

**AN ASSESSMENT OF LOCAL CONTENT
POLICY AND ITS SIGNIFICANCE FOR
FOREIGN DIRECT INVESTMENT (FDI) IN
THE OIL AND GAS INDUSTRY IN GHANA**

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DECLARATION

I, Selma Paulina Baba, hereby declare that this dissertation is the result of an original research conducted by me under the supervision of Dr. Boni Yao Gebe and that no part of it has been submitted anywhere else for any other purpose. Thus, references to the work of other persons or bodies have been duly acknowledged.

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DEDICATION

This work is dedicated to my family and friends who encouraged me to pursue higher education.

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All thanks and praises to God Almighty who does all things in His time and for seeing me through my studies at LECIAD.

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ABBREVIATIONS AND ACRONYMS

ABFA	-	Annual Budget Funding Amount
BOST	-	Bulk Oil Storage and Transport
BPD	-	Barrels per Day
E&P	-	Exploration and Production
EC	-	Energy Commission
FDI	-	Foreign Direct Investment
FPSO	-	Floating Production, Storage and Offloading)
GDP	-	Gross Domestic Product
GNPC	-	Ghana National Petroleum Commission
IOC	-	International Oil Company
IPP	-	Independent Power Producers
LCP	-	Local Content Policy
MMBBLs	-	Million Barrels
MMBOE	-	Million Barrels of Oil Equivalent
MMSCF	-	Million Standard Cubic Feet per Day
MNC	-	Multi-National Company
MOEN	-	Ministry of Energy and Petroleum
NOC	-	National Oil Company
NPA	-	National Petroleum Authority
PC	-	Petroleum Commission
PIAC	-	Public Interest and Accountability Committee
SOEs	-	State Owned Enterprises SOEs
TOR	-	Tema Oil Refinery

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ABSTRACT

The concept of local content has gain a worldwide acknowledgement as the debate as to whether indigenes and indigenous business is worthwhile protecting. Local content provides a significant framework in driving the development of Ghana and increase the influx of foreign investment. Therefore, this study sought to provide a comprehensive assessment of local content policy and its significance for FDI in the oil and gas industry in Ghana. It employed a random sampling qualitative methodology through the aid of a well-structured open ended and closed ended questions and found that the introduction of the local content policy increased the level of foreign investment in Ghana through structures laid down in implementing the local content legislation in the oil and gas sector in Ghana. This has also increased locals participating in the upstream oil and gas industry has improved through various mechanisms such as employment, joint venture partnership, supply of goods and services and through sub-contracting. On the whole, the study identified that the local content policy has not been able to significantly achieve its intended purpose since its inception hence, strict implementation and adherence is on the low key. Thus, it is recommended that there should be an establishment of local content funds to support indigenous SMEs to enhance their competitiveness vigorously in the industry with their foreign counterpart thus increasing the participation of Ghanaians in the oil and gas industry and eliminating fronting of foreign companies. Additionally, the local content policy should be strengthened such that foreign investors and local industry players are clear on their overall scope of work so that unnecessary expectation would be reduced to avoid any conflict between industry participants.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Statement of the Research Problem

Over the past era, the global financial system has seen a histrionic rise in foreign inflows and investment by renowned multinational organisations and also a fundamental modification to the foundation about the advantages of Foreign Direct Investment (FDI). Indeed, FDI has developed quickly than foreign exchange, especially among the world's most advanced economies, and as per UNCTAD the consolidated internal and outward FDI stocks influenced 31.7% of worldwide GDP and FDI to export represented 46% of worldwide exports of merchandise and services in 1999.¹ The innovative and generalised view about FDI has moved governments to disassemble numerous obstructions so as to draw in foreign inflows. Nonetheless, some repetitive practices of mediation and various vital qualifications proposed by trade researchers have led over the recent years to abundance of theoretical and empirical research which looks at this issue, using a diverse range of analytical approaches.

While firms from advance nations may like to trade their goods to unexplored markets, developing nations will endeavour to utilize their market potential to draw in FDI. This is because, as opposed to export, foreign direct investment by multinational enterprise (MNEs) may raise employment and upgrade innovation transfer in advanced nations. With a specific end goal to full benefits of employment and innovation exchange, developing nations regularly enforce local content requirements on FDI. This is on the grounds that local content requirements regulations require multinational firms to utilize a specific extent of locally made parts and components in their production, employment in the local enterprises will undoubtedly increase. Furthermore, to keep up the quality of their main goods, multinational firms must

transfer innovation to the local businesses. In this manner, local content requirements have turned into a well-known form of governmental regulations of FDI in developing nations.

Despite Ghana's endowment of rich natural resources, it is still rated as a lower middle income country and depend largely on foreign aid and grants. The multinational companies operating in the resource sectors in Ghana are expatriating a larger part of the returns leaving most Ghanaians in poverty.² As a result, the Ghana government was provoked and started to set local content policies (LCP) that will protect the interest of the domestic firms and citizens. Ghana began working on local content policies since 2010. The tone was set by the enactment of the Minerals and Mining (General) Regulations, 2012-LI 2173 as a local content policy in the mining sector. This was followed by that of the oil and gas industry - Petroleum (Local Content and Local Participation in Petroleum Activities) Regulations, 2013 (LI 2204), which defined Ghana's participation of local content in oil and gas industry. Ghana is fortunate to be one of the few nations that have strong regulatory framework dealing with issues relating to the local content in the petroleum sector.

The enactment and execution of the Local Content Policy within the petroleum Industry in Ghana sought to place a limitation on foreigners' participation in the activities of this sector. FDI is a main component of capital flow for developing countries of which Ghana is not an exception. According to Musila and Sigué³ most of the literature are of the view that the gains of FDI's overshadow its cost in the host countries.⁴ As a result, FDI's are necessary for economic growth in developing economies such as Ghana. There have been massive inflows of FDI into Ghana following the discovery of oil. Ghana was placed third out of the five top countries as major receivers of FDI in Africa in 2011.⁵ Ghana benefited from FDI in the newly developed Jubilee oil field where marketable production began in December 2010.

1.2 Statement of the Research Problem

Africa is blessed with enormous natural resources such as gold, diamond, cobalt, oil, bauxite and uranium yet most of the states in Africa is engulfed with poverty and remains the poorest continents on the globe.

The discovery of oil in commercial quantities in Ghana in 2007 was greeted with high expectations and optimism by Ghanaians as it was deemed as a good source of revenue. Since the commercial production of oil started in December 2010, the economy grew at a more than 14 per cent in 2011, making Ghana the fastest growing economy in the world that year thus attracting more MNCs in doing business in Ghana.

While the oil discovery presents enormous opportunities for economic growth and poverty reduction, the country has since not experienced that quantum growth. As result, there is the need to assess the efficacy of the implementation of Ghana's Petroleum Regulations, 2013 (LI 2204). This is because the Local Content Provisions for the oil and gas sector in the Petroleum Law (PNDC Law 84) did not succeed in increasing the benefits to Ghanaians in the sector due to inefficient implementation. Whether the passage of the Local Content law, 2013 (LI 2204) has made any difference leaves a lot more to desire and worth investigating.

Smith stresses that when a policy is espoused and supported by regulations, it does not necessarily mean it will be successfully implemented.⁶ Whenever assessments of programmes are done, it often turns out that their intended purposes are not always achieved. This could be as a result of the ideas been misapplied or they are not applicable at all in that area, even though

they appear good on paper.⁷ In some cases, the negative impact of the policy will turn to outweigh the positive.

The overall purpose of this research is to examine if the existing Local Content Policy (LCP) has any bearing on the amount of FDI in the oil and gas sector. This study seeks to enhance the development of the oil and gas business in Ghana, considering the numerous political and socio-economic challenges within the sector.

1.3 Research Questions

The study is motivated by the following questions:

- Has the enactment and the execution of the Local Content Legislation in Ghana's petroleum sector been effective in fulfilling its intended objectives?
- Does the Local Content Policy have any significance on FDI in the petroleum Industry in Ghana?
- How are Ghanaians currently participating in the Upstream Petroleum Industry?
- Are there any other best practices of local content in the Upstream Petroleum Industry Ghanaians are aware of?

1.4 Research Objectives

The study seeks to provide a comprehensive assessment of local content policy and its significance for FDI in the petroleum industry in Ghana. Specifically, the study seeks;

- To assess effectiveness in the enactment and the execution of the Local Content Legislation in Ghana's petroleum sector in fulfilling its intended objectives.
- To examine the significance of Local Content Policy on FDI in the Petroleum Industry in Ghana.

- To investigate the extent to which Ghanaians are participating in the Upstream Oil and Gas Industry.
- To find out if Ghanaians are aware of other best practices of local content in the Upstream Petroleum Industry.

1.5 Scope of the Study

The study concentrates on the oil and gas industry in Ghana which encompasses mainly the upstream activities within the petroleum sector. The upstream sector is responsible for exploration, development and production of petroleum from the fields. The study expounds on the Upstream Oil and Gas Sector from 2010 to 2016. This period of investigation comprises some years before the implementation of the LCP, 2013 (LI 2204) and some years after its implementation. This helps to make a comprehensive analysis of the growth of FDI in the Petroleum sector of Ghana over these years.

1.6 Rationale of the Study

The purpose of the study is to examine the effectiveness of the Local Content Policy (LCP) in the oil and gas industry in Ghana, as well as examine if the LCP has any significant influence on the amount of FDI received in this sector. The findings of this study will help in advising policy makers on the practicality of LCP in benefiting the Ghanaian populace. The study also seeks to add to the academic literature on the nexus between LCP and FDI which is not common in the existing works. In effect, the study intends to enlighten policy makers about if it is worth pursuing LCP if its significance on FDI which is one of the agents of economic growth turns out to be grievously detrimental and outweigh its gains.

1.7 Hypothesis

There has not been any significant fulfilment of the intended goals and objectives of the Local Content Legislation in Ghana's Oil and Gas Industry.

1.8 Theoretical Framework

As the study seeks to provide a comprehensive assessment of local content policy and its significance for FDI in the oil and gas industry in Ghana, two broad theories are considered: Globalisation and Protectionism, with globalisation (opening up the country's markets to MNCs) serving as the main theory and protectionism (developing countries bring up mechanisms to protect their share of the resources) as its criticism.

1.8.1 Globalization

The theoretical framework to this study hinges on globalisation as propounded by Anthony Giddens in the early 1980s. Globalisation is best described as a means through which countries and their regional blocks, economies, societies and various ethical backgrounds exchange ideas and innovations through an organised global system of trade, communication, migration and transportation.⁸ In recent years, the concept focused basically around the economic side of the world, for instance, foreign exchange, foreign direct investment and international capital inflow. Most recently, the term has been expanded to include a broader extension of areas and activities, for example, environmental elements (climate change).

Globalization has actuated changes in worldwide rivalry for foreign direct investment (FDI) and ongoing empirical evidence on the relative significance of determinants of FDI in developing nations. This brings about opening up the Ghanaian market for global and multinational companies to invest and operate within the country. This in effect increases the

gross domestic product of the country and enhances the growth and development of the country for instance creating employment opportunities for Ghanaians.⁹

Notwithstanding the strength underpinning this theory, studies identified some loopholes in its application, primarily directed at the acclaimed advantages of globalization. A large number of these perspectives are held by the counter globalization development. It includes the fact that globalization has created much global and internal unrest in many countries. While at the dynamics of capitalism is changing and each country is unique in its political makeup, globalization is “a set in stone” programme that is difficult to implement without political unrest. Globalization can be partly responsible for the current global economic crisis.

Despite these criticisms, globalisation forms the fundamentals of international trade and opening of new markets for foreign direct investment. The theory of globalisation thus provides a significant relevance to the study. Through its provision of an arena for various features and activities that go on in international trade such as issues of foreign direct investment in developing countries, free trade, natural resource exploration, capital operation and government reaction to globalisation in terms of using local content polices to create checks and balance to protect their domestic investments, the contextual framework of globalisation cannot be more than appropriate for the study.

Local content requirement is a popular government policy in both developed and developing countries. This policy allows countries to attract foreign direct investment and grow capacity and capability. Therefore, the advent of globalization is heavily relevant to the concept of the study on local content requirements as it engineers economic projects through corporation and technology in stimulating significant economic growth across the world with a resultant effect

of creating borderless world goods and services move relatively freely across borders with the formation of different regional trading alliance.

1.8.2 Protectionism

One of the criticisms of globalisation is protectionism, which refers to government actions and policies that restrict or restrain international trade, regularly done with the aim of protecting local businesses and jobs from foreign competition. Typical techniques and procedures for protectionism are tariffs and quotas on imports and subsidies or tax cuts granted to indigenous businesses¹⁰ Regional specialization of industrial production within a country shares many common features with international specialization and has received considerable attention in the study of international trade and regional economics.¹¹ The essential theory of regional specialization is a characteristic extension of the resource-endowment theory of international specialization.¹² Different regions are enriched with various set of natural, physical, and human capital. At the point when trade among various regions is possible, each region specializes in producing a subset of goods and services. The pattern of specialization is determined by the comparative advantages of regions, suggested mutually by resource endowment and innovative abilities. In any case, it is essential to take note that this theory depends on crucial assumption that factors of production are immobile.

The concept of protectionism implies that developing countries such as Ghana bring up mechanisms to protect their share of the resources through the enactment and enforcement of laws and regulations to deter mismanagement and excessive exploitation without any substantial benefit to the country. Therefore, “protectionism is the economic policy of restraining trade between states, through methods such as tariffs on imported goods, restrictive quotas, and a variety of other restrictive government regulations designed to discourage

imports, and prevent foreign take-over of local markets and companies.”¹³ This policy is closely aligned with anti-globalization, and contrasts with free trade, where government barriers to trade are kept to a minimum.

1.9 Literature Review

The study seeks to provide a comprehensive examination on the local content policy and its significance for FDI in the petroleum sector in Ghana. With this, related literature is reviewed on local content (building a workforce that is skilled and building a competitive supplier base) and FDI.¹⁴

1.9.1 Oil and Gas as a Country’s Resource

Like any other substantial economic resource, oil and gas resource is finite and for these reason, numerous nations (especially the developed ones) seems to move towards engrossing the probabilities for local companies to take key interest in the utilisation of resources, especially the resources within the exploration sector, such as mining and oil and gas. This because of a global ideology of these resources in these businesses drive financial growth as well as contribution to the country’s economic wealth. ¹⁵ To achieve the utmost benefit for their countries, the policymakers design various policies to monitor their countries' gains, regularly themed with increasing local content.¹⁶ Ironically, the idea of local content is not solely new; however, local content establishment in the petroleum sector is a concept which has attracted lots of academic and scholarly attention in recent years.¹⁷

Depending upon the perspective of researchers and other distinguishing stakeholders in the industry, there are differing definitions for the concept of local content, with much discussions to the extent to which and ways through which they bring benefits to host nations Further, there

exists some exceptionally strong arguments against the use of Local Content Policies (LCPs) to drive sustainable economic growth and development. The use of incentives and performance standards by developed countries to influence economic growth and sustain various indigenous enterprises has long been a trend.¹⁸ Several nations in the automobile and, for instance, Canada and several European countries, electronics industries have employed the use of policies such as content requirements, or export performance to their advantages.¹⁹ As provided in the literature, nations like the United Kingdom, Norway, Brazil, Malaysia and Trinidad and Tobago are frequently touted as local content successes in the oil and gas industry.²⁰

Obviously, the “utilization of these strategies and their legitimate execution have profited the countries and played a role in their industrial growth and economic development. How can Ghana, a new oil-producing country, harness its newly enacted policy to their advantage? To answer this question, the literature seeks to gain profound understanding of the concept of local content policies and why they are utilized and the degree to which they improve the livelihoods of citizens in countries where they are employed. It finally looks at some arguments that have been made both for and against local content policies.

