (2016). Are there good institutions in Ghana's oil and gas industry? *Developing Countries Studies*, 7(9), 23-56.

New York Times (October 12, 2010). Kosmos confirms sale of oil stake. http://www.nytimes.com/2009/10/13/business/energyenvironment/13oil.html. Accessed on 8 April, 2019.

O'Connell Davidson, J. & Layder, D. (1994): *Methods, Sex and Madness.* London: Routledge.

Obeng-Odoom, F. (2016). Oil boom, human capital and economic development: some recent evidence. *The economic and labour relations review*, *26*(1), 100-116.

Obi, C. (2014). Oil and Conflict in Nigeria's Niger Delta Region: Between the Barrel and the Trigger." *The Extractive Industries and Society 1* (2): 147–53. https://doi.org/10.1016/j.exis.2014.03.001.

Oil and Gas Law Review (2017). http://thelawreviews.co.uk/edition/the-oil-and-gas-lawreview-edition-4/1140329/ghana. Accessed on 8 May, 2019.

Oliveira, A. (2007). The Rise of the International Oil Company. *The baker Institute for Public Policy. 56*(3), 78-90.

Oskarsson, S., & Ottosen, E. (2010). Does oil still hinder democracy*? Journal of Development Studies, 46*(6), 1067–1083.

Panford K. (2017). *Ghana's Petroleum: Will the Myth of Ghanaian Exceptionalism in Africa Be Sustained or Broken? In: Africa's Natural Resources and Underdevelopment*. New York: Palgrave Macmillan.

Panford, K. (2010). *Africa's natural resources and underdevelopment: How Ghana's petroleum can create sustainable economic prosperity*. Berlin: Springer.

Panford, K. (2014). An exploratory survey of petroleum skills and training in Ghana. *Africa Today, 60*(3), 57-80.

Panford, K. (2017). The Paradox of Africa's Natural Resource Wealth. In *Africa's Natural Resources and Underdevelopment* (pp. 13-32). New York: Palgrave Macmillan.

Pankenham, T. (2003). *The scramble for Africa*. New York: Perennial.

Pegg, S. (2006). Can policy intervention beat the resource curse? Evidence from the Chad-Cameroon Pipeline Project. *African Affair*s 105 (418), 1-25.

Petroleum Commission (2016). Petroleum Register.

Petroleum Exploration and Production Act (2011). Act, 821

Petroleum Revenue Management (Amended) Act (2015). Act, 893

Petroleum Revenue Management Act (2010). Act, 815

Public Interest and Accountability Committee (2014). Report on Management of Petroleum Revenues for Year 2013: Annual Report. Accra: PIAC.

Public Interest and Accountability Committee (2015). Report on Management of Petroleum Revenues for Year 2014: Annual Report. Accra: PIAC.

Public Interest and Accountability Committee (2017). Report on Management of Petroleum Revenues for Year 2011: Annual Report. Accra: PIAC.

Public Interest and Accountability Committee (2018). Report on Management of Petroleum Revenues for Year 2012: Annual Report. Accra: PIAC.

Reddall, B. (2010). Chevron sees 'sharply lower' refining earnings. *Reuters.*

Robinson, J.A., Torvik, R. & Verdier, T. (2005). Political foundations of the resource curse. *Journal of Development Economics*, *24*(5), 45-57.

Rodney, W. (2018). *How Europe underdeveloped Africa*. Verso Trade.

Roll, M. (2011). Introduction: Resource governance, development and democracy in the Gulf of Guinea. In M. Roll (Ed.), *Fuelling the world—Failing the region? Oil governance and development in Africa's Gulf of Guinea,* (pp. 10-46). Abuja Nigeria: FriedrichEbert-Stiftung Publication.

Ross, M. (2001). Does oil hinder democracy? *World Politics*, *53*(3), 297–322.

Rostow, W. W. (1960). The United States in the world arena. *Naval War College Review*, 13(3), 7.

Roy, N. L. (2013). *Energy for the 21st century: a comparative guide to conventional and alternative sources*. New York: Routledge.

Rutledge, I. (2006). *Addicted to oil: America's relentless drive for energy security*. Harvard Common Press.

Sachs, D., & Warner, M. (1999). The big push: Natural resource booms and growth. *Journal of Development Economics*, *59*, 43–76. Retrieved from http://www.cid.harvard.edu/ciddata/warner_files/natresf5.pdf.

Sachs, J., & Stiglitz, A. (2007). *Natural resource abundance and economic growth.* Harvard Institute for International Development ((Working Paper). Cambridge, MA: Harvard University. Retrieved from http://www.cid.harvard.edu/ciddata/warner_files/natresf5.pdf.

Same, A. (2009). *Transforming Natural Resource Wealth into Sustained Growth and Poverty Reduction: A Conceptual Framework for Sub-Saharan African Oil Exporting Countries*. Policy Research Working Paper no. WPS4852.

San Joaquin valley Geology (2011). The History of the Oil Industry. Available at: *http://www.sjvgeology.org/history/index.html*. Accessed 1 November 2018.

Saunders, M., Lewis, P. & Thornhill, A. (Ed.). (2009) *Research methods for business students.* Harlow England: Pearson Education Limited

Schneyer, J. (2011). Commodity Traders: The trillion-dollar club. Reuters, *http://www.reuters.com/article/2011/10/28/uscommoditieshousesidUSTRE79R4S320111028*. Accessed 19 October 2018.

Sen, A. K. (1985a). well-being agency and freedom: the Dewey lectures 1984. *Journal of philosophy*, *82*(5), 56-78.

