

UNIVERSITY OF CAPE COAST

GHANA'S OIL AND GAS EXPLORATION AND PRODUCTION:
IMPLICATIONS FOR PEACE AND SECURITY IN THE SEKONDI-
TAKORADI METROPOLITAN AREA.

BY

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Thesis submitted to the School of Development Studies of the Faculty of Social Sciences, College of Humanity and Legal Studies, University of Cape Coast, in partial fulfillment of the requirement for the award of Master of Philosophy in Peace and Development Studies.

SEPTEMBER 2019

DECLARATION

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

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

Name:

Supervisors' Declaration

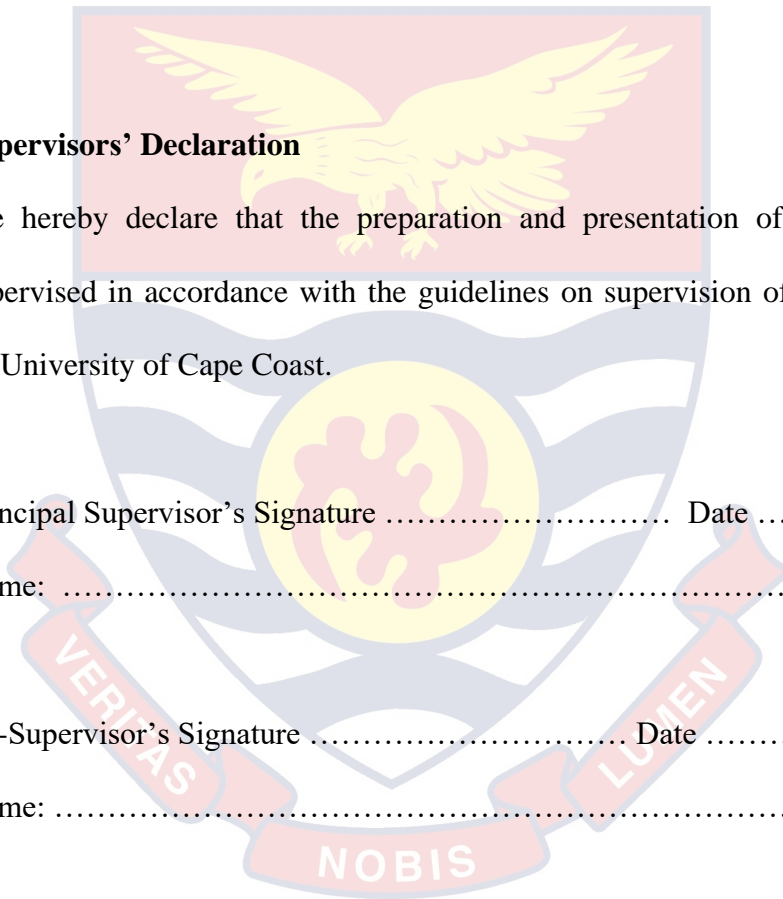
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ABSTRACT

Ghana's oil and gas exploration and production in the Western region which started in 2007 was welcomed with great enthusiasm and great expectations. In view of that, it has also created a new and formidable potential hornet's nest comprising political, economic, social and even governance challenges (Panford, 2017). In recent times, STMA has witnessed series of public protests, gas explosions and influx of migrants into the metropolis. This study therefore set off to examine the security implications of the oil and gas on STMA, to assess people's expectations from the oil and gas sector in STMA and to explore people's perception of the oil and gas operations on the peace in STMA. The qualitative research approach was adopted in this study. The study found out that oil and gas exploration and production in STMA has not necessarily led to insecurity in the metropolis. The study also discovered that the expectations of most of the inhabitants in STMA concerning oil and gas exploration and production have not been met so far. The study also revealed that STMA is enjoying a relatively peaceful atmosphere since the oil and gas exploration and production has not drastically altered the perception of peace in the metropolis. The study therefore came to a conclusion that oil and gas exploration and production in STMA has not been a major threat to the peace and security of the metropolis. In view of all these findings, the study recommends that the government of Ghana should properly engage local stakeholders whose lives are affected by the oil and gas exploration and production such as farmers and fishermen and also ensure that Ghanaians participate fully in the oil and gas value chain.

KEY WORDS

Conflict

Gas

Oil

Peace

Security

Violence

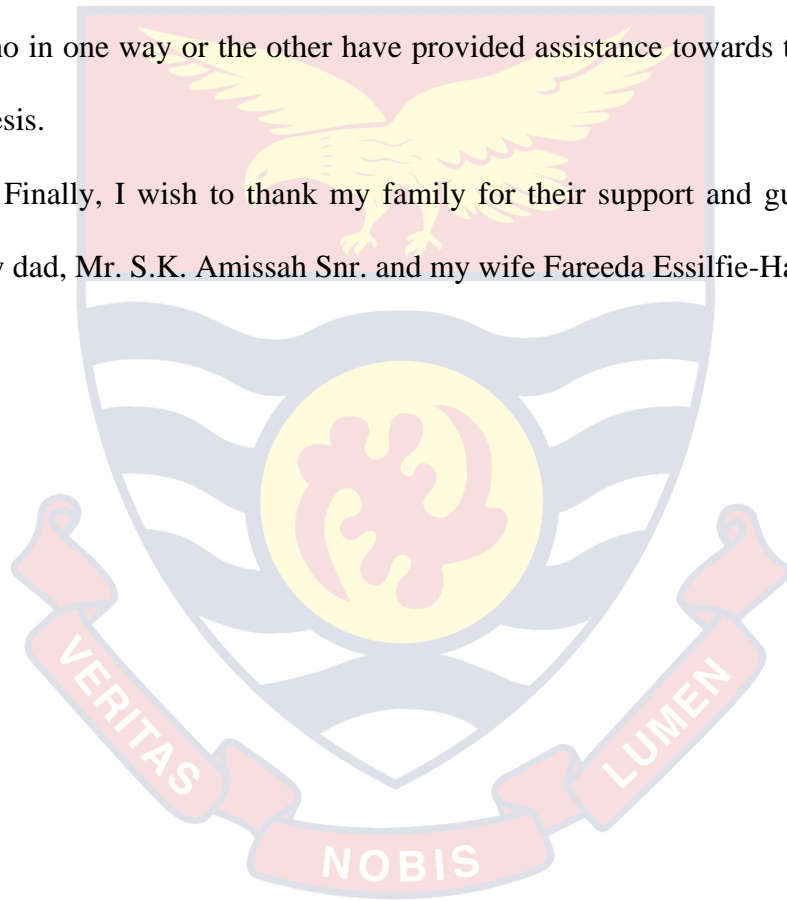


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Finally, I wish to thank my family for their support and guidance especially my dad, Mr. S.K. Amissah Snr. and my wife Fareeda Essilfie-Hammah.