1.9.2 Local Content Policies and the Oil and Gas industry

As indicated by Grossman, governments concerned with the survival of firms in the intermediate sector, place local content requirements to increase the domestic output in that sector.²¹ Researchers and industry experts have varying definitions to local content, to a larger extent it is based on the sector and the context in which it is being referred.²² Local content expert Michael Warner defines local content as the “composite value contributed to the national economy from the purchase on bought-in goods and services.²³ Tordo et al²⁴ also define local content as the extent to which production in the extractive industry sector adds value to other

industrial sectors through its activities. Wells and Hawkins²⁵ suggest that local content can be categorised into two fundamental methodologies: the enterprise approach which centres around the level or percentage of local ownership of a business involved in the production process, local means national or any geographic and administrative area. The second approach, is the value added approach, which focuses on the value added to goods and services in the production process.²⁶ In spite of this affirmation, other studies are of the view that the level of local ownership and the location of a business may mean two different things, as a business could be based locally but be foreign owned, or locally based and owned, which in each case, will bring different benefits to the economy.²⁷

Heum et al²⁸ in an in a study jointly commissioned by the Nigerian and Norwegian governments that explored viable policy approaches to Nigerian Local Content, defined local content as value addition activities taking place in Nigeria. They also defined a Nigerian company as one with ownership or possibly establishment to have the ability to manufacture and provide services in Nigeria. This definition clearly suits the enterprise approach.²⁹ However, their research concluded that it is more important that local content is seen in terms of the value added through increasing FDI in the host country to the local staff, the local materials, and local services and facilities, than in terms of the ownership or location of a company performing those value-added services.³⁰ This is because, building capacity of the local people is more sustainable in the long run than quantifying the level of ownership, as this equips the people to do more for themselves.³¹

Kazzazi and Nouri who also advocate the value-added approach, base their findings on the development of a conceptual model designed to help understand the concept of local content and its development in the oil and gas sector. This model based on a set of factors related to

each other; local policies, local infrastructure, local environment and local capability.³² Their findings showed that the progression of local content varies between countries depending on the political, economic and social development status of a country. In their study, public and industrial policies were found to straightforwardly influence the local macroeconomic and business and investment environments and local infrastructure; information technology, local company's needs, local standards, social, educational, institutional and business development infrastructure.

Local policies were moreover found to have a causal effect on the capabilities of local companies, on education, on skills and expertise development, research and development capabilities and on technology and know-how transfer capabilities.³³ In a study on enhancing the benefits of local content, Esteves and Barclay underlined the widespread belief that promoting local content has self-seeking benefits for both corporations and communities alike. By drawing on a past report that designed a good practice local procurement guide for the “Australian mining, oil and gas sectors, this impact assessment research showed that, from a corporate perspective, local content is seen as giving the corporation social licence to operate by giving the communities a stake in the project and ensuring that the companies have access to a reliable supplier nearby, thereby increasing their value chain efficiency and giving them a competitive advantage in the eyes of the community and the government.”³⁴ For the communities, local content development gives the members of the community the opportunity to participate in the development of a resource they could not have funded otherwise, and permitting the benefits of the resource to flow into the communities.³⁵ In spite of the divergent perspectives on the best way on how to define and approach the development of local content, all definitions concur that the successful development of local content should result in some form of value addition to the country.³⁶

1.10 Definition of Key Concepts

1.10.1 Local Content

Local content has been defined by different scholars in several ways. This study's working definition interprets local content in the Ghanaian context as one of the instruments used by the Government to increase the stake of the citizens and the domestic firms in the upstream oil and gas sector. Thus, Senoo & Armah defines the concept of local content to mean safeguarding the opportunities in the oil and gas industry for the natives by improving Ghanaian participation in resource activities in the country through fostering the development of local skills, technology transfer, and the use of local labour force and local manufacturing.³⁷

Again, according to the World Bank's definition, local content definition, local content broadly in terms of employment and procurement of inputs, as well as based on the domestic ownership of the firm such as domestic preference qualification. Ghana's local content largely emphasizes on the extend of use of local skill, the acquisition of local goods and services, the participation of domestic firms, and the funding of resource activities in the country.³⁸

1.10.2 Foreign Direct Investment (FDI)

In the views of Dhrifi³⁹ foreign direct investment (FDI) simply means having control of ownership in a business in one country by an individual or a company located in a different country through investment of substantial capital needed to enhance the growth of the business. For the purpose of this study, FDI refers to non-Ghanaians exercising their interest in Ghanaian businesses in the form of purchasing a firm in Ghana or expanding operations of a present business in Ghana and having management control in those firms. FDI therefore includes mergers and acquisitions, constructing new facilities, and profit reinvestment by foreigners.

Foreign Direct Investment (FDI) inflows do play a key role in providing the much needed additional financial and technical resources to support the industrialization process. Foreign Direct Investment (FDI) is broadly viewed as an essential channel for boosting economic growth in developing economies including the African region.⁴⁰ Developing nations with rich natural resources like Africa offer attractive investment opportunities, thus attract FDI inflows from developed economies.

1.11 An Overview of Ghana's Oil and Gas Industry

Ghana is noted as one of the few successful democratic countries in the African context,⁴¹ with a rich historical background in mineral extraction and petroleum exploration. Ironically, large-scale gold mining dates to the last quarter of the nineteenth century,⁴² while at the same time oil exploration dates back to 1896,⁴³ though on a limited scale. Oil and gas exploration was to a great extent hampered by the limited technology accessibility at the time.⁴⁴ Ghana has a modest upstream oil industry with one onshore and five offshore sedimentary basins. The main drive behind the oil and gas industry in Ghana is the need to reduce the country's dependence and reliance on hydroelectricity.

In spite of the fact that up till now, its upstream petroleum sector has no crude oil production, Ghana is one of the four West African countries with a petroleum refinery. The oil refinery operated by the Tema Oil Refinery Corporation (TOR). TOR has an operating capacity of 45,000 barrels per day running on crude imported from Nigeria. The National Oil Company (NOC), Ghana National Petroleum Corporation (GNPC) established in 1983 was first responsible for importing crude and refined petroleum products and later moved on to providing regulatory framework for the exploration of hydrocarbon resources and the right of making open acreage to undertake extraction activities such as exploration and development.

Ghana's Petroleum Commission was established in 2011 to promote, regulate and manage the activities of upstream petroleum operations and to coordinate policies in relation to them.

The nation's first oil was drilled in 2010 from the Jubilee Phase I field, 3 years down the line commercial quantities of crude was discovered. A number of other discoveries were made after this.⁴⁵ The downstream oil industry is vital to the economy. Oil-derived products supply 70% of Ghana's commercial energy needs. Current consumption of petroleum products is in the region of 950,000 tons per annum. Increasing power demands by industry and domestic consumption and a need to reduce the reliance on hydroelectric power is not only fueling the search for oil and gas but also has set in motion projects relating to the importation of gas via pipeline from Nigeria and Cote d'Ivoire. Overall responsibility for control and direction of the oil industry rests with the Government through its Minister of Energy. The national oil organization, Ghana National Petroleum Corporation (GNPC), is in charge of is responsible for procurement, storage and bulk distribution of petroleum products to the oil marketing companies. In late 1998, the Ministry established a seven-member Energy Commission, whose brief is to regulate and manage the utilisation of energy resources in the country and coordinate policies. It also includes the granting of licenses for the transmission, supply and sale of natural gas.

Several laws regulate petroleum activities in Ghana, including those aimed at ensuring transparency, accountability, and environmental sustainability and trickle-down of rents. Notably, PNDC Law 84 (The Petroleum Exploration and Production Law) sets out the policy framework and outlines the role of the Ministry of Energy. The Ghana National Petroleum Corporation Law (GNPC) or PNDC Law 64 enables the country Petroleum organization, GNPC, to carry out petroleum exploration and production, and to enter into joint ventures and

production-sharing agreements on behalf of the government. In 2011, the Petroleum Commission (PC) of Ghana was set up following implementation of the Petroleum Commission Act, 821. It regulates the upstream oil and gas industry processes applications and grants permits for petroleum related activities. It additionally set up a Local Content Committee to promote local participation. The Petroleum Revenue Management (Act 815), 2011, provides a framework for mobilising, allocating and managing petroleum revenues. The focal point of this research, however, is on the Petroleum Regulations (L.I. 2204), 2013, which set out the rules for local participation.

1.12 Research Methodology

1.12.1 Sampling Procedure and Sample Size

In choosing the sample size for the study, consideration was given to the selected stakeholders in the upstream sector of the oil and gas industry in Ghana based on their overall number of workers. Sampling technique is used to select respondents from the oil and gas sectors of business operation. Additionally, the study adopted a purposive sampling approach, which is a non-probability sampling technique, is used to select respondents who deal directly respondents. This was favourable for the researcher as it aids in exploring cases of only typical cases based on the objectives of the study; the time frame also contributed to the choice. The research focused on a sample of 31 respondents, which was chosen from the selected population of various stakeholders in the upstream sector of the oil and gas industry in Ghana. These respondents were categorised into three broad distinction. These were policy makers, the implementers and the beneficiaries. This enable the researcher obtain relevant and divers information's from different respondents for the purpose of the study.

1.12.2 Sources of Data

The research employs the use of the primary and secondary data. For the primary data, the target population is constituted by various stakeholders in the upstream sector of the oil and gas industry in Ghana. The reason is that the LCPs primarily target individuals in that sector. A semi-structured questionnaire will be administered face –to –face to gather data on the efficacy of the LCP since its inception in 2013 till date.

Primary Sources

To ascertain valid data for the study, the researcher contacted workers of the Ministry of Energy, Petroleum Commission, Ghana National Petroleum Corporation, Ministry of Trade, Ghana Investment Promotion Centre, Major IOC's like Tullow, Eni, Kosmos and Hess. These are well known industry participants that control majority stake within the oil and gas industry of Ghana. The method used in collecting the primary data was a well-structured opened ended interview guide.

Secondary Sources

The source of the secondary data is gathered from journals articles and reports on the inflow of FDI over the period of study. This is used to ascertain if the LCP has impacted FDI within the oil and gas industry of Ghana. This provided a strong foundation to the research on how key concepts were measured and the data sources that was employed. Additionally, its provides the study with a broader view and dimensions to boost the content of the study area.

1.12.3 Research Instrument

The research instrument used for this study is questionnaire. They study used a well-structured questionnaire prepared by the researcher to collate information from sampled participants from the petroleum sector of Ghana. The instrument provided the expected data about how LCP has impacted FDI in the Oil and Gas Industry in Ghana.

Questionnaires

The questionnaire was used to collate first-hand information in connection to the study. A set of questionnaires was designed to ascertain data that will help the researcher gain meaningful conclusion. The open and closed ended questions were to suggest options as well as provide room for respondent to suggest critical information that would be necessary for the study. This data retrieving source was important since it helped the researcher to get to interact with respondent and get primary information from the respondents.

1.12.4 Administration of Instruments

A research instrument is a tool that is utilized for data collection.⁴⁶ The questionnaires were printed and distributed to participants at their work places with detailed explanations provided to respondents.

To ensure adequate information from the sampled respondents the researcher formulated the questions very well to remove all uncertainties.

1.12.5 Research Design

The research approach used was both qualitative, involving the use of models where the response options had been predetermined. The study was based on the use of as open ended questions and the analysis was done with help of descriptive.

This method was employed due to its satisfactory nature in collecting data and also qualitative research generates reliable sample population based and data that can be generalized which is well suited to establishing flow of relationships. Furthermore, this methodology was chosen based on the research period and ease of acquisition of data.

1.12.6 Analysis of Data

Thematic analysis is one of the most common forms of analysis in qualitative research which emphasizes pinpointing, examining and recording patterns (or "themes") within data (Guest, 2012). Themes are patterns across data sets that are important to the description of a phenomenon and are associated to a specific research question, thus the themes become the categories for analysis (Braun & Clarke, 2006). The data gathered from the respondents are presented using descriptive statistics such as tables, graphs and charts.

The collected data were statistically analysed, using the Statistical Package for Social Sciences software (SPSS). Representations like tables and charts were used to ensure easy and quick interpretation of data. Responses were expressed in percentages. Data from the completed questionnaire were checked for consistency. The items were grouped based on the responses given by the respondents and were coded for easy usage of the Statistical Package for Social Sciences (SPSS). This method was used because it is the best instrument to identify, compare, describe and reach a conclusion.

1.13 Organization of Chapters

The research was organized into four chapters. The first chapter is the introduction. Chapter two looks at the background of the of local content policy in Ghana, the history and

development of upstream oil and gas industry. Chapter three examines the local content policy and its significance on the inflow of FDIs in the oil and gas industry. Finally, chapter four comprises the summary of findings, conclusions and recommendations.

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CHAPTER TWO

THE OIL AND GAS SECTOR IN GHANA

2.0 Introduction

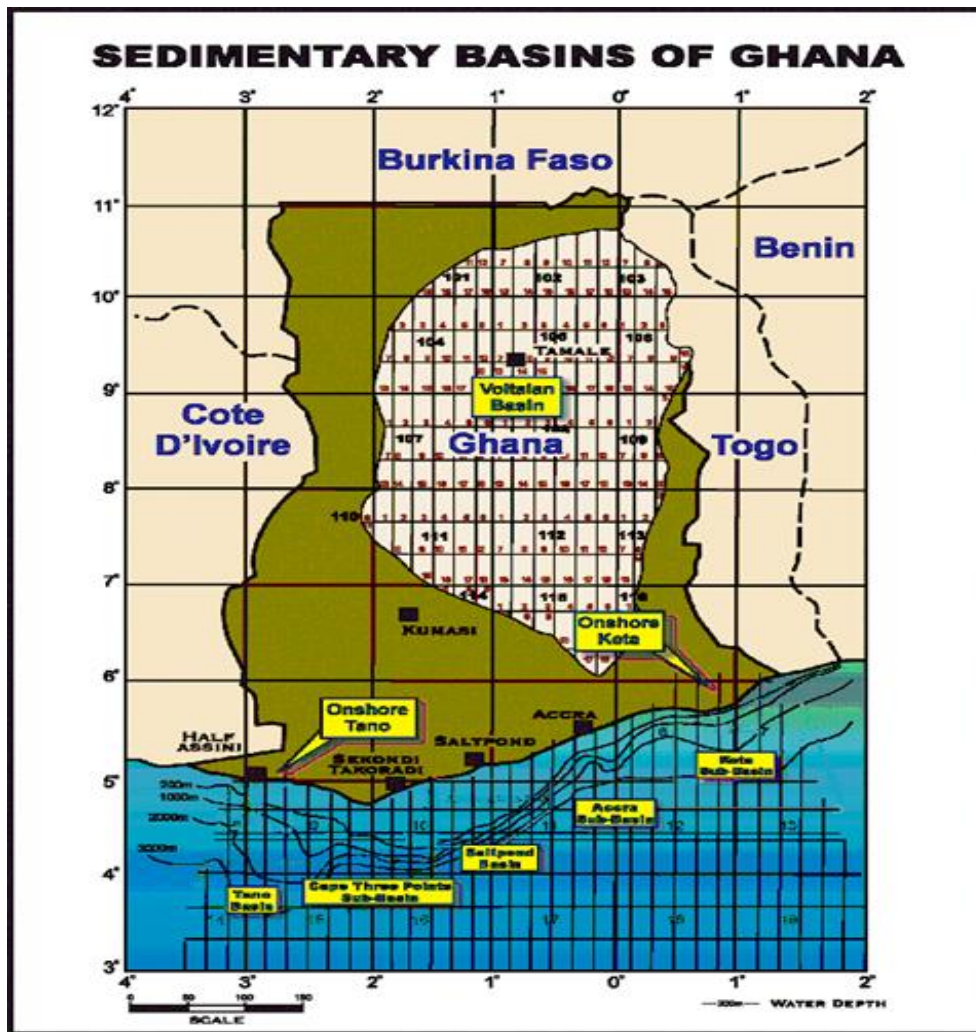
This chapter provides a comprehensive examination into the subject of oil and gas related issues in Ghana. It provides a background overview of the sector and the importance of the sector to the economic development of the country. Again, it also outlines the legislative regimes associated to the industry and its relationship with the study.