Siddiqui, S. (2012). Glencore says third-quarter solid, but outlook gloomy. Business Recorder *http://www.brecorder.com/top-news/108-pakistan topnews/88549-glencore-says-third-quarter-solid-but-outlookgloomy .html*. Accessed 1 November 2018.

Silverman, D. (2006). *Interpreting qualitative Data*. London: Sage Publications.

Silverman, D (2006). *Qualitative Research*. *Theory, Method and Practice*. London: Sage Publications.

Silverstein, K. (2002). US oil politics in the Kuwait of Africa. *The Nation, 14*(274), 2-5.

Spicer N. (2004). Combining Qualitative and Quantitative Methods. in Seale C. (ed.) *Researching Society Culture, 2nd Edition*. London: Sage Publications.

Stake (1994). Case Studies in N. Denzin, & Y. Lincoln, (Eds.), *Handbook of Qualitative Research* (pp. 63-88). Thousand Oak*:* Sage Publications.

Takyiwa, A. J. (2014). *Oil discovery, in-migration and infrastructural challenges in the Sekondi-Takoradi metropolis.* Unpublished Master of Art dissertation, Centre for Migration Studies, University of Ghana.

The Economist (August 6, 2012). Oil in America: Energy to spare. http://economist.com/oil/America/0f/2314/space/energy/.

The New Crusading Guide (January 27, 2018). (January 10, 2017). Akufo-Addo merges energy and power ministries.

The New Crusading Guide, (January 27, 2018). (March 27, 2017). Ameri deal to be abrogated over $150m "bloated": Takoradi and Atuabo Gas project commission—Committee.

Todaro, M. P., and Smith, S. C. (2012). *Economic Development*. Boston: Addison Wesley Pearson.

Tullow Oil Plc (2017). 2016 Full Year Report.

United Nation Environment programme (2008). Human Development Reports, New York.

United Nations Conference on Trade and Development (2019). Globalization for Development: Opportunities and Challenges. *Report of the Secretary-General of UNCTAD to UNCTAD XII.* Geneva: United Nations.

United Nations Conference on Trade and Development (2014). *Human Development Report*. New York: Oxford University Press

US Department of Energy, Energy Information Administration (2018). *Annual energy outlook with projection to 2035.* Washington DC: EIA.

Van der Ploeg, F. (2010). *Challenges and Opportunities for Resource Rich Economies.* OXCARRE: Oxford University.

Wikileaks (December 18, 2009) Ghana: Kosmos energy update. https://wikileads.com/ghanakosmos_energy//update?.

World Bank (May 12, 2010). Fiscal policies in Ghana's fledging oil industry. http://documents.worldbank.org/curated/en/173561467986250592/Ghana-Fledging-Oil-Industry. Accessed on 8 May, 2019.

World Bank (May 12, 2017). The Role of Fiscal Institutions in Managing the Oil Revenue Boom. Washington DC.

Yergen, D. (1991). *The quest: Energy security and the Remaking of the modern World.* New York: Penguin Press.

APPENDICES

APPENDIX A

UNIVERSITY OF CAPE COAST

CENTRE FOR AFRICAN AND INTERNATIONAL STUDIES

Ghana's Oil and Gas Discovery: Prospects and Challenges for National Development and Diplomatic Relations.

KEY INFORMANT INTERVIEW GUIDE

Sub themes

1. Regulatory framework and how it supports economic development

i. What are some of the governance issues which are pertinent to the industry?

ii. What are the consequences for breaking these rules and regulations?

iii. How is the relationship between the government regulators and agencies with foreign oil companies?

iv. Does the government have conflict-resolution mechanisms in place for the industry, both at the national and district levels?

v. Are there effective measures to check corruption in the oil and gas sector of Ghana?

2. Contributions to economic development

i. Is there a national policy plan for the utilization of the oil and gas revenue?

ii. What is the priority allocation in the budget?

iii. What should be the appropriate Government policies to enable efficient use of the oil revenues?

iv. What measures are put in place to ensure the oil revenue is not used as collateral for loans that may lead to high debt burden like the case of Nigeria?

v. What measures are put in place to preserve the oil against the current international volatile oil prices?

vi. What is the main focus of the industry in terms of development?

vii. What is the percentage of Ghanaians who are employed in the oil and gas sector?

viii. What is the current state of linkage between the oil and gas sector and the other sectors of the economy?

3. Sustainable development and challenges

i. What measures are in place to ensure public transparency and accountability in the oil and gas industry?

ii. How do we ensure/improve public transparency and accountability?

iii. How do you track spending on goods and services in the oil and gas industry?

iv. Does the Public Interest Accountability Committee (PIAC) monitor other agencies spending like Ghana National Petroleum Corporation (GNPC)?

v. What safeguards do we have to protect the oil and gas revenues from abuses?

vi. How will you rate the country on the management of the other extractive industries?

vii. Has there been any improvement on the existing regulations that governs the other extractive industry?

viii. Like the case of Norway, what measures are put in place to ensure that the oil revenue is kept for the future generations?

ix. What measures are put in place to ensure that taxes are not neglected due to more revenue inflow from the oil and gas sector?

x. Do the changes in government affect the long-term financial stability of the oil and gas sector?

4. How the oil and gas influence Ghana's diplomatic relations

i. Does the commercial discovery of oil and gas affect Ghana's relation with other countries?

ii. Does the disputes between Ghana and Kosmos Energy affects Ghana and US diplomatic relations?

iii. Does the maritime dispute between Ghana and Cote d'Ivoire affects their diplomatic relations?