DEDICATION

To my daughter,

Eileen Schell



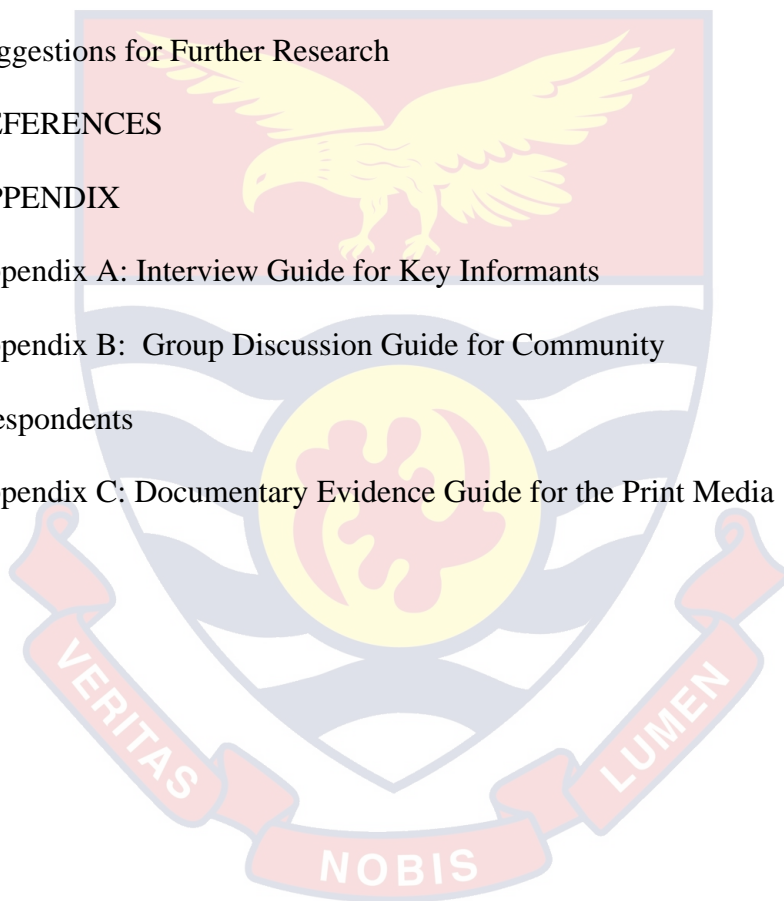
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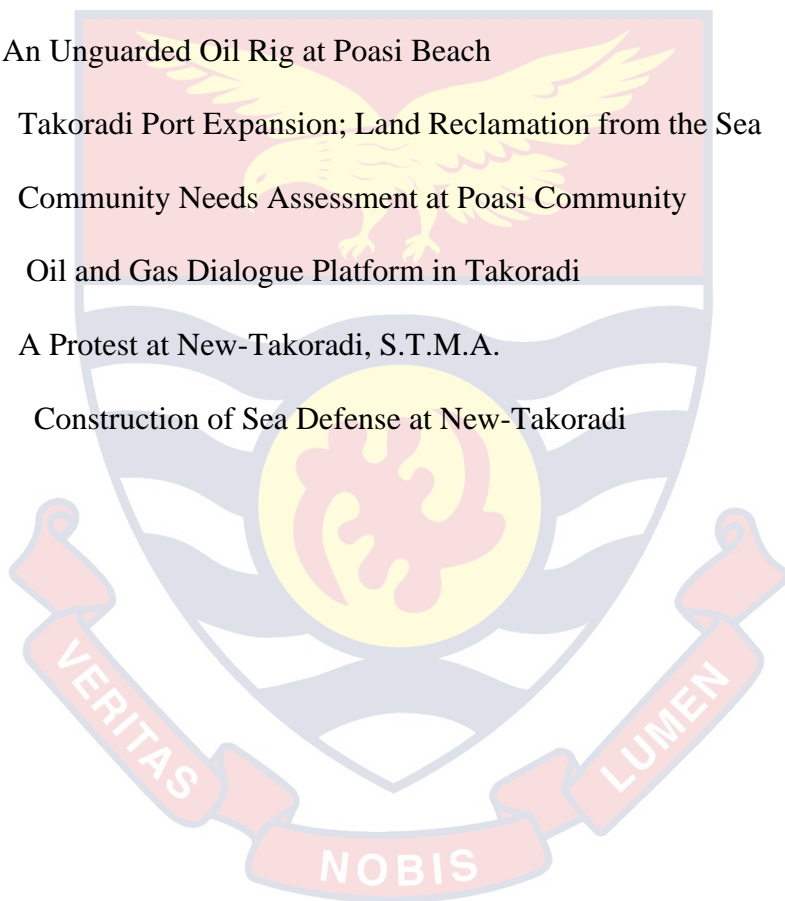
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LIST OF ACRONYMS

ACEP	Africa Centre for Energy Policy
AMV	Africa Mining Vision
AU	African Union
BBC	British Broadcasting Corporation
BDC's	Bulk Distribution Companies
BNI	Bureau of National Investigations
BP	British Petroleum
CHF	Cooperative Housing Foundation
CSPOG	Civil Society Platform for Oil and Gas
EI	Environmental Impact
EITI	Extractive Industry Transparency Initiative
FPSO	Floating Production Storage and Offloading
GDP	Gross Domestic Product
GHEITI	Ghana Extractive Industry Transparency Initiative
GHUMCO	Ghana Household Utilities Manufacturing Company Limited
GNCFC	Ghana National Canoe and Fishermen Council
GNPC	Ghana National Petroleum Corporation
GoG	Government of Ghana
GOGIG	Ghana Oil and Gas for Inclusive Growth
GPHA	Ghana Ports and Harbors Authority
GPRTU	Ghana Private Road Transport Union
IMO	International Maritime Organization

IOC	International Oil Companies
ISODEC	Integrated Social Development Centre
ITLOS	International Tribunal on the Law of the Sea
KVIP	Kumasi Ventilated-Improved Pit
L.I.	Legislative Instrument
MNCO's	Multinational Companies
NGO	Non-Governmental Organization
O & G	Oil and Gas
OPEC	Organization of the Petroleum Exporting Countries
PC	Petroleum Commission
PIAC	Public Interest and Accountability Committee
REGSEC	Regional Security Council
S.T.M.A	Sekondi-Takoradi Metropolitan Assembly
TEN	Tweneboa, Enyenyer, Ntomme
U.S.	United States
U.S.A.	United States of America
UN	United Nations
UNEP	United Nations Environmental Program
WC	Water Closet
WR	Western Region
YIEDIE	Youth Inclusive Entrepreneurial Initiative for Development