2.1 Overview of Oil and Gas

Ghana is situated in the Gulf of Guinea of Western Africa known for diverse natural life, old forts and secluded beaches. Coastal towns, for example, Elmina and Cape Coast contain posubans (local places of worship), colonial buildings and castles-turned-museums that serve as testimonials to the slave trade.¹ North of Cape Coast, vast Kakum National Park has a treetop-shade walkway over the rainforest.² Ghana has an estimated population of 28.21 million people as at the year 2016. Ghana has an area size of 238,500 square kilometers and it is blessed with gold, timber, industrial diamonds, bauxite, manganese, rubber, hydropower, oil, silver, salt and limestone.³ Ghana is recognized with significant level of peace, and making great walks in its popularity based on its democratic governance in the West African sub-area⁴ Cocoa has been a noteworthy contributor of its Gross Domestic Product (GDP) through⁵ agribusiness that records for 37 percent of GDP. Exploitation of the Saltpond field began since 1980s at the shallow offshore though, the production was minimal compared to the value of energy utilised in the country. From 1980 to 2006, the oil production from the Saltpond field expanded from 2000 barrels per day (bpd) to 6000 bpd, while utilization expanded from 16000 bpd-51,300 bpd during the period.⁶ Interestingly, the exploration and production was undertaken by a local oil and gas

company. Currently, Ghana harbours four sedimentary basins: Tano-Cape Three Points Basin (Western Region), Saltpond/Central Basin (Central Region), Accra-Keta Basin (Eastern Region), and Voltarian Basin (Northern Region).

Figure 2.1: The sedimentary basins of Ghana. The overview of oil and gas sector in Ghana



Source: The Petroleum Commission of Ghana. <http://www.petrocom.gov.gh>. Accessed on 11 December 2017.

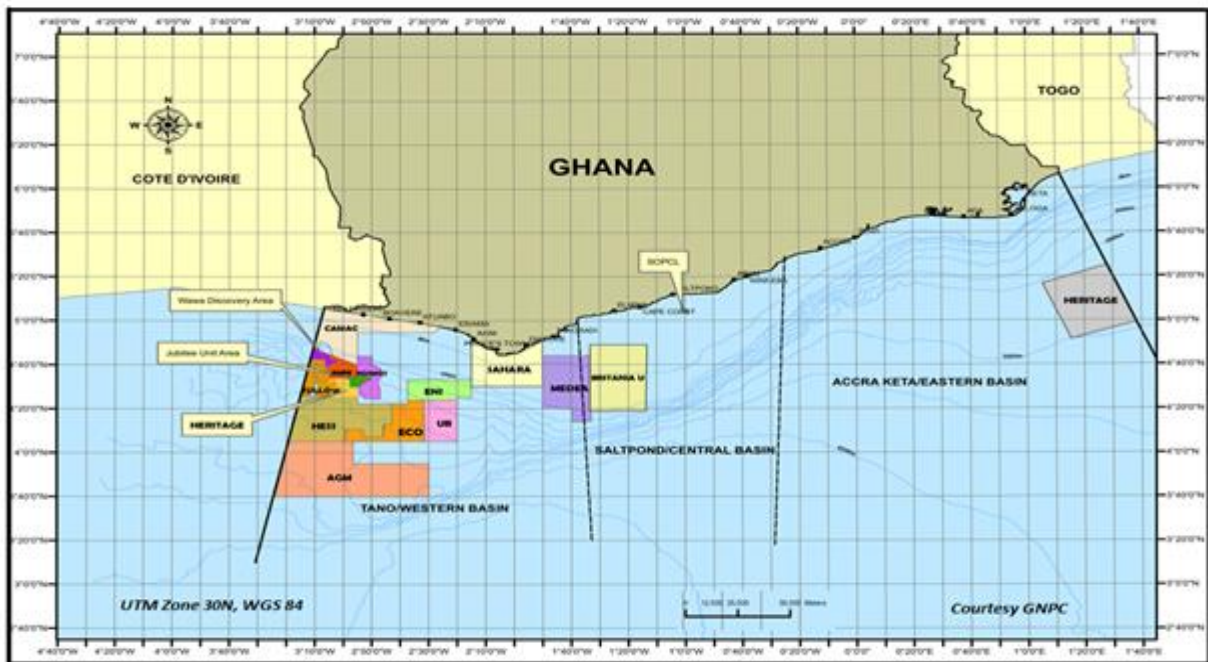
2.2 Development in Oil and Gas Exploration Sector

Studies provide that the history of oil and gas exploration and its exploitation can be traced in the nineteenth century that is during the Gold Coast era.⁷ Indications of a possible oil discovery

in Ghana were affirmative, fueling the future believe of significant oil finds in the country. The revelation of oil leakage at the Tano basin, near Half-Assini in the Western Region, triggered the further exploration for oil in 1896 by the West African Oil and Fuel Company Limited.⁸ Several other organizations emerged during pre-independence and after independence, however it was not until the sixties that progressive governments started to genuinely look for oil in commercial volumes.

Historically, within the period of 1966 and 1967, a Romanian Company contracted by the government drilled a well in the Eastern part of Ghana. In 1970, premier discovery was made by Signal Amoco Oil Company, around 100 kilometers West of Accra in spite of the fact that it was insignificant. The site was known as Saltpond Offshore Field, with an estimated 45 million barrels of oil. Production started 8 years later in 1978 and continued until the point when 1985 when production dipped below economic levels, requiring the closure of the field and the production platform. According to Aratuo (2012) from 1978 and 1985 a total of about 3.47 million barrels of oil was produced from the field and around 14 billion cubic feet of gas was flared. Amid a similar period, the Volta Petroleum made it the first panel basin offshore discovery of VT1X in 1970, and Zapata Oil Company discovered gas offshore at Cape Three Points in 1973.

Figure 2.2: Ghana's offshore activity map- The licensed area.



Source: The Petroleum Commission of Ghana. <http://www.petrocom.gov.gh>. Accessed on 11 December 2017.

Additionally, the Philips Petroleum in the South Tano Fields from the period of 1978-1980 and the Petro-Canada International Assistance Corporation in 1985 at the Tano basin made further drilling and discoveries. Appraisals of these discoveries were made and some found to be marginal and not economically viable. In 1985, a law enacted in 1983 establishing the GNPC was passed. The GNPC has since partnered with various organizations to drill wells and acquire seismic data. GNPC went into a joint venture partnership with Lushan Eternet to reopen the Saltpond Offshore Production Company Limited (SOPCL) in 2000, which recommenced its production at the Saltpond field producing about 600 bpd of crude oil. Other organizations, for such as, Damond, Shamock, Arco, Amoco, Hunt Oil and Dana Petroleum all folded up and left around 2003. Kosmos Energy came on board in 2004 to commerce deep- water explorations and Tullow Oil joined in 2006. The collaboration between these two companies brought about the Jubilee Oil and Gas find in 2007 according to Aratuo (2012).

There are more than fifty drilled exploration wells of which seventy-five percent are hydrocarbons and ten discoveries with more ongoing drilling. Production on Jubilee Phase 1 began in December 2010, comprising of nine production wells, five water injection wells (a well utilized for the purpose of pumping water or gas into the reservoir), and three gas injection wells. The Jubilee find has brought about a scramble for procurement of exploration blocks and a speed up in exploration and production activities.⁹

2.3 The Operation of Oil and Gas Industry in Ghana

The industry consists of three operational areas namely upstream, mid-stream, and downstream. The upstream oil is the Exploration and Production (E&P), midstream is transport and logistics while downstream is the processing and distribution. The Ministry of Energy (MOEN), and Parliament regulates all the three operation divisions of the oil and gas industry.

2.3.1 GNPC's Mandate

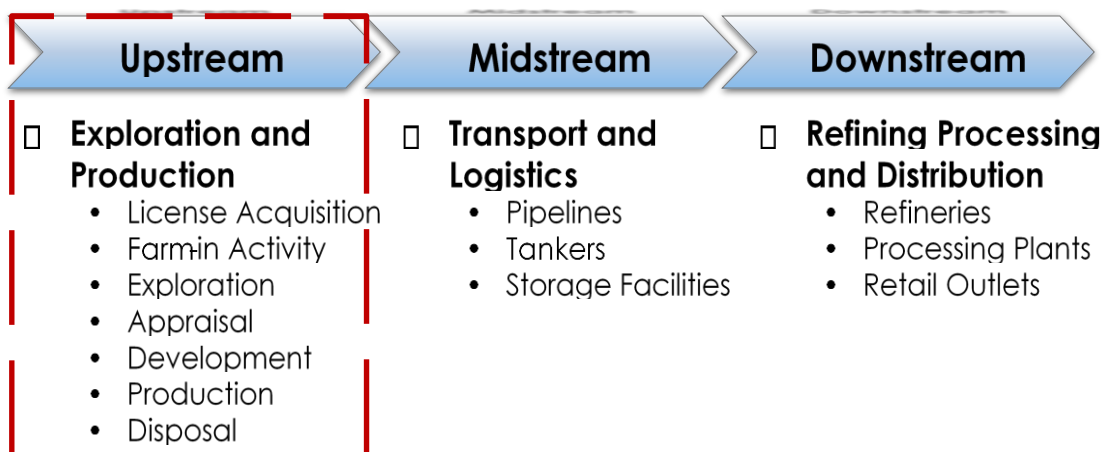
The Ghana National Petroleum Company is a state institution established under the GNPC Law 1983 (PNDC Law 64) in 1985 as a strategic vehicle to regulate the petroleum sector in the country.¹⁰ It was set out with an objective enshrined in the section 2 (1) of the PNDC Law 64 to undertake the exploration, development, production and disposal of petroleum.

The law provides the GNPC with the right to undertake exploration, development and production of petroleum in all open blocks and requires all individuals keen on undertaking petroleum related activities to partner with the Corporation.¹¹

2.3.2 The Petroleum Commission

Act 821 set up the Petroleum Commission for the regulation and management of the utilisation of petroleum resources in Ghana and coordination of policies in relation to them. As the Upstream Petroleum Regulator, Petroleum Commission of Ghana is mandated to effectively regulate, manage and co-ordinate all activities in the Upstream Petroleum (oil and gas) industry for the overall benefit of the nation.¹² With the aim of ensuring the sustainable development of the oil and gas resource in Ghana, the Petroleum Commission works with its stakeholder to control and direct all activities therein in relationship to oil and gas the public sector.

Table 2.1: The three operational sectors within the oil and gas industry



Source: The Petroleum Commission of Ghana. <http://www.petrocom.gov.gh>. Accessed on 11 December 2017.

2.3.2 Current Operations within the Sector

Current operations of the upstream in the Jubilee field with two platforms Eirik Raude (a Norwegian Rig for well drilling) for the drilling of wells and FPSO Nkrumah (Floating Production, Storage and Offloading), for the production and storage of oil and gas.¹³ Activities in the upstream sector are administered by the GNPC in the interest of the MOEN because of their specialized expertise. The mid-stream sector includes all activities between the well-head

and the refinery. It includes transportation of oil and gas from the FPSO Nkrumah to refineries onshore and storage of petroleum. However, there is no clear governmental agency supervising this sector on behalf the Ministry of Energy.

The downstream sector is the onshore operations that includes refining, distribution, and marketing of petroleum products. The Tema Oil Refinery (TOR) which is operational and a proposed, yet to be established a gas processing plant at Bonyere in the Western Region, which will be operated as an oil refinery and gas production respectively. The Bulk Oil Storage and Transport (BOST) Company Limited has a responsibility of transport and gas distribution nationwide as well as storage of petroleum. The National Petroleum Authority (NPA) set up by an Act of Parliament in 2005 is to oversee, regulate and monitor all activities in the downstream sector in the oil industry. Nevertheless, Energy Commission (EC) regulates the downstream natural gas. Presently, there is no single office or government agency monitoring and regulating all the three areas. However, there is a proposal for the setup of an autonomous National Petroleum Regulatory Authority to oversee the activities in all the three sectors.¹⁴

2.4 Importance of Oil and Gas to Ghana

Ghana is said to be blessed as the discovery of oil and gas (petroleum), according to many researchers, will generate economic, social and technological benefits.

Economic Benefits

The nation stands to gain from increased growth of its Gross Domestic Product. Revenues from oil are expected to be sizable, being estimated to average US\$1 billion yearly from 2011 to 2029, or about 5 percent of GDP.¹⁵ Through the Annual Budget Funding Amount (ABFA) as stipulated in the Ghana Petroleum Revenue Management Act, 2011 (Act 815), revenues will be made

accessible to finance the development of sectors like agriculture, health and education for a diversified economy that supports poverty reduction efforts. These targets are, however, not without challenges such as limited financing, infrastructure as well as misplaced priorities on the part of leaders. As per the Public Interest and Accountability Committee (PIAC) – a major body created by the Petroleum Revenue Management Act, 2011 (Act 815) in ensuring transparency and compliance with accountability in managing oil wealth – in its 2011 report, “not all payments expected to go into the Ghana Petroleum Holding Fund (a dedicated wealth fund for accrued petroleum revenues set up under the Petroleum Revenue Management Act, 2011 (Act 815) were reported on”.¹⁶ The report indicates that surface rentals were paid into Government of Ghana Non-Tax Revenue Account in 2011 and not accounted for in the Petroleum Holding Fund.¹⁷

Social Benefits

The oil income could be channeled to finance and invest in basic and higher-level public infrastructure. Ghana’s oil income could finance scientific research into threatening diseases, environmental protection, and basic infrastructure like roads, alternative power, urban water and sanitation, health and education. The World Bank Report "World Bank on the Economy-Wide Impact of Oil Discovery in Ghana, 2009" estimates that Ghana’s infrastructure financing gap ranges between US\$ 350 and 800 million. This means the provision of public infrastructure through increased budgetary allocations complemented by oil revenues could serve as an enormous boost to meeting the development needs of the country.¹⁸ The provision of infrastructure has spillover benefits for the entire society in the form of enhanced political stability and increased access to basic human needs. Present and future citizens can be made better off by having a significantly larger share of revenues invested in domestic infrastructure while saving to cushion the economy against volatilities in oil prices. The oil find could attract

private investors. The proliferation of investments from multinational companies would benefit the country in terms of employment and foreign exchange generation.¹⁹

Technological Benefits

Ghana's oil and gas resources have the potential to create local value premised on the use of technology. This is particularly important in terms of job creation, income generation, business expansion, and ensuring industrialization drive. This will, however, materialize when Ghana adopts an effective local content strategy. In Brazil, Petrobras through its local content strategies with the government agency, Sabre, have resulted in the participation of 2,300 small and micro companies. In the same vein, according to Ghana's Energy Commission through its local content and participation policy could benefit immensely from transferred industrialization should Ghana National Petroleum Corporation (GNPC) seek the growth and integration of local businesses.²⁰The technological benefits could be evident in operationalization of local industries specializing in fertilizer production for agriculture modernization and LNG for domestic and industrial purposes.