CHAPTER ONE

INTRODUCTION

Background to the Study

Resources such as oil and gas are important commodities on the international market and for many countries these resources keep the economy going and satisfy many human needs. The increasing demand for these resources and the shortage in supply make it a necessity for many consumers. For countries that possess large deposits of these resources, the wealth accrued from their production and exportation increases their national income and improves their economy and so there is a high reliance on these resources (Onigbinde, 2008). The presence of these precious natural resources such as oil and gas poses both economic and physical security concerns that has an implication on the peace and security of the area where these resources are exploited. Recently the Gulf of Guinea has come to assume a greater importance in security matters since it now represents a major source of oil for the industrialized countries (Traub-Merz & Eze, 2004). There are many ways that ownership of strategic raw materials like oil can create international security concerns. What come easily to mind are discriminative policies by suppliers or threats to traditional sources. A country which can't substitute imported oil, may be in dire straits by a blockade and may be tempted to use violent means. Debates on the last war in Iraq in some circles followed such pattern or arguments but it may be pointed out, that since independence, West Africa has not witnessed an international aggression from overseas in securing access to strategic commodities (Traub-Merz & Eze, 2004, p.73).

There is a second group of inter-state security concerns which are more relevant to the Gulf of Guinea: conflicts arising from claims to and control of territorial boundaries and oil reserves therein. The coastal states of the Gulf of Guinea which includes Ghana are prone to two sorts of territorial disputes that are linked to ownership. There may be unclear delineation of borders that wouldn't create much concern in normal times but can become a serious concern when oil is discovered in disputed territories (Traub-Merz & Eze, 2004). A typical example is the case between Ghana and La Cote D' Ivoire which was sent to the International Tribunal on the Law of the Sea (ITLOS) whose ruling went in favor of Ghana.

Moreover, the fact that oil and gas prices are determined on the international stock market makes the commodity highly volatile and unpredictable in the long term which makes the budget of oil dependent countries subject to the prices of the commodity on the world market. In this regard, budgets of countries which depend mostly on revenues from oil and gas can change unexpectedly which will sometimes require that the budget get reviewed and in the course of reviewing these budgets, most projects and funding get cut when it is reviewed downwards and vice versa. This budget review sometimes serves as a basis for systemic and structural conflicts, when people's salaries get cut and others lose their jobs etc. On the other hand, if these budgets get reviewed upwards, most people become happy and less conflict is expected because there will be more jobs and more incentives for a job done. The Human needs theory and the systemic theory of conflict thus become relevant even on the international level due to price fluctuations. The systemic theory of conflict posits that the reasons for social conflicts are found in

the social context in which they occur. This could be political, economic or cultural.

Africa as a continent can't be left out when one is talking about resource-based conflicts. In Africa, conflicts over natural resources occur in large scale. It therefore shows that "for marginalized groups seeking to redress injustices or inequities in resource distribution, conflict is an inherent feature of their struggle for change and can provide the leverage needed to assert their claims (Onigbinde, 2008). Poor resource management has huge implications for peace and security in Africa (ibid). The evidence to date particularly in developing countries shows that the discovery and exploration of high valued natural resources including oil have plunged some oil-producing countries into anarchy and conflict. The data from Collier and Hoeffler (2000) which served as an extension of the resource-curse theory, is further buttressed with a report conducted by the United Nations Environmental Program (2009). This report indicates that from 1990 to date, not less than 18 violent conflicts have been sparked by the exploration of natural resources including oil in regions such as Angola, Cambodia, and the Democratic Republic of Congo, Darfur in the Sudan and the Middle East. These intra-state armed conflicts can be national or confined to a specific territory of the country. In some cases, these intra-state armed conflicts are influenced by inequalities in the allocation of oil revenues especially when the local communities near the oil reserves are disadvantaged as is the case of the Niger Delta of Nigeria. According to Boonstra et al (2008), insurgency is on the increase in Nigeria and this is coupled with frequent attacks on oil installations and increases in the kidnapping of western

workers (over 100 between 2006 and 2007). Le Billon (2001) also provides a good account of the extent to which the war in Angola was fuelled by proceeds from the sale of oil.

The major problem of the African continent and West Africa in particular, can be succinctly stated to be that of mis governance – either at the political, economic, social or cultural levels. Governance relates to decisions that define expectations, grant power, or verify performance in terms of accurate account of accruals from resources. It consists either of a separate process or of a specific part of management or leadership processes (Ezirim, 2011). Familiarity with the literature on the subject matter indicates that internal conflicts in the oil-rich region of the Gulf of Guinea are as a result of many factors, some of which are that the struggle for the control of oil and gas resources increases the region's vulnerability to conflicts; greed for economic gains is the primary motivation for resistance and struggle for the control of oil and gas resources; there is profiteering from the struggle. Community leaders, warlords and traders profit from the oil and gas-related conflict situation in the region and so stoke the embers of the crisis for private-regarding interests; warlords characterize the insurgency, rebellion and militancy in the region in such a manner that they become the subject of discourse which gives them bargaining power; there is high level of economic and financial crimes involved in the struggle for the control of oil and gas resources in the form of pipeline vandalization, piracy, oil bunkering, small arms proliferation, hostage-taking and kidnapping; and government's militarization of the region gives the sense of insecurity and people therefore feel constrained to take up arms against

government forces, *ibid.* Countries in Africa such as Nigeria, Equatorial Guinea, Sudan, Angola etc. suffer from this kind of resource based conflicts.

Moreover, West Africa's long established petro-states seem like a monument to hopes lost in a jungle of corruption, economic mismanagement and bad government. Nigeria, Africa's champion of oil production for four decades, has gambled away billions of dollars in oil revenue in failed development schemes and by nourishing a parasitic political elite, while the living standard of ordinary citizens is lower than before independence. Suffering from a combination of "Dutch disease" and rent seeking, none of the established oil producing countries has managed to turn its wealth into development opportunities (Paes, 2004, p.87).

Ghana recently found crude oil off the shores of its Western Atlantic Coast. In June 2007, KOSMOS Energy announced the discovery of commercial quantities of oil offshore the Western Coastline of Ghana. Jubilee field 's estimated reserves, as of October 2009, amounted to 490 million barrels of high-quality oil and justify commercial exploitation should barrel oil prices exceed US\$30. At its peak (mid 2011- mid 2016), some 120,000 barrels of oil per day could be extracted – making Ghana a net oil exporter for a short while, and the overall period of activity could span over two decades based on the fiscal regime in place, and a price assumption of US seventy five dollars (\$75.00), per barrel (World Bank Report, 2009). The World Bank 's central estimate puts potential government revenue at US\$1.0 billion on average per year between 2011 and 2029. By way of comparison, government revenue in 2008 reached US\$3.7 billion (excluding grants) and GDP US\$16.1 billion. Such level of proven reserves puts Ghana at par with neighboring

Cameroon (400 million barrels) and above Côte d'Ivoire (100 million barrels), but much below Nigeria (36,200 million barrels). That notwithstanding, many are of the view that petroleum contracts entered into in the past were injurious to the interest of the Ghanaian (World Bank Report, 2009).

Also, Ghana 's oil reserves are relatively modest by international standards, and will thus not radically transform Ghana 's economy into one where oil becomes the major sector, (World Bank Report, 2009). Nonetheless, they are already large enough to deeply affect the future of the non-oil economy, positively or negatively. Issues that have to do with changes in people's economic wellbeing and its associated security implications such conflicts and peace will have to be well interrogated. As liquidity constrained, Ghana 's economy could expect high development returns from oil but without sufficient preparation, risks of misuse of oil revenue are considerable, to the extent that it could even lead to a decline in per capita incomes in absolute terms after the initial boom years. The political capture of oil rents could also revert some of the important progress made in Ghana in terms of governance, security and executive accountability. Hence the huge premium and responsibilities put on Ghana 's successive authorities to wisely manage the oil wealth. The security implications of this oil and gas operations on the country and the study area cannot be overlooked. These security implications may be in different phases: the increase need for security thereby causing the creation of more private security companies or an increase in the national security apparatus, the possible eruption of violence out of frustration and disappointment among the populace and the occupational hazards associated with the oil and gas

operations on the populace which may result to an increase or decrease in violent conflicts.

This thesis dwells on the Human Needs conflict theory and is supported further by the systemic conflict theory and the structural conflict theory in explaining the security implications of the oil and gas. By security implication, we mean the factors and condition both social and economic which has the tendency to lead to violent conflicts and in turn require the increase in security agencies or the expansion of existing ones. This research is a conflict prevention exploration into the elements and factors that have the tendency to lead to violent conflicts in Ghana by taking a cue from other countries which have gone through similar experiences so as to put the proper measures in place to prevent the same experience in Ghana. The focus of this thesis is to explore Ghana's oil and gas exploration and production in the Western Region and its implications on the peace and security in the Sekondi-Takoradi Metropolitan Area (STMA) by looking at factors that have both direct and indirect linkages with the oil and gas exploration and production and also having the tendency or capacity to trigger violent conflicts in STMA.

Also, the fact that Ghana's oil deposits are mostly located near and within wildlife protection areas and environmentally sensitive regions makes it necessary to put measures in place so that the exploration and production activities do not impact negatively on the environment. If not properly managed, environmental degradation could lead to local strife. Fishermen along the coast of the Western Region are affected by the offshore oil and gas operations which have resulted in the loss of life and property. There have been collisions between oil supply vessels

and canoes and most often incursions into the advisory and exclusive zones offshore. This was buttressed by the Daily Graphic report which stated that, the Petroleum Commission (PC) revealed that instead of declining, the number of incursions by canoe fishermen rose to 7,015 as of October last year, from 4,185 in 2016 and 6,622 in 2017 (Daily Graphic, 2019). The fishermen usually tied their nets to the installations, a practice that could damage the multi-billion-dollar installations and impact oil production for months, *ibid*.

While these issues are important to the overall stability of the region, the primary security threat posed to Ghana lies in the domestic effects of large-scale oil exploitation. In many cases, sizeable petroleum reserves in less developed countries have not improved overall national economic performance. Indeed, for many petroleum-rich, underdeveloped states, exploitation has reduced the competitiveness of previously productive economic sectors, leading to declining wealth, social and political unrest, increasingly disaffected populations, and emergence of rebel organizations, government corruption, and destabilized domestic security. Six years after the commencement of oil and gas production in commercial quantities, the Sekondi-Takoradi Metropolis has not seen any major infrastructural development and improvement in basic social amenities. This brings to bear the human needs theory of conflict which underpins this research. The human needs theory states that, “All humans have basic needs which they seek to fulfill and that the denial and frustration of these needs either by other groups or individuals could affect them immediately or later thereby leading to conflict.” These conditions of relative and absolute poverty amidst the great income

accrued from oil and gas production have serious security implications which make this research relevant in order to explore these shortcomings and provide remedy for their termination or abatement. This is further buttressed by Kendie et al. (2014) who argue that in Ghana, the potential for conflict is ever present owing to the fact that the differences and inequalities which cause conflicts in other countries are equally present.

The fact that STMA has been the hub of the oil and gas operations, has not necessarily made it the decision-making center of the industry which doesn't auger well for the interest of the people of STMA. Since decisions concerning the oil and gas operations are made in Accra, it somehow removes the decision makers from having direct access and experience of the problem on the ground. It also in a way doesn't speed up corporate social responsibility between the companies and the local communities. To help in reducing this grievance and gap between the multinational oil companies, some civil society groups and politicians are advocating for the relocation of the head quarters of the Ghana National Petroleum Corporation (GNPC) to the twin-city of Sekondi-Takoradi. This move is to ensure that those who make decisions concerning oil and gas are living closer to the people who are impacted directly by the effects of the oil and gas activities.

Kendie (2010) argues that within capitalist power dynamics many development challenges are harbingers for conflict and violence in contemporary Ghana. High levels of poverty, inequalities, exclusion and unemployment alongside unequal development among different parts of the country have the potential to lead to violence, (Kendie, Osei-Kufour & Boakye, 2014).

Friends of the Nation, a Takoradi based NGO conducted a research in 2009 a year before the commercial production of oil among the six coastal districts of the Western Region and some of the positive perceptions and expectations were summarized to mean that the oil and gas exploration and production will make Ghanaians better off economically and also bring about more infrastructural developments such as better roads, hospitals, housing etc. Five years down the line, most of these expectations have not been met which has casted doubt on people's mind on whether the oil and gas discovery and production in Ghana will not be like the other resources like gold, bauxite, manganese etc., which has been mined for many decades but have not been able to transform the Ghanaian economy.