Generally, these are the benefits available to an economy based on sound and effective medium to long term development strategy. It is important to stress however that the benefits enumerated above are strongly conditional upon understanding of and readiness to enable basic trappings of transparency and accountability to work in the oil and gas sector. It is on this on this ground that the role of the civil society is exceptionally significant.

2.5 FDI in the Oil and Gas Industry

The role of FDI in any industry is to bolster its development and contribute in economic growth. Yet, the problem still remains by how much FDI affects the petroleum sector in terms of growth

in petroleum industry. Nevertheless, most economies with oil and gas as a natural resource have seen a progressive uptick in infrastructure for refining petroleum products and it homes the largest refinery in the world. Various studies in different context of study have on the majority suggested a positive relationship between FDI and the development of the oil and gas industry. This section provides empirical evidence around the world to this effect.

Studies explored the investment trends and patterns along with discussing various initiatives taken by the Government of India to promote FDI influx in Oil and Gas sector.²¹ According to data released by the Department of Industrial Policy and Promotion (DIPP), the petroleum and natural gas sector attracted FDI worth US\$ 6.67 billion between April 2000 and March 2016. Agrawal used a time series data analysis to predict the total inflow of FDI to the Indian gas sector and the positive relevance it has had up to date. Additionally, Gawad and Muramalla posit in their study to provide a supporting evidence with the assumption that there is a positive and significant relationship between FDI and Exports of Oil and Gas Industries.²² However, in the same study it was found that the relation between FDI and Production of Crude Oil was inconclusive.

In China, Kember provided that the foreign Investment in China's Energy Sector China faces two urgent pressures: to develop its domestic energy system rapidly and massively as demand swells with growth; and to set up secure access to energy from abroad to satisfy rising import demand.²³ These objectives, combined with the with the pressing need to build physical infrastructure, will be difficult to accomplish without private foreign investment and technology. Securing finance and investment to modernize the energy infrastructure is obviously a focal need for the Chinese government. Although the energy sector is still dominated by State Owned Enterprises (SOEs), foreign investor participation is encouraged with the aim of expanding

infrastructure and introducing new technology. This shows the high recognition by government of importance of FDI as demonstrated by growing to easing the burden transformation on the public budget. This evidence and more suggest that, in the oil and gas (petroleum) industry FDI has a major and significant role in improving the maximum growth and development within most jurisdictions.

2.6 Local Content in Ghana

Local content has been defined by different scholars in several ways. This study's working definition interprets local content in the Ghanaian context as one of the instruments used by the Government to increase the stake of the citizens and the domestic firms in the oil and gas sector. Thus, literature defines the concept of local content to mean safeguarding the opportunities in the oil and gas industry for the natives by improving Ghanaian participation in resource activities in the country through fostering the development of local skills, technology transfer, and the use of local labour force and local manufacturing.²⁴ Again, according to the World Bank's definition, local content broadly in terms of employment and procurement of inputs, as well as on the basis of the domestic ownership of the firm such as domestic preference qualification. Ghana's local content largely emphasizes on the extend of use of local skill, the acquisition of local goods and services, the participation of domestic firms, and the funding of resource activities in the country.²⁵

It is in the light of this that, the discovery of oil in commercial quantities in Ghana in 2007, the country was embraced with euphoria by many Ghanaians. With this, the key aspect of the Local Content Policy is that, its targets a minimum of 90 per cent local participation in all aspects of the oil and gas value-chain by 2020. Hence, relative to local content, specifically, section 3 (f) of Act 821 mandates the Commission to promote local content and local participation in Ghana.

According to literature successive Ghanaian governments and policy makers have sought to realize the implementation of local content through various legal and policy initiatives.²⁶ Apart from the 1992 Constitution, several pieces of legislation govern the oil and gas sector in Ghana. Some of these laws address local content.

Similarly, local content has been found in active force in many countries such as Nigeria (which was enacted in 2010 to focus on indigenous participation and domiciliation of oil and gas activities), Indonesia (in 2009 focusing on procurements of domestic inputs), Trinidad and Tobago (in 2004 with its focus on in-country fabrication) and Brazil (also enacted in 2003 with its policies in effect to oil and gas concession).²⁷ Recently, the Norwegian also enacted the model policy on local content focusing on the oil and gas industry. This focus was geared towards the production chain which was not found in the sector. This was made possible for the Norwegian government to add local companies in the sector to the operators' list of suppliers and hence the more operated in contact with the government had a greater chance of gaining slots for subsequent biddings. This were all initiated to protect local industries in other to boost the economic conditions of the country.²⁸

Although the policy has come across many critics all over the world, many government acknowledge the local content policy to be an advantage in fostering growth and development within the shores of their countries.²⁹ Critics such as; the policy inhibits benefited sectors from becoming more competitive vis a vis foreign suppliers; the consequent trend is then reduction of investment in R&D and innovation; costs associated with the acquisition of inputs increase; and resulting disincentive to further investments by foreign investors in the country, many of these government believe that the policy strengthening demand directed to the domestic market and employment expansion; diversification of the industrial sector; development of technology-

intensive sectors and high growth potential; build relevant segments to enhance national security.³⁰

In sum, the local content policies in the oil and gas sector can achieve its economic and social objectives if the policies are adequately designed and implemented.³¹ Again, the policy designed should give due attention to and avoid international trade law violations.

2.7 Stakeholders within the Industry

Research provides that the perception of power relations suggests interactions between at least two people or group with various economic, social or political status and it is characterized by their social, financial, and political areas and positions.³² These collaborations may bring about horizontal or vertical relationship between the participants.³³ Richard Cullen Rath explained the concept of power relations as what empowers an individual to do what and to whom. Basically, it is the matrix of likely actors and their possible relations. Vital to these interactions and relations is the concept of power. Power drives and shapes these relations. Steve McShane and Mary Ann Von Glinow have characterized power as the ability of a man, group, or association to impact others. The degree of impact is an element of reliance which has linkages with the apparent choices and how critical these decisions are. Distinctive literature has given diverse definition of power with various theories.³⁴ However, the thrust of this study is to find potential power relations among actors in the developing oil industry like Ghana and how these distinctive dimensions and concept of power creates these interactions.³⁵

The key players in the oil business in Ghana comprise of the Government (that is institutions and agencies), International Oil Companies, Ghana National Petroleum Corporation (GNPC), and citizenry (made up of civil society organisations, parliament, media, local frontier companies and

trade unions). The influences of these players through their interactions stem from power relations amongst them with consequences for each of the players.³⁶ The Government of Ghana faces enormous challenge in its dealings with the IOCs because of the unequal technical expertise between them. These IOCs has extensive experience and technical know-how in the oil and gas industry and has the advantage of better understanding of economic rents and value of the oil. The unequal technical know-how places IOCs at favorable position in negotiating with Government. Oil exploration and production is technology driven and capital intensive.³⁷ These IOCs have more financial holdings greater than GDP of Ghana which creates power relations that influence agreement on government.

Another source of power relations stems from the country of origin of the IOCs. The IOCs usually from the global north bring along huge influences from countries of incorporation.³⁸ Their influence becomes enormous if the country plays a vital role in the developmental agenda of the natural resource rich country through humanitarian assistance, budgetary support, loans and grants.³⁹ The impact is the unfair relations of power, stimulates the bargaining position of the IOCs, in this way denying the host nation a reasonable arrangement for its assets during negotiations. Hence the effect of unequal power relations, strengthens the bargaining power of IOC denying the host country of a fair arrangements for its natural resource; thus, institutions of weak states may also fail in their bid to gain optimum deal for the country as they interact with these powerful IOCs.⁴⁰ The power relations between IOCs, government or state organisations may bring about unfair agreements that deny the resource rich country of the desired benefits therefore creating resource curse.

The relations amongst government and its institutions with the citizens is also characterised by unequal power relations which shapes the level of engagements and spaces of participation.⁴¹

The upper class may confine the spaces of engagement and participation of media, frontier communities, civil society groups, or workers' union. This may bring about incomprehensive legislations and procedures that do not reflect the character of the state. For instance, in situations where grievances of the frontier communities are not given the required consideration, the communities may engage in violence which may degenerate into conflict prone area.

It is however refreshing to note that, the situation on the ground in Ghana do not reflect an unequal power relation in this regard.⁴² The nationwide consultation and engagements with all segments of the society which culminated in the formulation of the current legal regime for the oil and gas industry is a case in point.⁴³ It is also worth noting that engagements with all stakeholders are still ongoing to ensure all concerns are taken onboard for necessary remedial actions.

2.8 The Sector Currently

Ghana is an emerging oil and gas producer with enormous potential with healthy investment climate and stable economy to encourage investment flows.⁴⁴ Upstream industry currently dominated by international companies (ENI, Tullow, Anadarko, Aker Energy, Kosmos and recently Exxon Mobil). Participation by Ghanaians is limited due to low technical and commercial expertise and huge capital investments constraints. The objective of the government is to ensure the development of a vibrant and flourishing industry, integrate the oil and gas sector into the rest of the economy and derive the utmost from the sector in a sustainable manner.⁴⁵

Over six years, 201.3 million barrels (mmbbls) have been produced with average daily production above 85,311 bopd. Ghanaians have however lifted 34.9mmbbls since inception. Hence the total volume of gas delivered to GNGC is 56,260 million standard cubic feet per day

(MMScf) from November 2014 to date.⁴⁶ In contrast, TEN field productions commenced in August 2016 and the total production as at May 2017 was 13 mmbbls.

The first technical oil production commenced on 20th May, 2017 with about 12,051 bopd and the total proven oil and gas reserves as at January 2017 is 1,253 million barrels of oil equivalent (Mmboe). Ghana however has over 36,000 km squared and 103,600 km squared of open offshore acreages.⁴⁷ There has been a lot of development in that, HESS field -now owned by Aker Energy is currently at pre-development phase and the plan of development to be submitted post final ITLOS ruling- Greater Jubilee field development discussions is ongoing.⁴⁸ Again, there are 23 more discoveries since jubilee and there are several fields at different levels of exploration and appraisal such as Mahogany, Teak, Akassa field and many others. GNPC was appointed as National Gas Aggregator in 2014 to receive Jubilee gas and TEN gas. Sankofa on the other had is the game changer for the industry with over 1 trillion cubic feet of natural gas expected in 2018.

2.9 Gas Aggregation

As the national Gas Aggregator, GNPC is mandated to buy and market all gas produced in Ghana to independent power producers (IPPs) with power generation being the priority for gas utilization. As gas aggregator, they are also responsible for sourcing gas from international suppliers to supplement indigenous gas production such as LNG.⁴⁹ The gas aggregator therefore represents the single buyer and seller of natural gas to eligible IPPs. The role also mandates GNPC to make specific investments in gas infrastructure to create a viable domestic gas market. Some gas infrastructure projects include:

- Ten/Jubilee gas export tie-in
- WAGP Compressed reverse flow

- OCTP gas export Sealine and ORF
- LNG project
- Onshore West – East pipeline

Opportunities – Upstream & Downstream

- ❖ Joint venture partnership for upstream projects with GNPC & subsidiaries such as GNPC-Explorco to develop stranded oil & gas discoveries;
- ❖ Farm-in opportunities in upstream licenses;
- ❖ Upstream infrastructure development (FPSO, fabrication yard, deep sea port etc.);
- ❖ Mid-downstream gas infrastructure projects (pipelines, gas plant, reverse flow, compressor stations etc.);
- ❖ Financing for Gas infrastructure projects; LNG etc.;
- ❖ Partnership with Ghanaian companies in upstream services sector for local content development.

2.10 Conclusion

Evidently, the Ghana oil and gas industry has a strong policy and regulatory environment with key institutions established. Currently 3 producing assets (Jubilee, TEN, Sankofa) positioning Ghana as a strong emerging producer. GNPC is pursuing the 6-year initial exploration phase of the Voltaian 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.⁵⁰ 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.

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CHAPTER THREE

DATA ANALYSIS AND DISCUSSION OF FINDINGS

3.0 Introduction

This chapter presents and discusses the empirical data gathered on assessment of Ghana's local content policy and its significance for foreign direct investment (FDI) in the oil and gas industry. It provides results and discussions for the study, with focus on the objectives of the study which include:

- To assess effectiveness in the enactment and the execution of the Local Content Legislation in Ghana's petroleum sector in fulfilling its intended objectives.
- To examine the significance of Local Content Policy on FDI in the Petroleum Industry in Ghana.
- To investigate the extent to which Ghanaians participate in the Upstream Petroleum Industry.
- To find out if there are other best practices of local content in the Upstream Petroleum Industry.

A sample size of 31 respondents consisting of policy makers, implementers and beneficiaries of the oil and gas industry were interviewed to seek their views on the subject area. The study adopted questionnaire as its research instrument. Both open and close ended questions were provided to ensure anonymity and convenience to participants.

In all, 31 questionnaires were distributed, accurately filled and returned. The data is critically analysed qualitatively using response obtained from respondents. The 31 responses are

analysed and a 100% response rate was achieved. This helps in gaining an in- depth analysis and a more demonstrative conclusion for the study.

The responses from respondents are analysed using directly displayed tables, percentages and chats. The chapter is presented in the following sections: demographic characteristics of respondents, effectiveness in the implementation of the Local Content Legislation in Ghana’s oil and gas sector, Ghanaians participate in the Upstream Oil and Gas Industry and the best practice of local content in the Upstream Oil and Gas Industry.

3.1 Demographic Characteristics of Respondents

1. Policy Makers

Table 3.1: Demographics of Respondents (Policy Makers)

	Frequency	Percent
Gender of Respondents		
Male	9	90.0
Female	1	10.0
Total	10	100.0
Age of Respondents		
30- 39 Years	5	50.0
40- 49 Years	4	40.0
50- 59 Years	1	10.0
Total	10	100.0
Education of Respondents		
Tertiary	6	66.7
Masters	3	33.3
Total	9	100.0
Department of Respondents		
Operations	2	22.2
Finance	1	11.1
Corporate Governance	2	22.2

Business Development	3	33.3
Supply chain	1	11.1
Total	9	100.0
Position of Respondents		
Line Manager	4	50.0
Senior manager	2	25.0
Head of department	2	25.0
Total	8	100.0
Years of Service		
Below 4 Years	2	20.0
5- 10 Years	7	70.0
10- 15 Years	1	10.0
Total	10	100.0

Source: Field Data, 2018

Overall, the gender composition of the policy makers constituted ninety percent (90%) who were males and ten percent (10%) who were females, of whom nine were males and one female. Fifty percent (50%) of the respondents were within the ranges of thirty to thirty-nine years, with forty percent (40%) within the forty to forty-nine age range and finally ten percent (10%) within the fifty to fifty-nine age range.