Incidents of violent protests between Concerned Citizens of New-Takoradi, a community based group, some fisher folks, residents of Poasi and New-Takoradi and the management of GPHA about the issue of land reclamation for the port expansion project to accommodate the oil and gas sector in STMA, the poor nature of roads in the Sekondi-Takoradi metropolis amidst the volume of heavy duty vehicles operating in the harbor and the oil and gas enclaves have been a major concern to the residents in the metropolis. Poasi/ New-Takoradi is one particular town which had witnessed series of protests between state authorities and the disappointment of the expectations of the citizenry. These issues of protests and public unrest have in one way or the other has generated the feeling of insecurity in the STMA.

In view of all these developments in the Oil and Gas sector and its associated or accompanied challenges with regards to the people of STMA, the security of the

people of STMA becomes paramount. This is because oil and gas are high trading commodities and as such has lot of interests. It attracts pirates in the oceans, land grabbers, migrants etc. All these factors have security implications on the metropolis and thus the security of individuals, companies, traders etc. must be increased. It is based upon these factors that this research looks at how the oil and gas operations have affected the security of the metropolis.

Problem Statement

Even though Ghana's commercial oil and gas (OG) extraction is in its infancy, some conflicts have already flared up while others are lurking in the oil producing coastal districts. There are also potentially "hot spots" that could ignite social turbulence if they are left unchecked or allowed to fester (Panford, 2017, p.145). At present, Ghana's Western region which has Sekondi-Takoradi as its capital city is faced with many challenges ranging from environmental pollution to sanitation, healthcare etc., the region is suffering from the 'resource curse' because amidst all the natural resources, citizens in the region lack adequate health facilities, schools, proper drainages, proper waste management systems, proper road infrastructure to convey goods from the rural areas to the urban centers and many more. According to Panford (2017), many observers including Ghanaians, have expressed reservations like the Venezuelan Oil Minister, Alphoso about escaping the proverbial "resource curse" that emanate from oil, minerals and other plentiful natural resources. The case of the oil and gas exploration and production in the Western region of Ghana is not an exception looking at the myriad of problems

facing the region amidst the abundance of natural resources such as oil, gas, gold, timber, manganese, bauxite, rubber etc.

The expansion of the Takoradi Port to accommodate the oil and gas operations which has led to tensions between GPHA and the fishing communities has made some residents anxious about their personal security in the area. This development has the potential to escalate into a violent conflict if not properly managed. This has led to the formation of a stakeholder engagement committee between the affected communities who have been engaging GPHA in order to discuss issues of relocation, compensations and even the construction of a landing beach alongside the project but proposal from these stakeholder engagements are not taken seriously by GPHA and the Bulk Distribution Companies (BDC's).

For instance, the road linking Paa Grant roundabout to New-Takoradi community which accommodates many oil and gas firms and other strategic firms such as Ghacem, Flour Mills, Bauxite, Manganese etc. has for many years been left un-tarred and has resulted in many protests and demonstrations which in many cases had called for the intervention of the Police in order for peace to prevail. One of these protests and grievances was captured by the Daily Guide Newspaper on March 30th, 2017.

Another problem that is rearing its head subtly in the metropolis is the issue of organized crimes. These organized crimes include oil siphoning, fuel adulteration and stealing from the rigs. These issues of organized crimes had also become a major concern to the safety and security of inhabitants of S.T.MA., since some inhabitants have expressed concerns about theft from the rigs which can result in an

unannounced raid from the military or the police which may end with many innocent residents beaten or sent to jail. According to Okubo and Shelley (2011), organized crime tends to be associated with the exploitation of various illicit markets and never hesitate to use fear and intimidation to perpetuate themselves in order to avoid detection and prosecution.

The encroachment of oil pipelines so close to the roads at New-Takoradi and Poasi communities have also raised security concerns among the residents as well as the location of numerous oil and gas tank farms around the communities. In recent times, there has been a fire outbreak around these tank farms which has raised alarm among residents. The safety of the pipelines and the potential for mass injuries in the case of an accident such as what happened recently at GHUMCO where over two hundred residents of STMA sustained various injuries due to a gas explosion has led residents to worry about their safety and security amidst oil and gas activities.

The creation of advisory zones and exclusive zones in the ocean or offshore of STMA has also created problems for fishermen who complain that these zones harbor fish which reduces their catch. There have been incidents of confiscating of nets of fishermen by the Ghana Navy when these nets are dragged by oceanic currents into the advisory and exclusive zones. All these confiscation of fishing equipment's and accidents between oil and gas supply vessels and canoes which has led to the death of some fishermen has increased tensions between fisher folks and the oil and gas industry in STMA. The problem is worsened by the fact that most of these fisher folks are illiterate and cannot report accurately on incidents at

sea coupled with the lack of proper communication gadgets to report these incidents have made the situation dire for these fishermen.

These myriads of problems concerning the oil and gas exploration and productions and the fact that there are few literatures concerning the security implications of the oil and gas exploration and production on STMA, has necessitated this study.

Objectives of the Study

Main Objective:

The main objective of the study is to examine Ghana's oil and gas exploration and production and its implications for peace and security in the Sekondi-Takoradi Metropolitan Area (STMA).

Specific Objectives:

The specific objectives of this research are:

- I. To examine the security implications of the oil and gas operations on STMA.
- II. To assess people's perceptions from the oil and gas sector in STMA.
- III. To explore people's expectations of oil and gas operations on the peace in STMA.

Research Questions

- I. In what ways have the oil and gas operations in the Western Region affected security in STMA?
- II. How do citizens of STMA perceive the oil and gas exploration and production?
- III. How have people's expectations from the oil and gas sector been met in STMA?

Scope of the Study/ Delimitation

This study looked at the security implications of the oil and gas operations in the Sekondi-Takoradi Metropolitan Area (STMA). It focused on three thematic areas: the security implications of the oil and gas sector looking at both positive and negative security implications, the measure of people's expectations, and the perception of the state of the peace in STMA. This research was situated in STMA and covers the four sub-metro of STMA. It is situated in STMA because it is the capital of the Western region and holds most of the assets and logistic supply line of the multinational oil and gas companies. The population of the metropolis also makes it a preferred choice to conduct such a research.

Limitations of the Study

Though the research adopted the qualitative approach, the use of interviews group discussions and documentary evidence could be supported with other methods but due to resource constraints and time constraints, the research was limited to these three methods. The study did not also include certain key informants due to time and resource constraints.

Significance of the Study

This research brings to fore what we have to do or measures to be put in place to ensure that the oil and gas exploration and production benefits the people of Sekondi-Takoradi, Western region and Ghana as a country by focusing on the peace and security implications of the oil and gas operations and eliminating factors that may lead to violent conflicts. This research seeks to provide policy

guide to alert relevant institutions in the oil and gas value chain on the potential of the oil and gas sector to spark violent conflicts in STMA, the Western Region, and Ghana as a whole. It will also serve as a preventive measure to help us to avoid oil and gas related violent conflicts and insecurities in STMA and Ghana as whole.

Operational Definition of Terms

Peace

The concept of peace has many connotations and meanings in different contexts. According to Ibeanu (2006), there is a tendency in peace and conflict studies to conceptualize peace as the converse of war. Thus, we often hear of war and peace being two sides of the same coin. In other words, peace is defined as the absence of war, and by logical extension, war is the absence of peace. This way of conceptualizing peace though attractive, is inadequate for understanding the nature of peace, *ibid.*

Peace according to Coser (1956) is nothing more than a change in the form of conflict. According to Ibeanu (2006), the word peace has different definitions which may arise from different perspectives or interpretations. These perspectives include the instrumentalist and functionalist perspective, philosophical perspective, sociological perspective, political perspective etc.

Peace according to some school of thought exist independent of war thus there can be peace even when there is war. For instance, a country experiencing social conditions such as abject poverty, exclusion, intimidation, oppression, want, fear etc cannot be described as peaceful even though the country might not be

experiencing physical violence (Ibeanu, 2006). This makes the definition for peace quite complicated.

To the instrumentalist, peace is a means to an end. In this sense the absence of war serves the end of social progress and development. In the functionalist interpretation of peace, peace is seen as playing a social function and from another angle as the product of the function of other social structures.

Although there are many definitions for peace, this research will focus on the political definition of peace. Politically, peace entails political order that is; the institutionalization of political structures. Institutionalization means that political structures acquire value and stability. In the absence of institutionalization, there is a primacy of politics (Ibeanu, 2006, p.8).

Security/Insecurity

Security according to BBC English Dictionary (1992) refers to all the precautions that are taken to protect a place or the legal protection against possible harm or loss. It is also the assurance that something of value will not be taken away from you. The opposite of security is insecurity and there is just a thin line between insecurity and crime. Crime only has the law attached to it and as such crime can be defined as a state of insecurity by not abiding by the laws of the state. By the term security, as this research is concerned, we mean the safety and wellbeing of the people of STMA in view of the development in the oil and gas industry and its accompanied challenges. These challenges could be accidents between oil supply vessels and canoes, restrictions on fishing grounds, land grabbing and disputes arising from the oil and gas operations, inadequate compensations for lands etc.

Some of the potential security threats that are associated with the oil and gas (O&G) sector include; terrorist attack on development and exploration sites, terrorist attack during maritime transport, terrorist attack on the distribution system, terrorist attack on refinery and future potential threats to the oil and gas (O&G) value chain. Although Ghanaians are not anticipating any terrorist attack on the oil and gas industry, there has been news on seizure of ships by pirates in our waters. In this research, the word security will be limited to factors that are capable of causing violent conflicts and on the other hand, factors that has the potential of making sure that violent conflicts are avoided. Therefore, we will be looking at negative security and positive security.

Organization of the Study

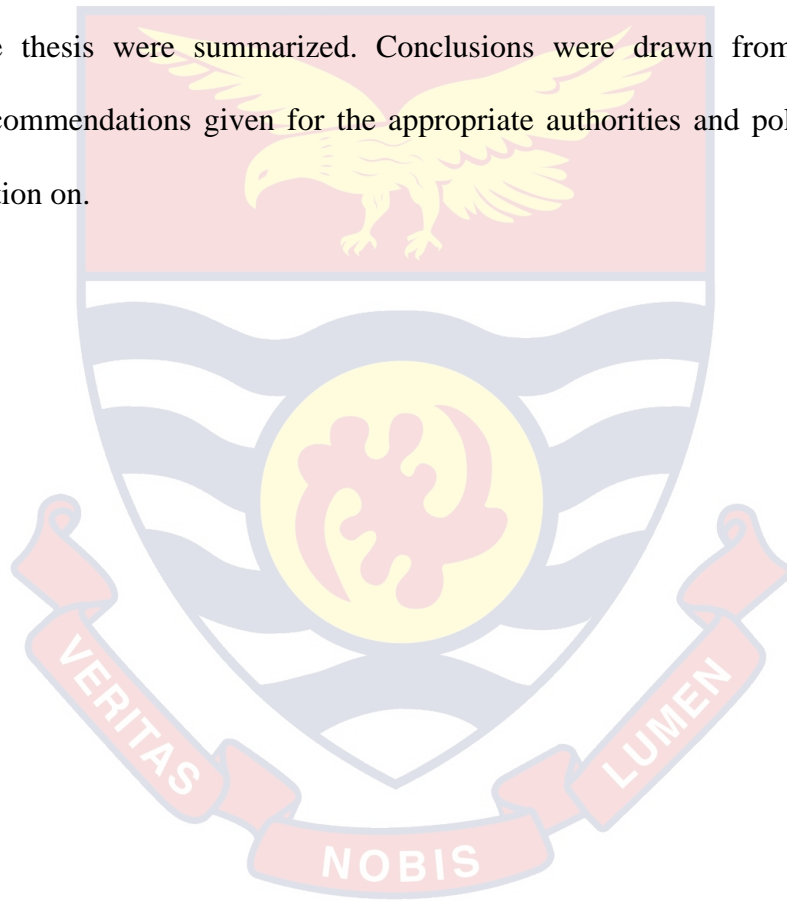
This write-up was organized into five main chapters. Chapter one gives us the general introduction which comprised of the background to the study, the problem statement, objective of the study, research questions, scope of the study, limitation of the study, significance of the study, operational definition of terms and organization of the study.

Chapter two of this thesis is about the review of relevant literature. These include literature on the potential of the oil and gas operations to cause conflict with emphasis on cases across the world, Africa and West Africa in general.

Chapter three of this thesis dealt with the study area, the study design and sampling and data collection techniques. This means that this chapter focused on the field aspect of the research, how relevant information was collected for the research and the tools that were employed in gathering the data.

Chapter four of this thesis dealt with the interpretation of the results from the data gathered. It also looked at how the results of the research can be used to effect policies in order to avert or minimize the effects of the oil and gas discovery on the peace and development of the Sekondi-Takoradi metropolis.