Sixty-seven percent (67%) of the Policy makers were found to have completed their tertiary education for their first degree whereas thirty-three percent (33%) were found to have a masters' degree. Thirty-three percent (33%) of the respondents were in the Business Development Department, with twenty-two percent (22%) from the Corporate Governance Department, then also another twenty-two (22%) from the Operations Department and finally eleven percent (11%) from the Supply Chain and Finance Departments each.

With the position of the respondents, fifty percent (50%) of the policy makers were identified to be line managers, whereas twenty-five percent (25%) were senior managers and finally twenty-five percent (25%) were heads of departments.

For the years of service for each of the policymakers, seventy percent (70%) had served the company between five to ten years, whereas twenty percent (20%) have been with the company for less than four years and finally ten percent (10%) have been with the company between ten to fifteen years.

2. Implementers

Table 3.2: Demographics of Respondents (Implementers)

	Frequency	Percent
Gender of Respondents		
Male	9	90.0
Female	1	10.0
Total	10	100.0
Age of Respondents		
30- 39 Years	2	22.2
40- 49 Years	3	33.3
60 and above	4	44.4
Total	9	100.0
Education of Respondents		
Secondary School	1	10.0
Tertiary	9	90.0
Total	10	100.0
Department		
Operations	3	30.0
Corporate Governance	2	20.0

Business Development	4	40.0
Supply Chain	1	10.0
Total	10	100.0
Position		
Line Manager	4	40.0
Senior Manager	2	20.0
Head of Department	3	30.0
MD/ CEO	1	10.0
Total	10	100.0
Years of service		
Below 4 years	1	10.0
5- 10 Years	1	10.0
10- 15 years	3	30.0
16- 20 years	1	10.0
21+ Years	4	40.0
Total	10	100.0

Source: Field Data, 2018

For the Gender composition of the implementers, ninety percent (90%) were males and ten percent (10%) were females. Forty-four percent (44%) of the implementers were sixty-years and over, thirty-three percent (33%) were within the ages of forty to forty-nine years.

Ninety percent (90%) of the implementers were found to have completed their tertiary education for their first degree whereas ten percent (10%) were found to have completed their high school education. Forty percent (40%) of the implementers were in the Business Development Department, with thirty percent (30%) from the Operations Department, then also twenty (20%) from the Corporate Governance Department and finally ten percent (10%) from the Supply Chain Department.

With the position of the implementers, forty percent (40%) of the respondents were identified to be line managers, whereas thirty percent (30%) were heads of department, followed by twenty percent (20%) who were line managers, and finally ten percent (10%) were found to be CEOs.

Again, with the years of service for each of the implementers, forty percent (40%) have been with the company for over twenty-one years, whereas thirty percent (30%) have been with the company between ten to fifteen years, followed by ten percent (10%) respondents who have been with the company for less than four years, another ten percent (10%) who have been with the company for ten to fifteen years and finally ten percent (10%) have been with the company between sixteen to twenty years.

3. Beneficiaries

Table 3.3: Demographics of Respondents (Beneficiaries)

	Frequency	Percent
Gender		
Male	9	81.8
Female	2	18.2
Total	11	100.0
Age		
20- 29 Years	3	27.3
30- 39 Years	6	54.5
40- 49 Years	2	18.2
Total	11	100.0
Education		
Tertiary	9	90.0
Master	1	10.0
Total	10	100.0

Total		11
Occupation		
IT specialist	1	10.0
Civil Servant	1	10.0
Web designer	2	20.0
Administrative Assistant	1	10.0
Administrator	1	10.0
General manager	1	10.0
Asset integrity engineer	1	10.0
Marketer	1	10.0
Engineer	1	10.0
Total	10	100.0
Sector		
Communication	1	9.1
Diplomatic service	1	9.1
Oil and Gas	9	81.8
Total	11	100.0
Years of service		
Below 4 Years	5	45.5
5- 10 Years	6	54.5
Total	11	100.0

Source: Field Data, 2018

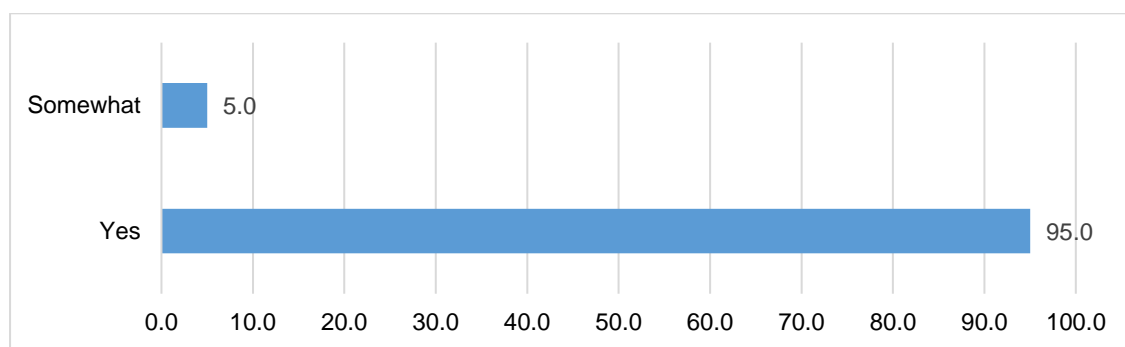
Also, with the beneficiaries, the analysis revealed eighty-two (82%) to be males and eighteen percent (18%) to be females. Fifty-six percent (56%) were within the ages of thirty to thirty-nine years, whereas twenty-seven percent (27%) of the beneficiaries were within the age range of twenty to twenty-nine years, and finally eighteen percent (18%) of the beneficiaries were within the ages of forty to forty-nine years.

For the level of education, ninety percent (90%) of the beneficiaries were found to have completed their tertiary education for their first degree whereas ten percent (10%) were found to have completed their masters' level. With the occupation of the beneficiaries' twenty percent (20%) of the beneficiaries were in the Web Designers, with ten percent (10%) each who were either an IT specialist, Administrator, Administrative Assistant, General Manager, Civil Servant, Marketer, Engineer and finally Asset Integrity Engineer.

Eighty-two percent (82%) of the beneficiaries belonged to the oil and gas sector whereas nine percent (9%) were in the Diplomatic Service Sector and finally another nine percent (9%) were in the Telecommunication sector. With the years of service of the beneficiaries, fifty-five percent (55%) had worked with their companies for a period of five to ten years, whereas forty-five percent (45%) of them have served their companies for less than four years.

3.2 Effectiveness in the implementation of the Local Content Legislation in Ghana's oil and gas sector

Figure 3.1: Knowledgeable about local regulations guiding the sector

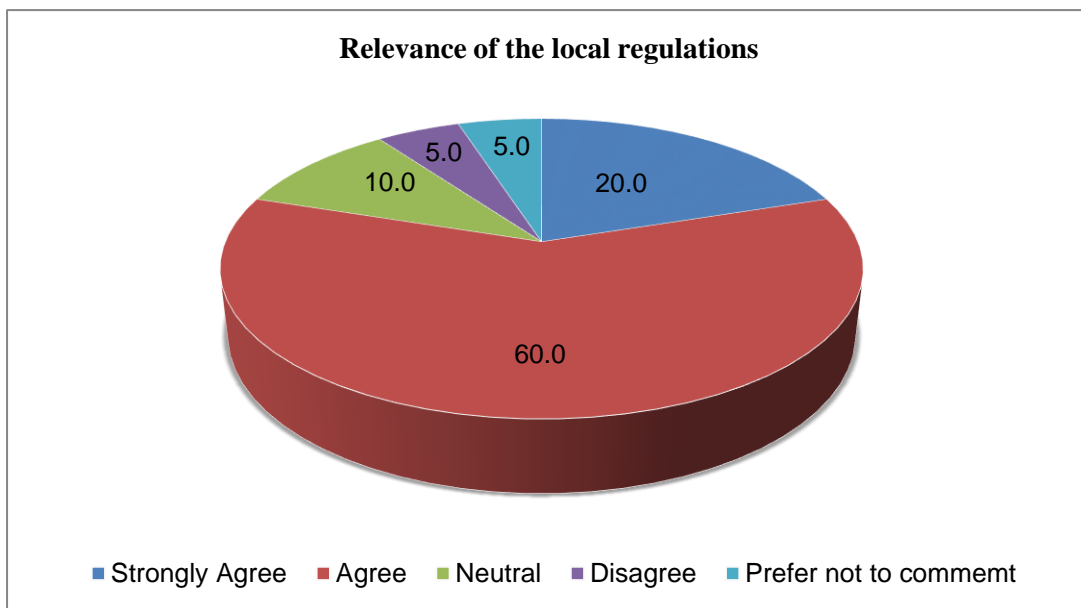


Source: Field Data, 2018

From the Figure 1 above, the findings from the respondents revealed that ninety-five percent (95%) were knowledgeable about the existing local content policy regulations of the oil and

gas sector in Ghana, whereas five percent (5%) were somehow knowledgeable of the local policy regulation for the oil and gas industry in Ghana. This suggests that industry participants sampled for the study had good knowledge about the local regulations surrounding the industry. This means that all activities undertaken by respondents were in the jurisdiction of the law.

Figure 3.2 : Relevance of the local regulations



Source: Field Data, 2018

The findings again revealed that sixty percent (60%) of the respondent agreed that the local content policy has been relevant and effective enough to achieve its intended purpose, twenty percent (20%) of the respondents preferred not to comment on the relevance and effectiveness of the local policy content, whereas ten percent (10%) were neutral, five percent (5%) strongly agreed to the effectiveness of the local policy content, with the remaining five percent (5%) who disagreed and said the local content policy has not been relevant in achieving its intended purpose. This result is in consonance with that of Ovadia¹ as his study also indicted the local communities support the existence of the local content policy has been relevant and effective

in achieving its intended purpose. This is because locals are given the opportunity to compete soundly with other foreign investors in the quest to promote growth and development.

Table 3.4: Procedures lay down in implementing the local content legislation

	N	Percent	Percent of Cases
Legislative instruments backed by the law of Ghana	6	13.6%	31.6%
Various regulations	13	29.5%	68.4%
Procurement Process	5	11.4%	26.3%
Research and development plan	6	13.6%	31.6%
Training and succession plan	4	9.1%	21.1%
Periodic assessment of compliance by Petroleum Commission	3	6.8%	15.8%
Local content development centres to build capacity	2	4.5%	10.5%
The joint venture guidelines	1	2.3%	5.3%
Insurance protocol guidelines	2	4.5%	10.5%
Petroleum commission monitoring	1	2.3%	5.3%
Procurement process	1	2.3%	5.3%
Total	44	100.0%	231.6%

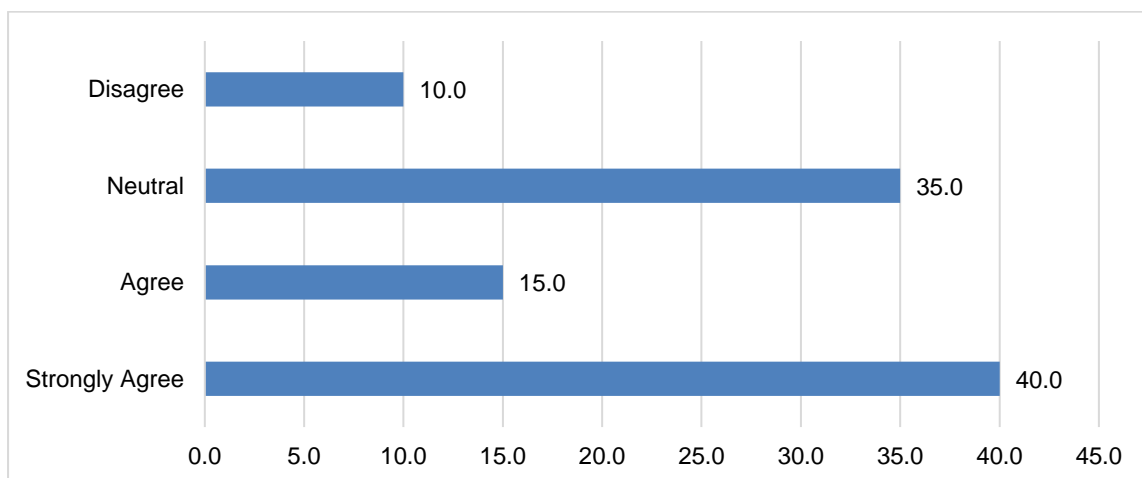
Source: Field Data, 2018

On the issue of the procedure laid down in the implementation process, the Table 4 revealed that the procedures of the local content law to some extent have been effectively laid down in implementing the local content legislation in the oil and gas sector in Ghana.

The findings also revealed that thirty percent (30%) of other various regulations have been effectively laid down to aid the implementation of the local content regulations in the oil and gas sector in Ghana with sixty-eight percent (68%) of reported cases. Fourteen percent (14%) of the procedures had been developed from the Research and Development plans with thirty-

two percent (32%) with reported cases that have been successful. Another fourteen percent (14%) of the procedures were from legislative instruments backed by the laws of Ghana with thirty-two percent (32%) of reported cases. Thirteen percent (13%) were from the procurement process with thirty-one percent (31%) reported cases. Nine percent (9%) of the procedures involved training and succession planning with twenty-one percent (21%) reported cases. Seven percent (7%) of the procedures were periodic assessment of Compliance by the Petroleum Commission with sixteen percent (16%) reported cases. Five percent (5%) were from local content development centres to build capacity with eleven percent (11%) reported cases. The Joint Venture guidelines constituted two percent (2%) and five percent (5%) reported cases. Insurance Protocol guidelines were five percent (5%) with eleven percent (11%) reported cases. Finally, the monitoring done by Petroleum Commission which constituted two percent (2%) of the procedures laid down to implement the local content legislation in Ghana. This process was so to facilitate a smooth implementation of the local content policy to safeguard the interest of stakeholders within the industry. It also brought about uniformity and formality in bringing all participants in understanding and order.

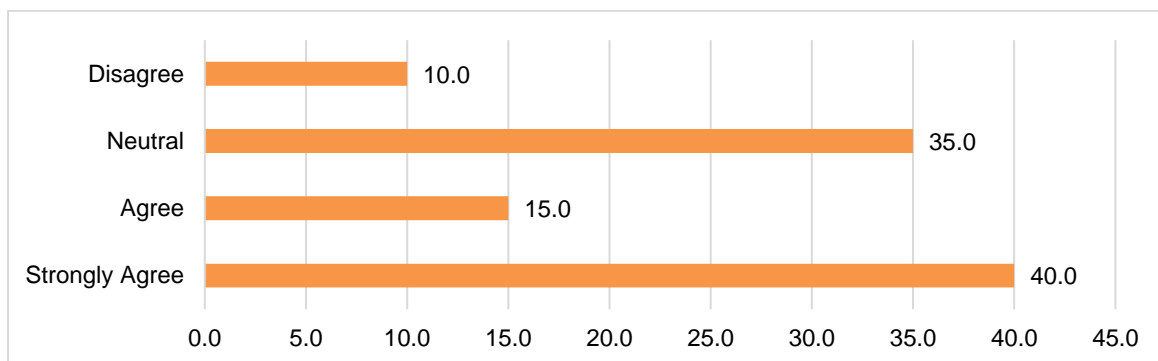
Figure 3.3: Feasibility of the procedures



Source: Field Data, 2018

Forty percent (40%) of the policy makers strongly agreed that the processes in implementing the Local Content Legislation were feasible, with thirty-five percent (35%) who were neutral, followed by fifteen percent (15%) who were agreed that the processes were feasible and finally ten percent (10%) who did not agree that the processes in implementing the local content legislation have been feasible. This result suggest that globalization would be subject to limitations and promote protectionism as the local content policy increasingly promote locals to be more equipped to compete vigorously with foreign investors. However, the participation of major IOC’s like Tullow Ghana, Kosmos Energy, ENI Exploration and Production, Modec among others have opened up the Ghanaian market for other global and multinational companies to invest and operate within the country like the new entrant Exxon Mobil. This in effect increases the gross domestic product of the country and enhances the growth and development of the country through the reduction of unemployment.