Chapter five of this research deals with the summary, conclusion and recommendations. In this chapter, the major themes in the research that encompass the thesis were summarized. Conclusions were drawn from the findings and recommendations given for the appropriate authorities and policy makers to take action on.



CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter covers the review of related literature which includes the review of theoretical literature, the concepts that underline the research and empirical literature underlining the research. It also seeks to explain how those literatures relate to the topic of the study.

Theoretical Literature Review

There are many theories that cover the concept of peace, conflict as well as development and underdevelopment but in this research, the *Human Needs Theory*, the *Systemic Conflict Theory* and the *Structural Conflict Theory* were used to explain the security implications of the oil and gas exploration and production in STMA. This research looked at the relationship between oil and gas exploration and production and its security implications in the Sekondi-Takoradi Metropolitan Area (STMA) by dwelling on these three theories.

Human Needs Theory

The human species, like other species inhabiting the earth, is a product of evolutionary forces. There is no reason to believe that the human species is anything more than just one more bud on the bush representing all species. Furthermore, there is every reason to believe that this bud, classified as homo sapiens, contains much within it that is shared with other creatures whose mutations over time brought it to fruition. Given this, it seems reasonable to agree with

Kemper (1987) and others that humans share the physiological basis of the primary emotions with the higher animals. Animals, for example, experience fear, anger, depression and satisfaction as do humans. There is little doubt that emotions came into existence in the evolutionary scheme of things because they enhanced survival value. If the logic of the analysis presented here is to hold, it follows that since animals have the same primary emotions as humans, a case must be made that animals like humans can be said to have a corresponding set of needs (Sites, 1990, p.9).

The position of the human needs' theory is that all humans have need which they seek to fulfill, and that their denial and frustration of these needs by other groups or individuals could affect them immediately or later, thereby leading to conflict (Rosati et al., 1990). According to Masini (1980), needs can be understood abstractly to refer to those human requirements calling for a response that makes human survival and development possible in a given society. Basic human needs include freedom, identity, ability for action and creativity, privacy, meaning and participation, recognition and understanding, connectedness and affection, security and protection etc. Inadequate satisfaction of any of the fundamental human needs generates pathology. The pathology can be in economic and political terms. Economically the pathology is expressed as unemployment, under-employment, hyperinflation, and poor quality of life. Politically, the pathology can be expressed as fear or xenophobia, crime or violence, exile and marginalization. At the heart of the Needs Theory, is the tension between deprivation and potential. This tension drives needs-based conflicts (Ademola, 2006).

The discovery of oil and gas in Ghana's Western region has raised the expectations of the populace for a better life since they are of the belief that the oil and gas sector have the ability to change their living conditions. This need or expectation has made the human needs theory relevant in this research. The social and psychological expectations of the people must be handled with care since disappointment in that area can lead to violent conflicts or agitations which can destabilize the peace of the region and probably the whole country.

The social, psychological and physical impact of the oil and gas activities on the people of STMA can't be overlooked. The oil and gas exploration and production have led to some employment opportunities for the citizens in STMA but the greater effect of deterioration of roads, the creation of numerous buffer zones in the ocean and many more is gradually leading to contempt for the oil and gas exploration and production activities. Most people in the STMA especially the fishermen are not happy with the way that oil and gas supply vessels collide with their canoes and most a times fail to duly compensate the victims. All these occurrences and many more have made the human needs theory more relevant for this research.

Systemic Conflict Theory

A conflict is a special kind of system whose complexity stems from many different and sometimes unrelated elements. On the one side, there are the parties involved in the conflict; If it is true that there are cases in which the parties are just two (or even one, in the case of a dilemma), most often the parties are many, with intricate relations between them. More importantly, there are often multiple and

diverse objectives. On the other side, each conflict does not arise in a vacuum but in a context, local, regional, or international, a context that may be changing over time and has often unforeseen effects on the conflict's structure and parties (Gallo, 2012).

Systemic theories provide a socio-structural explanation for the emergence of violent social conflicts. The position for this theory is that reasons for any social conflict lie in the social context within which it occurs (Ibeanu, 2006). Systemic factors that lead to changes in people's material comfort include environmental degradation, uncontrolled population growth in urban centers, pollution, resource allocation and its scarcity and other factors like unemployment and poverty.

Braumoeller (2012), has stated that the combination of two ideas; that the environments have an impact on people's behavior and that people act to alter their environments is the essence of systemic thinking. Systemic sources of conflict are found in every aspect of life and affect large numbers of people even though their influence on the emergence and intensity of conflict are not always visible to people. This theory has to do with the functioning of institutions for the common good of the people, failure of which will result in the structural causes of conflict.

Systemic theory is relevant in this research because the oil and gas exploration and production will only benefit the people and ameliorate the effects of conflict when the institutions of the state responsible for the management of the proceeds do their work to expectation and even go beyond expectation for the common good of the people. Failure to do that may jeopardize the peace and development of the region and the country as a whole. Issues like environmental degradation,

uncontrolled population, insanitary conditions, high rents, unemployment etc will eventually lead to agitations among the people and can distort the peace and development of the Sekondi-Takoradi Metropolitan Area, the region and the country.

Moreover, the fact that systemic theories seek to explain the relationship between modernization and political disorder and also regard movement between different periods of economic and political history as containing potential tension and crises that creates the conditions of internal conflict and instability makes it all the more relevant for this particular research. The government of Ghana sometimes find it challenging to give full disclosure of Ghana's oil and gas proceeds and this is a clear indication of institutional failure and lack of transparency on the part of the government of Ghana regarding oil and gas operations.

However, the Public Interest and Accountability Committee (PIAC), has been set up to give proper account on the proceeds from the oil and gas industry and also track the revenue stream in order to make public to the Ghanaian citizenry how revenue from oil and gas are being used. This activity by PIAC will help reduce the negative impact of the oil and gas expenditure and strengthen the transparency in the oil and gas spending. The systemic theory thus becomes relevant in this area of strengthening our institutions and making them transparent in order to reduce the potential for violent conflicts in STMA.

Structural Conflict Theory

Most social conflict is based on the unequal distribution of scarce resources among groups and individuals. Weber identified those resources for us as class, status, and power. According to Coser (2010), in explaining Weber's view of society stated that Weber viewed every society as divided into groupings and strata with distinctive life-styles and views of the world, just as it is divided into distinctive classes. While at times status as well as class groupings may conflict, at others their members may accept fairly stable patterns of subordination and superordination (Coser, 2010, p.229).