Figure 3.4: Foreign Investors' Agreement with Local Policy



Source: Field Data, 2018

Forty percent (40%) of the policy makers strongly agreed that foreign investors were in agreement with the local content policy for the oil and gas industry, with thirty-five percent (35%) of the policy makers who were neutral on the foreign investors’ agreement, followed by fifteen percent (15%) who were agreed that foreign investors were in agreement with the local

content policy and finally ten percent (10%) who disagreed that foreign investors were in agreement with the local content policy. Ngoasong² using narrative analysis in examining the business practices used by five International Oil and Gas companies (IOC's) stated that the understudied companies strongly agree with the local content policy for the oil and gas industry.

Table 3.5: Ghanaians agreement with the Local Content Policy

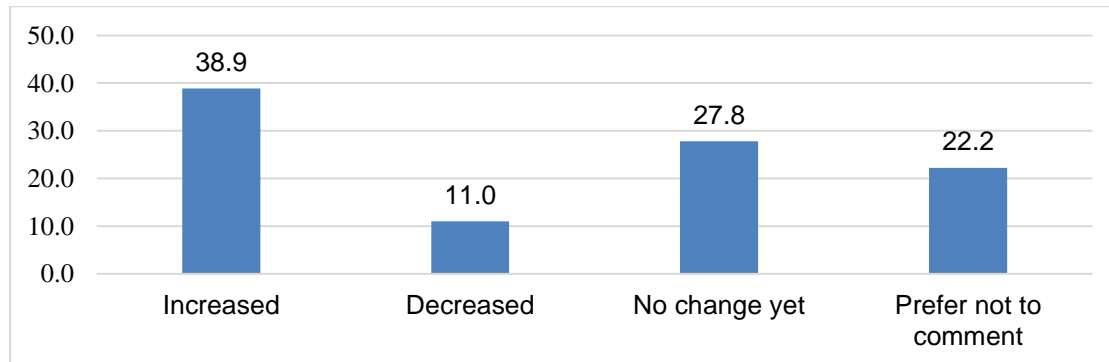
	Responses	Percent of Cases	
	N	Percent	
Transfer of technical and technology know- how	1	14.30%	16.70%
Provide employment to local workers	3	33.00%	33.30%
Less training to employees compare to other oil and gas companies	1	14.30%	16.70%
The local content policy has legitimized local operations	2	28.60%	33.30%
Total	7	100.00%	116.70%

Source: Field Data, 2018

The beneficiaries also revealed the reasons why they were in agreement with the local content policy. On the whole, thirty-three percent (33%) of the beneficiaries revealed they totally agreed with the provision of employment to local workers in the local content policy. Twenty-nine percent (29%) of the beneficiaries gave the reason of legitimizing the local operations in Ghana. Fourteen percent (14%) on the other hand revealed their agreement to the transfer of technical and technology know- how. With finally, another fourteen percent (14%) of the beneficiaries who revealed that the local content policy requires less training given to employees as compared to other oil and gas companies. Ovadia³ in his study “local content policies and petro-development in Sub-Saharan Africa: A comparative analysis” indicted the local community are in support with the local content policy has been relevant and effective to

achieve its intended purpose since the local content emphasizes on the extend of use of local skill, the acquisition of local goods and services, the participation of domestic firms, and the funding of resource activities in the country.

Figure 3.5: Effect of Local Content Policy on Foreign Investors

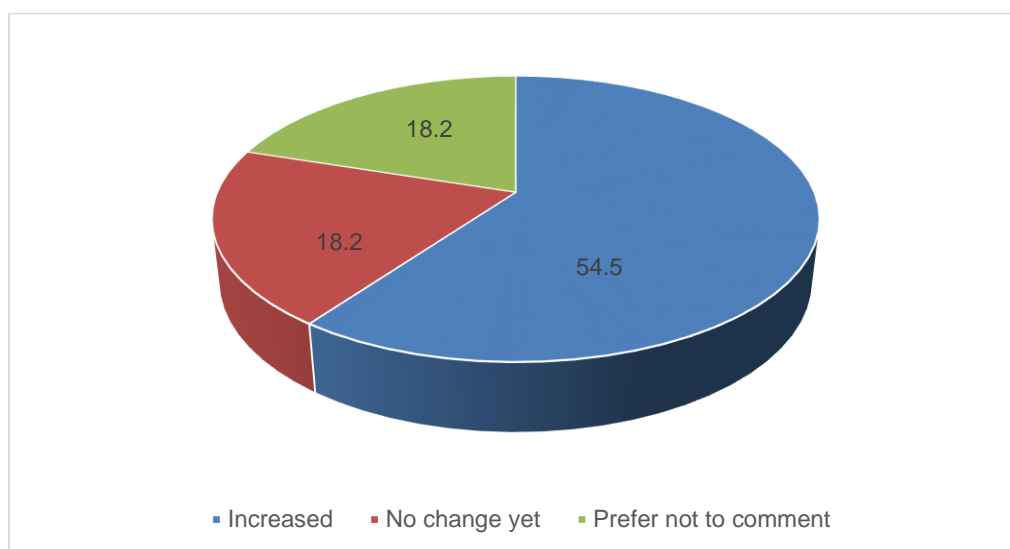


Source: Field Data, 2018

With the introduction of the local content policy on foreign investment in Ghana, the impact of the policy was also examined. The analysis revealed that forty percent (40%) of the policy makers believed that foreign investment had increased, twenty-eight percent (28%) of the policy makers believed that the impact of the local content policy on foreign investment had not changed, with twenty-two percent (22%) who preferred not to comment and finally eleven percent (11%) who believed that foreign investment had decreased. This is constant with the findings of Ojide et al⁴ investigating the impacts of Foreign Direct Investment in oil sector in Nigeria and its attendant impact on economic growth. The study indicated that FDI have increased tremendously as a result of the introduction of the local content policy in Nigeria. This is due to the fact that local content policy provides a structure mechanism that allows for the protection of investors' funds.

Ngoasong⁵ using narrative analysis to critically examined the business practices used by five international oil and gas companies (IOCs) namely Chevron, ExxonMobil, Shell, BP and Total to respond to local content policies in petroleum-producing developing countries like Nigeria, Angola, Venezuela, Kazakhstan, Brazil, Indonesia, Yemen and Indonesia during the period 2000–2012 indicated that the foreign investors are adapting various effective mechanisms such as focusing of technical expertise and technology, effective and timely monitoring and evaluation and training and promoting linkage with other value chain processes to be successful in the oil and gas sector.

Figure 3.6: Opportunities received from Local Content Policy

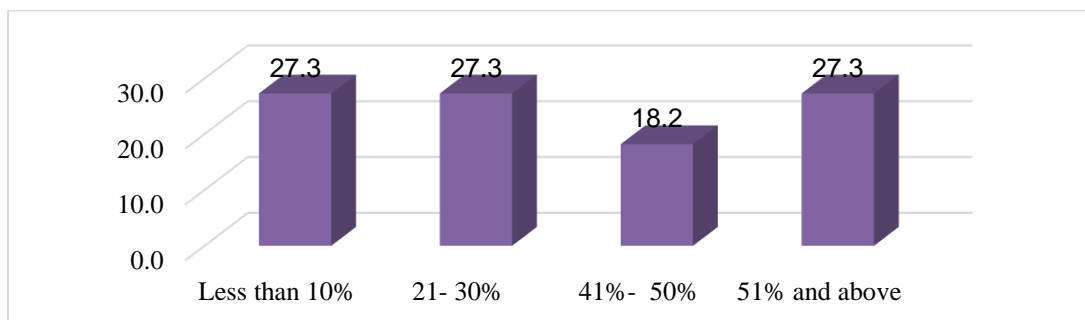


Source: Field Data, 2018

Again, the findings examined how the local content policy has increased the opportunities of the beneficiaries in participating in the oil and gas industry. The findings revealed that fifty-five percent (55%) revealed that their participation in the oil and gas industry have increased with the introduction of the local policy content. Eighteen percent (18%) of the beneficiaries preferred not to comment. And finally, another eighteen percent (18%) believed there have not been any change yet. Ovadia⁶ researching on the “local content policies and petro-development in Sub-Saharan Africa: A comparative analysis” emphasis that local content policy has

increased the opportunities of the beneficiaries in participating in the oil and gas industry. A notable indigenous company in Ghana is Rigworld International Services who have partnered with several foreign companies including Maersk Drilling that won a four-year contract for the deep water drilling ship Maersk Venturer by Tullow Ghana Limited in December 2017 to commence work in February 2018. Rigworld has also established world class, oil and gas accredited Safety Training offering providing a range of client focused safety training services to the oil and gas industry across the region. Other notable indigenous companies are Amaja Oilfield Services, Seaweld Engineering, BBS Engineering, Hydra Offshore etc. Although there are some successes stories in joint venture partnerships, the one of the challenge Petroleum Commission faces at the moment is that most foreign investors are keen on working with experienced indigenous companies that are doing well in the industry hence making it difficult for new and smaller indigenous companies to get the opportunity to form joint venture partnership.

Figure 3.7: Decreased/ increased the foreign investment into the industry

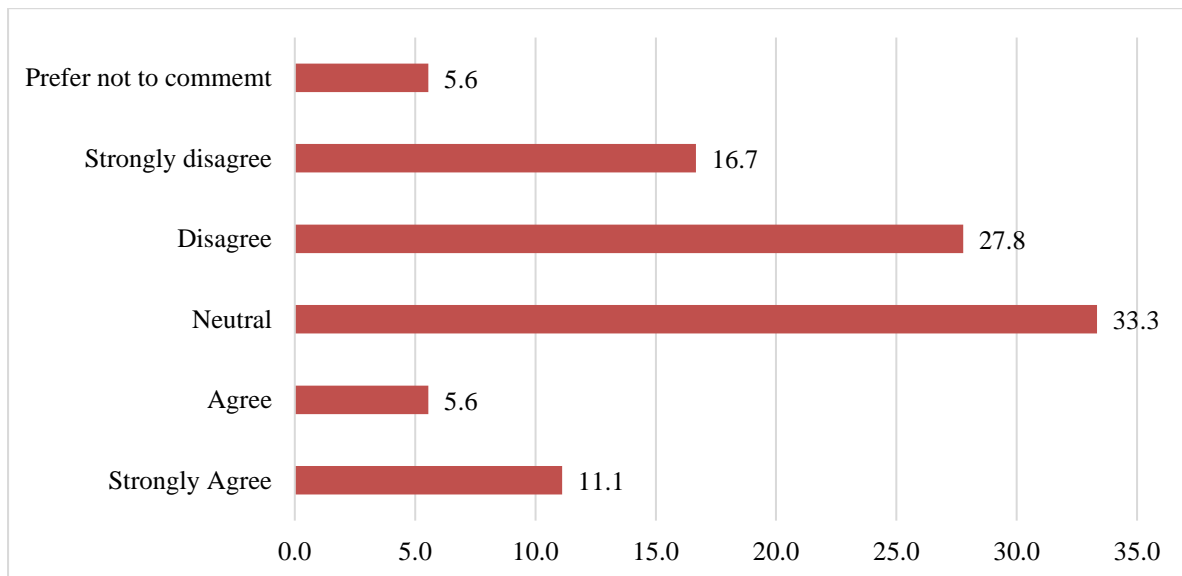


Source: Field Data, 2018

Percentage-wise, twenty-seven (27%) percent of the policy-makers believed that foreign investment had increased by less than ten percent, another twenty-seven (27%) percent of the policy-makers believed that the foreign investment had increased by twenty-one to thirty percent, and the last twenty-seven (27%) percent of the policy-makers again believed that the

foreign investment had increased by over fifty-one percent. Finally, eighteen (18%) percent of the policy-makers who believed that the foreign investment had increased by forty-one to fifty percent. Respondents confirmed in the increase of FDI by the help of the oil and gas industry.

Figure 3.8: Non- Ghanaian companies’ partnership, with indigenous company



Source: Field Data, 2018

The findings again revealed that the policymakers believed that the clause in the local policy that stipulates that foreign companies are supposed to form a joint venture partnership with an indigenous company before they are allowed to operate affected the interest of the foreign investors. Thirty-three percent (33%) of the policy-makers were neutral, with twenty-eight (28%) percent of the policy-makers who disagreed that the clause had affected foreign investors’ interests, and seventeen (17%) percent of the policy-makers who strongly disagreed, followed by eleven percent (11%) who strongly agreed that the clause had affected the interest of foreign investors, then six percent (6%) who agreed that the clause had affected the interest of foreign investors and finally another six percent (6%) who preferred not to comment.

One respondent commenting on this stated that:

KEG's formation predates the Local Content act and our interest in the Jubilee and TEN assets has not been affected. The JV stipulation adds an additional layer of complexity with respect to new business development. The E&P side of the business is capital intensive and finding indigenous companies with the appropriate technical expertise and funding base will continue to be challenging. To put things in perspective, the Jubilee field development expenditures to date is about \$5 billion. That means, any indigenous JV partner (assuming 5% participating interest) should be able to risk about \$225 million for a 5- 7 year period.

However, Ablo⁷ argue otherwise. To him even though the Engineering, Procurement, and Construction (EPC) is structured to facilitate an effective interaction between major stakeholders (local entrepreneurs, state institutions officials and foreign oil companies) only a few well-established medium to large-scale Ghanaian enterprises are able to take advantage of the opportunities provided by the EPC project to expand their operations. This according to Ablo⁸ have limited the enhancement of the local entrepreneurs' knowledge of the oil and gas sector and provides enterprises with no entry point. That is majority of relatively new and small businesses are still unable to gain entry.

Table 3.6: Modifying the Joint Venture Partnership clause

	Responses		Percent of Cases
	N	Percent	
Foreign companies which wants to do good business	6	37.50%	42.90%
Protecting the interest of Ghanaians	5	45%	50%
Interest required to be given to local partners is still low.	2	12.50%	14.30%
New PA's coming into the system	1	6.30%	7.10%
Total	16	100.00%	114.30%

Source: Field Data, 2018

Again, with the Joint-Venture clause, the opinions of the policymakers concerning future modifications of the clause in order to increase the interest of foreign investors were also

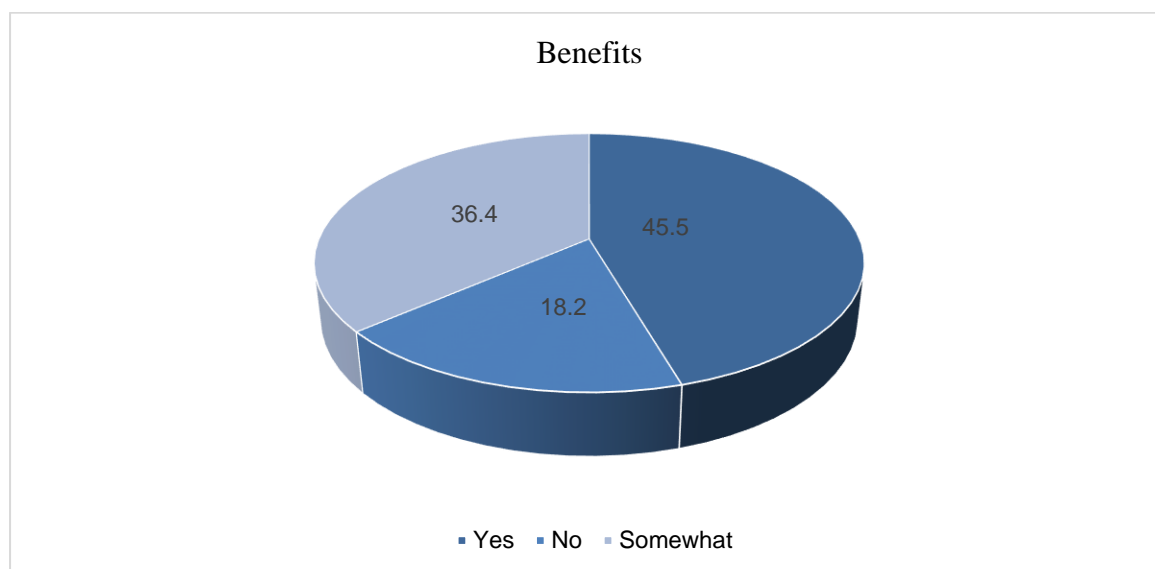
investigated. The findings revealed that thirty-eight percent (38%) of the policy makers believed that the clause should be modified in order for the foreign companies who want to undertake positive projects would be successful with a report of forty-three percent (43%) cases. Forty-five percent (45%) of the beneficiaries disagreed to future modifications since they believed the clause would protect the interest of Ghanaians, with fifty percent (50%) reported cases. Another thirteen percent strongly of the implementers agreed to the future modification of the clause since interest to be acquired for the local investor is still low with fourteen percent (14%) reported cases. Finally, six percent (6%) of the implementers believed that as a result of the new Pas in the system, the future modification is highly likely.

One respondent indicated that:

“We believe that Local Content is the best way to create a sustainable long-term industry in Ghana. However, the key JV requirements focus on local ownership rather than providing the necessary structures for value creation in relation to the Ghanaian economy. This focus on ownership interest overlooks the value-added benefits of Local Content and addresses only a small aspect of the benefits; i.e. indigenous participation and local owner profit. The search to find appropriate partners (due diligence, business fit etc.) can also lead to delays with respect to formalizing agreements and the necessary obtaining approvals. These delays can also have a negative impact on the decision-making process”.

This can discourage foreign investment in areas where technical and financial capacity is challenged. This deprives the host nation of the benefits associated with employment and capacity building.

Figure3.9: Benefits of the Oil and Gas Industry



Source: Field Data, 2018

Again, the findings revealed that forty-six percent (46%) have benefited from Ghana's oil find, whereas thirty-six percent (36%) of the respondents revealed that they had somehow benefited from Ghana's oil find and finally eighteen percent (18%) affirmed that they have not benefitted from Ghana's oil find.

3.3 Extent to which Ghanaians participate in the Upstream Oil and Gas Industry

Table3.7: Ghanaians participation in the upstream oil and gas industry

	Responses		Percent of Cases
	N	Percent	
Supply of goods and services	3	15.0%	21.4%
Employment	8	40.0%	57.1%
Very poor, many Ghanaians are fronting	4	20.0%	28.6%
JV partnership	4	20.0%	28.6%
Sub- contracting	1	5.0%	7.1%
Total	20	100.0%	142.9%

Source: Field Data, 2018

The analysis revealed that forty nine percent (49%) of the policymakers are currently participating in the upstream oil and gas industry through employment, whereas twenty percent (20%) of the policymakers believed Ghanaian’s contributions were through JV partnership, with another twenty percent (20%) who said Ghanaians’ participation were very poor as they do not have the financial capacity to engage in the oil and gas business resulting in most indigenous companies fronting foreign companies. Fifteen percent (15%) on the other hand believed Ghanaian’s participation in the upstream oil and gas industry was through the supply of goods and services and finally five percent (5%) of the policy makers believed current participation to be through sub-contracting.

Some beneficiaries commenting on the Ghanaians’ participation in the upstream oil and gas industry stated that:

Ghanaians are acquiring knowledge and gaining employment in the oil and gas sector. Few Ghanaians are also setting up companies to outsource contracts and benefits from the oil fields.

Another respondent (beneficiary) also stated that:

Ghanaians are still developing capacity to do a lot more in the oil industry. Currently most Ghanaian companies are soft service providers, leaving the high earning core engineering and fabrication aspect to foreign companies.

Table 3.8: Aspect of the local content policy working well

	Responses		Percent of Cases
	N	Percent	
Formation of Joint Venture Partnership	2	15.4%	22.2%
Employment	3	23.1%	33.3%
CSR	1	7.7%	11.1%
JV’s	1	7.7%	11.1%
Preference given to local companies	2	15.4%	22.2%
Participation of indigenous in block acquisition	3	23.1%	33.3%
Capacity building of individuals	1	7.7%	11.1%
Total	13	100.0%	144.4%

Source: Field Data, 2018

The analysis revealed that twenty-three percent (23%) of the policymakers believed that the employment aspect of the local content policy was working very well. Again, another twenty-three percent (23%) of the policymakers believed the aspect of participation of indigenous in block acquisition policy was working very well. Fifteen percent (15%) of the policy makers believed that the policy on the formation of joint venture partnership was also working well, another fifteen percent (15%) also believed that the policy on the preference given to local companies was also working well. Then finally seven percent (7%) each of the policymakers believed the policies on JVs, CSRs and capacity building of individuals were working very well.

Table 3.9: Improving an aspect local content policy

	Responses		Percent of Cases
	N	Percent	
Targets on the schedules	2	18.2%	20.0%
Financing local companies to partake JV partnership	6	54.5%	60.0%
Technology transfer programs	1	9.1%	10.0%
Law enforcement	1	9.1%	10.0%
Incorporation of JV	1	9.1%	10.0%
Total	11	100.0%	110.0%

Source: Field Data, 2018

With the improvement of an aspect of the local content policy, fifty-five percent (55%) of the policy makers believed that the financing of local companies to partake in JV partnership is an aspect of the local content policy that needs improvement, whereas eighteen percent (18%) believed the targets as scheduled rather needs improvement. Nine percent (9%) of the policymakers believed the area of technology transfer programs needed improvement, with another nine percent (9%) who believed the aspect of law enforcement needed further

modification and finally another nine percent (9%) policymakers rather believed incorporation of the JV rather needs improvement. From the field data one of the respondents mentioned that:

Timelines and local participation targets did not consider the project life cycle and operation activity levels. Specifically, Ghana needs to provide the enabling environment for reputable IOCs to invest and expand the E and P footprint. Development of service industry (Key to local content) is driven by the potential for sustain the E and P activity over an extended period.

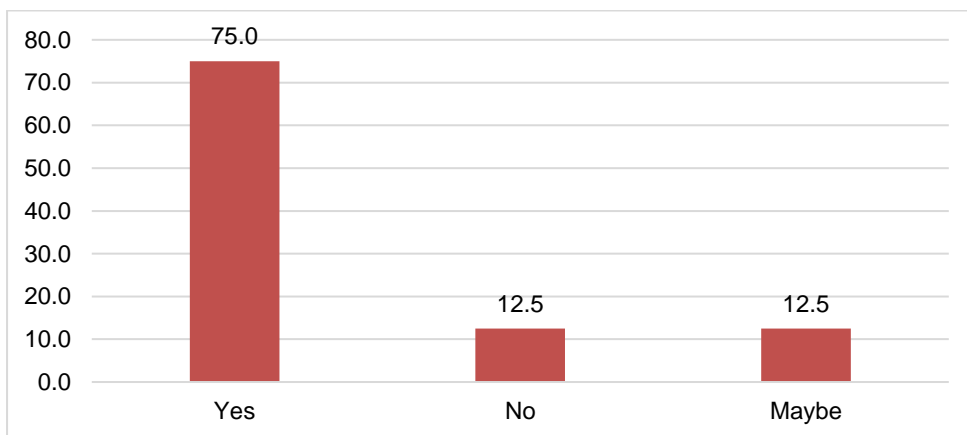
Again, some beneficiaries indicated that:

The level of Ghanaians ownership should increase and local companies encouraged to participate more in the industry.

This analysis is in agreement with Damman et al⁹ whose study revealed that most of the local businesses lack the financial capital, the technical expertise and competitiveness to engage effectively in the oil and gas sector. Therefore, adequate training and development should be encouraged as well as partnering with high technological inclined and equipped institution to enhance the sector.

3.4 Best practice of local content in the Upstream Oil and Gas Industry

Figure 3.10: Knowledge about other best practice



Source: Field Data, 2018

For the best practices of local content in the upstream oil and gas industry, the findings revealed that seven-five percent (75%) of the policy-makers were aware of other best practices whereas thirteen percent (13%) of the policy-makers were not aware of other best practices and finally another thirteen percent (13%) who were somehow aware of other best practices.

Table 3.10: Best Practices

	Responses		Percent of Cases
	N	Percent	
Norwegian local content policy	5	35.7%	83.3%
Kenya	2	14.3%	33.3%
Nigerian Local Content policy	4	28.6%	66.7%
Local content requirement	2	14.3%	33.3%
Provision of financial assistance to indigenous Ghanaian companies	1	7.1%	16.7%
Total	14	100.0%	233.3%

Source: Field Data, 2018

Again, with the other best practices of the local content in the upstream oil and gas industry, the findings revealed that thirty-six percent (36%) of the policy makers were aware of the Norwegian local content policy with a report of eighty-three percent (83%) cases. Twenty-nine percent (29%) of the policymakers were aware of the Nigerian Local Content policy with sixty-seven percent (67%) reported cases. Followed by fourteen percent (14%) who were aware of the local content requirement with thirty-three percent (33%) reported cases. And another fourteen percent (14%) who were aware of the local content for Kenya with another thirty-three percent (33%) reported cases. Finally, seven percent (7%) of the policy makers were aware of the provision of financial assistance to indigenous Ghanaian companies with seventeen percent (17%) reported cases. A respondent attest that:

The size of the national oil and gas sector play an important role in the development of local content. The best practices tend to focus on the benefits to the nation in terms of added value as well as increasing efficiency and reducing the costs of operations (efficient supply of goods and services, enhanced stakeholder engagement).

3.5 Conclusion

This chapter provided a detailed presentation and analysis of results from respondents to address the objective of the study. The data gathered from field suggest that Ghana's local content policy has in a way increased the foreign direct investment (FDI) in the oil and gas industry. Yet, the local content fund has only been proposed; this is an initiative to increase and to help raise the capital needed for indigenous Ghanaian companies to engage more in the oil and gas business. Thus, without adequate implementation the sector will still be dominated by foreign national relegating indigenous companies to the side-lines.

Also, the Local Content Policy is currently under review. This in the nut shell suggest government's initiate to strengthen the policy implementation to safeguard investment foreigners, regulate effectively the activities of the industry and enhance progress within the sector.

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² Ngoasong, M. Z. (2014). "How international oil and gas companies respond to local content policies in petroleum-producing developing countries: A narrative enquiry." *Energy Policy*, 73, 471-479.

³ Ovadia, J. S. (2016), op. cit.

⁴ Ojide, M., Kareem, S., Kari, F., Gazi, A., & Matuin, O. (2012). Impact of Gas industry on sustainable economy in Nigeria: further estimations through Review.

⁵ Ngoasong, M. Z. (2014). How international oil and gas companies respond to local content policies in petroleum-producing developing countries: A narrative enquiry. *Energy Policy*, 73, 471-479.

⁶ Ovadia, J. S. (2016), op. cit.

⁷ Ablo, A. D. (2015). Local content and participation in Ghana's oil and gas industry: Can enterprise development make a difference?. *The Extractive Industries and Society*, 2(2), 320-327.

⁸ Ibid.

⁹ Damman, S., Akon-Yamga, G., & Mohammed, K. S. (2011). Developing Local Content: knowledge, attitude and practice among Ghanaian supply companies. Report) Trondheim: SINTEF.

CHAPTER FOUR

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

4.0 Introduction

This chapter, which is the final chapter, provides the summary of findings, conclusions and recommendations for policy implementation and future studies.

4.1 Summary of Findings

The study sought to provide a comprehensive assessment of local content policy and its significance for FDI in the oil and gas industry in Ghana. The following objectives were developed to arrive at conclusive results: to assess effectiveness in the implementation of the Local Content Legislation in Ghana's oil and gas sector in fulfilling intended goals and objectives. Also, the study probe further to evaluate the significance of Local Content Policy on FDI in the Oil and Gas Industry in Ghana, to investigate the extent to which Ghanaians participate in the Upstream Oil and Gas Industry and to find out if there are other best practices of local content in the Upstream Oil and Gas Industry. From this the following results were found:

- **Effectiveness in the implementation of Local Content Legislation in Ghana's oil and gas sector**

The findings revealed that respondents were privy to the existing local content policy regulations and its relevance to achieving efficiency and effective management of the oil and gas sector in Ghana. Again, the researcher found out that procedures were effectively laid down in implementing the local content legislation in the oil and gas sector in Ghana. These procedures had been developed from the Research and Development, legislative instruments

backed by the laws of Ghana and involved training and succession and the periodic assessment of Compliance by the Petroleum Commission. Although some positions with the major MNCs have been successfully transitioned to Ghanaians, for example, the Managing Director positions in Tullow Ghana and Kosmos Energy are now occupied by Ghanaians, Expatriates still hold critical positions that can be easily filled by Ghanaians. These implementation programmes, according to policy makers were feasible as Forty percent (40%) of the policy makers strongly agreed to the assertion made on processes in implementing the Local Content Legislation

Further, with the introduction of the local content policy on foreign investment in Ghana, the impact of the policy was also examined. The analysis revealed that forty percent (40%) of the policy makers believed that foreign investment had increased, this is constant with the findings of Ojide et al¹ investigating the impacts of Foreign Direct Investment in oil sector in Nigeria and its attendant impact on economic growth. The study indicated that FDI have increased tremendously as a result of the introduction of the local content policy in Nigeria. This is because the findings again revealed that the clause in the local policy that disclosed that foreign companies are supposed to form a joint venture partnership with an indigenous company before they are allowed to operate affected the interest of the foreign investors.

- **Extent to which Ghanaians participate in the Upstream Oil and Gas Industry**

The findings revealed that Ghanaians are currently participating in the upstream oil and gas industry through employment, JV partnership, supply of goods and services and through subcontracting. Again, the findings revealed that the employment aspect of the local content policy was working very well. This was so with the indigenous in block acquisition as well as the policies on JVs, CSRs and capacity building of individuals were working very well.

However, with the improvement of an aspect of the local content policy fifty-five percent (55%) of the policy makers believed that the financing of local companies to partake in JV partnership is an aspect of the local content policy that needs improvement as it results to most Ghanaian companies fronting for foreign companies which is not beneficial to the Ghanaian economy.

- **Best practices of local content in the Upstream Oil and Gas Industry known to Ghanaians**

Finally, with the other best practices of the local content in the upstream oil and gas industry, the findings revealed that thirty-six percent (36%) of the policy makers were aware of the Norwegian local content policy with a report of eighty-three percent (83%) cases. Twenty-nine percent (29%) of the policymakers were aware of the Nigerian Local Content policy with sixty-seven percent (67%) reported cases. Followed by fourteen percent (14%) who were aware of the local content requirement with thirty-three percent (33%) reported cases. And another fourteen percent (14%) who were aware of the local content for Kenya with another thirty-three percent (33%) reported cases. Finally, seven percent (7%) of the policy makers were aware of the provision of financial assistance to indigenous Ghanaian companies with seventeen percent (17%) reported cases. This in effect fosters best behaviours within the industry.

4.2 Conclusions

The discovery of oil and gas at the Jubilee Field in 2007 has heightened expectations for the transformation of the economy by the oil revenues; while others have expressed caution due to the negative effect of oil in other oil producing African countries like Nigeria and Angola. The

oil find has since increased investor interest and attracted huge financial inflows for development attracting more MNCs to engage in the oil and gas business. This establishes the link between oil and development.

As the local content policy appears to remain a significant issue in driving the development of Ghana and increase the influx of foreign investment, the study sought to provide a comprehensive assessment of local content policy and its significance for FDI in the oil and gas industry in Ghana. Therefore, the following objectives were developed to arrive at conclusive results: to assess effectiveness in the implementation of the Local Content Legislation in Ghana's oil and gas sector in fulfilling intended goals and objectives. Also, the study probed further to evaluate the significance of Local Content Policy on FDI in the Oil and Gas Industry in Ghana, to investigate the extent to which Ghanaians participate in the Upstream Oil and Gas Industry and to find out if there are other best practice of local content in the Upstream Oil and Gas Industry.

With the use of a qualitative methodology through the aid of a well-structured open and closed questionnaire, the study found out that respondents were privy to the existing local content policy regulations and its relevance to achieving efficiency and effective management of the oil and gas sector in Ghana. Again, the researcher found out that procedures were effectively laid down on how to implement the local content legislation in the oil and gas sector in Ghana. These procedures had been developed from the Research and Development, legislative instruments backed by the laws of Ghana and involved training and succession, periodic assessment of compliance by the Petroleum Commission. Further, the findings revealed that the introduction of the local content policy increased the level of foreign investment in Ghana

The findings revealed local participating in the upstream oil and gas industry has improved through various mechanisms such as employment, JV partnership, supply of goods and services through sub-contracting. Finally, with the other best practices of the local content in the upstream oil and gas industry, the findings revealed that significant number of respondents were privy to the Norwegian local content policy, Nigerian Local Content and the local content for Kenya. These in effect fosters best behaviours within the industry as Ghana's Local Content Policy is quite similar to the Norwegian and the Nigerian Local Content Policies.

In summary, the study based on the hypothesis that *“There has not been any significant fulfilment of the intended goals and objectives of the Local Content Legislation in Ghana's Oil and Gas Industry”*. This study sought to agree to the hypothesis since the inception of the local content policy, the local content fund has only been proposed and therefore the maximum penetration and involvement by the indigenous companies in Ghana still struggle to compete vigorously with foreign investors thus end up in fronting most foreign companies. Also, some Expatriates still hold critical positions in MNCs eventhough there are qualified Ghanaians who could occupy those positions. An example of such jobs is the Drilling Manager; GNPC Scholarships has sent a number of Ghanaians abroad for training purposes in Universities such as Aberdeen University, Heriot-Watt University, Robert Gordon University and Dundee University, those Ghanaians can easily occupy these critical positions since they have been trained by world class oil and gas universities.

As the Local Content Policy is currently under review, it suggests government's initiate to strengthen the policy implementation to safeguard foreign investments, job creation, technological transfer and effectively regulate the activities of the industry and enhance progress within the sector and thus increasing investments.

4.3 Recommendations

From the study findings, the researcher suggests the following recommendation for policy implementation.

- Establishment of local content funds to support indigenous SMEs to enhance their competitiveness vigorously in the industry with their foreign counterpart thus increasing the participation of Ghanaians in the oil and gas industry and eliminating fronting of foreign companies is vital.
- The local content policy should be strengthened such that foreign investors and local industry players so that unnecessary expectation would be reduced to avoid any conflict between participants. Also, locals should be encouraged to take advantage of this policy so as to improve upon the competitiveness within the industry. This would reduce the over dominance of the foreign investors and increase economic growth.
- A temporal Petroleum Commission license should be introduced for short term opportunities i.e. to make it more attractive for smaller foreign investors as administrative charges for setting up are quite expensive, therefore, foreign investors could work on a onetime opportunity for a duration that is less than a year. Having more smaller foreign investors means that more Ghanaians companies would get the opportunity to work with these companies and gain more expertise rather than these smaller investors working through the foreign companies already existing in the country.

- There should be mechanisms in place to monitor the training and succession programmes of MNCs to ensure Expatriates that have occupied critical positions for number of years should be transitioned to qualified Ghanaians.

- As this study focused heavily on a comprehensive assessment of local content policy and its significance for FDI in the oil and gas industry in Ghana, it is imperative that future studies would also consider touching the impact of the local content policy on economic growth and development within the country.

Endnote

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APPENDICES

APPENDIX 1

Questionnaire for policy makers (Ghana National Petroleum Corporation, Petroleum Commission, Ministry of Energy and Mines and Energy Committee of Parliament of Ghana)

This questionnaire seeks to solicit answers on **an assessment of local content policy and its significance for FDI in the oil and gas industry in Ghana**. This seeks to gather data for a research work in partial fulfilment for an award of MA in International Affairs. I would be grateful if you could help answer the questions below to facilitate the achievement of the study's objectives. The study is purely for academic purposes and responses will be treated with utmost confidentiality.

Tick (✓) the appropriate option where responses are given and provide your answer in the spaces provided where responses are not given.

SECTION A: BACKGROUND INFORMATION

1. **Gender of the respondent** a. Male b. Female

2. **Age range**
a. below 20 years b. 20–29years c. 30–39years
d. 40–49years e. 50-59 years f. 60 and above

3. **Level of education**
a. Primary school b. Secondary school c. Tertiary
d. Others, specify:

3. **Which of the following departments do you belong to?**
a. Legal b. Operations c. Finance
d. Corporate Governance e. Business Development f. Supply Chain
g. others please specify.....

4. **Which position do you hold in this organisation?**
a. Line Manager b. Senior Manager c. Head of Department d. MD/ CEO
g. others please specify.....

5. **How long have you been in the oil and gas industry?**
a. Below 4year b. 5-10 years c. 10- 15 years
d. 16-20 years e. 21+ years

SECTION B: LOCAL CONTENT POLICY AND FDI IN THE OIL & GAS INDUSTRY

6. **Do you have knowledge of the existing local content policy regulations the oil and gas industry in Ghana?**
a. Yes b. Not c. Somewhat

7. **Is the local content policy relevant and effective enough in fulfilling its intended purpose?**
a. Strongly agree b. Agree c. Neutral d. Disagree
e. Strongly disagree f. Prefer not to comment

8. What procedures are effectively laid down in implementing the Local Content Legislation in Ghana’s oil and gas sector? Please outline them.

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9. Are these processes outlined feasible in the implementation of the Local Content Legislation in Ghana’s oil and gas sector in fulfilling intended goals and objectives?

- a. Strongly agree b. Agree c. Neutral d. Disagree
e. Strongly disagree f. Prefer not to comment

10. Are foreign investors in agreement with this local content policy within the industry?

- a. Strongly agree b. Agree c. Neutral
d. Disagree e. Strongly disagree f. Prefer not to comment

11. Has the introduction of Local Content Policy reduced/increased foreign Investment in the Oil and Gas Industry in Ghana?

- a. Increased b. Decreased c. No change yet d. Prefer not to comment

12. By how much in terms of percentage has this decreased/increased the foreign investment into the industry?

- a. Less than 10% b. 10%-20% c. 21%-30% d. 31%-40%
e. 41%-50% f. 51% and above

13. According to the local content policy, all non-Ghanaian companies are supposed to form a joint venture partnership with an indigenous company before they are allowed to work in Ghana. Has this clause affected the interest of foreign investors in the oil and gas industry in Ghana?

- a. Strongly agree b. Agree c. Neutral d. Disagree
e. Strongly disagree f. Prefer not to comment

Please give reasons for your answer

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14. In your opinion, do you think there is room to change the clause- JV partnerships first to MOU’s or technical partnership to generate more interest of foreign investors in the oil and gas industry in Ghana?

- a. Strongly agree b. Agree c. Neutral d. Disagree
e. Strongly disagree f. Prefer not to comment

Please give reason(s) for your answer

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15. How are Ghanaians currently participating in the upstream Oil and Gas Industry?

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16. What aspect of the local content policy is working well?

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17. In your opinion, what aspect of the local content policy needs more improvement?

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18. In your opinion, do you think the local content policy has achieved its intended purpose?

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19. Are you aware of other best practices of local content in the upstream Oil and Gas Industry? a. Yes b. No c. Maybe d. Prefer not to comment

20. If yes, list some of these best practices of the local content in the upstream oil and gas industry.

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Questionnaire for Implementers of Local Content Policy

This questionnaire seeks to solicit answers on **an assessment of local content policy and its significance for FDI in the oil and gas industry in Ghana**. This seeks to gather data for a research work in partial fulfilment for an award of MA in International Affairs. I would be grateful if you could help answer the questions below to facilitate the achievement of the study’s objectives. The study is purely for academic purposes and responses will be treated with outmost confidentiality.

Tick (✓) the appropriate option where responses are given and provide your answer in the spaces provided where responses are not given.

SECTION A: BACKGROUND INFORMATION

1. **Gender of the respondent** a. Male b. Female

2. **Age range**
 - a. below 20 years
 - b. 20–29years
 - c. 30–39years
 - d. 40–49years
 - e. 50-59 years
 - f. 60 and above

3. **Level of education**
 - a. Primary school
 - b. Secondary school
 - c. Tertiary
 - d. Others, specify:

3. **Which of the following departments do you belong to?**
 - a. Legal
 - b. Operations
 - c. Finance
 - d. Corporate Governance
 - e. Business Development
 - f. Supply Chain
 - g. others please specify.....

4. **Which position do you hold in this organisation?**
 - a. Line Manager
 - b. Senior Manager
 - c. Head of Department
 - d. MD/ CEO

5. **How long have you been in the oil and gas industry?**
 - a. Below 4year
 - b. 5-10 years
 - c. 10- 15 years
 - d. 16-20 years
 - e. 21+ years

SECTION B: LOCAL CONTENT POLICY AND FDI IN THE OIL & GAS INDUSTRY

6. **Do you have knowledge of the existing local content policy regulations in the oil and gas industry in Ghana?**
 - a. Yes
 - b. Not
 - c. Somewhat

7. **Is the local content policy relevant and effective enough in fulfilling its intended purpose designed to achieve?**
 - a. Strongly agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly disagree
 - f. Prefer not to comment

8. What procedures are effectively laid down in implementing the Local Content Legislation in Ghana’s oil and gas sector? Please outline them.

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9. Are these processes outlined feasible in the implementation of the Local Content Legislation in Ghana’s oil and gas sector in fulfilling intended goals and objectives?

- a. Strongly agree b. Agree c. Neutral d. Disagree
e. Strongly disagree f. Prefer not to comment

10. Are you in agreement with this Local Content Policy within the industry?

- a. Strongly agree b. Agree c. Neutral d. Disagree
e. Strongly disagree f. Prefer not to comment

11. Has the introduction of Local Content Policy reduced/increased foreign Investment in the Oil and Gas Industry in Ghana?

- a. Increased b. Decreased c. No change yet d. Prefer not to comment

12. By how much in terms of percentage has this decreased/increased the foreign investment into the industry?

- a. Less than 10% b. 10%-20% c. 21%-30% d. 31%-40%
e. 41%-50% f. 51% and above

13. According to the local content policy, all non-Ghanaian companies are supposed to form a joint venture partnership with an indigenous company before you are allowed to work in Ghana. Has this clause affected your interest in the oil and gas industry in Ghana?

- a. Strongly agree b. Agree c. Neutral
d. Disagree e. Strongly disagree f. Prefer not to comment

Please give reasons for your answer

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14. If that clause (JV partnerships first) was changed to MOU’s or technical partnership would it influence your interest in the oil and gas industry in Ghana?

- a. Strongly agree b. Agree c. Neutral d. Disagree
e. Strongly disagree f. Prefer not to comment

Please give reason(s) for your answer.

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15. In your opinion, do you think the local content policy has achieved its intended purpose?

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16. What aspect of the local content policy is working well?

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17. In your opinion, what aspect of the local content policy needs more improvement?

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18. Are you aware of other best practices of local content in the Upstream Oil and Gas Industry? a. Yes b. No c. Maybe d. Prefer not to comment

19. If yes, list some of these best practices of the local content in the upstream oil and gas industry.

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Questionnaire for Beneficiaries (Ghanaians)

This questionnaire seeks to solicit answers on **an assessment of local content policy and its significance for FDI in the oil and gas industry in Ghana**. This seeks to gather data for a research work in partial fulfilment for an award of MA in International Affairs. I would be grateful if you could help answer the questions below to facilitate the achievement of the study’s objectives. The study is purely for academic purposes and responses will be treated with utmost confidentiality.

Tick (√) the appropriate option where responses are given and provide your answer in the spaces provided where responses are not given.

SECTION A: BACKGROUND INFORMATION

- 1. **Gender of the respondent** a. Male b. Female

- 2. **Age range**
 - a. below 20 years
 - b. 20–29years
 - c. 30–39years
 - d. 40–49years
 - e. 50-59 years
 - f. 60 and above

- 3. **Level of education**
 - a. Primary school
 - b. Secondary school
 - c. Tertiary
 - d. Others, specify:

3. **Occupation**

4. **Please indicate the sector/industry you work in eg. Financial sector, oil and gas etc**

- 5. **How long have you been in that industry?**
 - a. Below 4year
 - b. 5-10 years
 - c. 10- 15 years
 - d. 16-20 years
 - e. 21+ years

SECTION B: LOCAL CONTENT POLICY AND GHANAIAIAN PARTICPATION IN THE OIL AND GAS INDUSTRY

6. **Do you have knowledge of the existing local content policy regulations in the oil and gas industry in Ghana?**

- a. Yes
- b. Not
- c. Somewhat

7. **Is the local content policy relevant and effective enough in fulfilling its intended purpose?**

- a. Strongly agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly disagree
- f. Prefer not to comment

8. **What aspect of the local content policy are you familiar with?**

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9. Please indicate if you have benefited from Ghana's oil find?

- a. Yes b. No c. Somewhat d f. Prefer not to comment

Please outline the benefit(s)

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10. As a Ghanaian are you in agreement with the Local Content Policy within the industry?

- a. Strongly agree b. Agree c. Neutral d. Disagree e. Strongly disagree f. Prefer not to comment

Please give reason(s) for your answer.

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11. Has the introduction of Local Content Policy increased your opportunity in participation in the oil and gas industry?

- a. Increased b. Decreased c. No change yet d. Prefer not to comment

12. How are Ghanaians currently participating in the upstream Oil and Gas Industry?

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13. What aspect of the Local Content Policy is working well.

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14. In your opinion, what aspect of the Local Content Policy needs more improvement?

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15. Are you aware of other best practices of local content in the upstream Oil and Gas Industry? a. Yes b. No c. Maybe d. Prefer not to comment

16. If yes, List some of these best practices of the local content in the upstream oil and gas industry?

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