The structural conflict theory has two main sub-orientations. The first is the radical structural theory represented by the Marxist dialectical school with exponents like Marx and Engels, Lenin, etc. (Ademola, 2006). The second is the liberal structuralism represented by Ross (1993), Scarborough (1998) and the famous work of Johan Galtung (1990) on structural violence. It further sees incompatible interests based on competition for resources, which in most cases are assumed to be scarce, as being responsible for social conflicts (Collier, 2000, p. 2). Theories like Marxism, in its thesis on 'historical materialism' present conflicts as mostly tied to economic structures and social institutions.

The main argument of the structural conflict theory is that conflict is built into the particular ways' societies are structured and organized. The theory looks at social problems like political and economic exclusion, injustice, poverty, disease, exploitation, inequity etc., as sources of conflict (Ademola, 2006). Structuralism maintain that conflicts occur because of the exploitative and unjust nature of human

societies, domination of one class by another etc. This case is made by radicals like Friederich Engels, Karl Marx, Joseph Lenin and Mao Tse Tung, who blame capitalism for being an exploitative system based on its relations of production and the division of society into the proletariat and the bourgeoisie. The exploitation of the proletariat and the lower classes under capitalism creates conflict. Thus, capitalist societies are accused of being exploitative, and such exploitation is a cause of conflict. Capitalist conflict, to Marxists, will be resolved through a revolution where the bourgeoisie will be overthrown in a socialist revolution led by the working people. Furthermore, there will be "capitalist internationalism", a situation where workers all over the world unite, and will not be limited by state boundaries since the state itself is an artificial creation of the bourgeoisie to dominate others (Ademola, 2006, p.42).

In relation to oil and gas exploration and production in Ghana, the structural conflict theory becomes relevant because of the role of state institutions in regulating the use of income from the oil and gas exploration and production in order to benefit the masses positively or negatively. These institutions include the Parliament of Ghana, Ghana National Petroleum Corporation, the Bank of Ghana, Petroleum Commission etc. Failure of these institutions to put the oil and gas resources and opportunities to the best use will lead to erosion of confidence in these institutions which may lead to conflict or revolt against these state institutions in Ghana and STMA to be specific.

Conceptual Issues

The various concepts that are key to this study have been discussed extensively drawing from literature on the security implications of oil and gas exploration and production.

Peace and Conflict

A critical conceptualization of peace and conflict studies is the inextricable link between peace and security (Francis, 2006). According to Terrif et al. (1999), even though peace is widely accepted as the absence of warfare or negative peace, the concept of peace has remained unexplored, until recently, as a security issue. Despite the efforts by the international community and African regional intergovernmental 'collective security' organizations to maintain peace and security in Africa, and to manage or resolve conflicts and build the peace, the continent lacks the 'depth of relevant knowledge', sustained capacity and critical mass of expertise for conflict prevention, management, resolution and peacebuilding (Francis, 2006).

According to Galtung (1996), there are three types of violence relevant to the understanding of peace and conditions that create un-peaceful situations or 'peacelessness'. Direct violence, i.e., physical, emotional and psychological violence. Structural violence, i.e., deliberate policies and structures that cause human suffering, death and harm. Cultural violence, i.e., cultural norms and practices that create discrimination, injustice and human suffering. Again Galtung (1996), in broadening the definition of peace, also outlines two dimensions of peace: a. Negative peace, i.e., the absence of direct violence, war, fear and conflict

at individual, national, regional and international levels and b. Positive peace, i.e., the absence of unjust structures, unequal relationships, justice and inner peace at individual level.

Peace and conflict resolution have different names and interpretations in different cultures. The Muslims talk about ‘Salam’ meaning peace, the Jews talk of ‘Shalom’, the Hindus talk of ‘Ahimsa’ while the African Traditionalist talks of ‘Ubuntu’ (Francis, 2006).

Many philosophers also see peace as a natural, original, God-given state of human existence. Peace, from the philosophical standpoint, is the pre-corruption state of human society, as was established by God. The instrumentalist sees peace as a means to an end. Which means that the absence of war serves the end of social progress and development (Ibeanu, 2006). While the instrumentalist sees peace as a means to an end, the functionalist sees peace as performing a social role and as a product of the function of social structures and institutions. Some critics of the instrumentalist and the functionalist perspectives of peace see peace as an end in itself which in most cases people will prefer if the two are placed side by side, that is if peace is placed beside war and we are to choose.

Peace from the sociological perspective refers to the social harmony where there is no social antagonism. This means that peace is a condition of social harmony where there are no conflicts, where individuals and groups are able to meet their aspirations. Other definitions that seek to conceptualize peace include: political, peace as a process etc.

Kendie et al. (2014), defines potential conflict as, the presence of underlying conditions of stress due to absolute deprivation and poverty, relative deprivation of resources based on ethnic, religious or racial differences, weak state capacity to manage tensions, and power inequalities or other differential status levels based on ethnic, religious or racial differences. The potential for conflict can adversely alter the nature of peace. Conflict usually occurs primarily as a result of a clash of interests in the relationship between parties, groups or states, either because they are pursuing opposing or incompatible goals (Oyeniya, 2011).

According to Coser (1956), conflict occurs when two or more people engage in a struggle over values and claims to status, power and resources in which the aims of the opponents are to neutralize, injure or eliminate their enemies. These struggles make conflict a dangerous element which can lead to loss of lives and property in the society.

Also, Sandole (1993), defines conflict as a dynamic phenomenon characterized by phases of initiation, escalation, controlled maintenance and an end stage that is normally reflective of settlement, resolution and transformation. In this context, a conflict is conceptualized as a process that has to go through certain specific stages (Kendie et al., 2014).

Resource based conflicts: Oil and Gas

Oil and gas are essential, high-value commodities for both industrialized and developing countries. According to Onigbinde (2008), Africa has been blessed with numerous resources all of which contribute to its growth and economic development. With this vast amount of resources and the wealth amassed from their

trade, resource management is very important. The concept of resource management is closely tied to that of resource control. These resources when managed properly should bring economic development, reduce poverty and improve the economy of the country. Proper natural resource management also involves accountability on how these resources and the wealth are used. Proper resource management ensures that everyone in the country benefits from the oil wealth in a fair and equitable manner. Resources are therefore a blessing for the countries that possess them only if properly managed (ibid).

Oil is a special commodity. No economy can as of yet flourish without it, and those countries that consume it most have it least under their own soils (Traub-Merz & Yates, 2004). For consumer states, it is a strategic natural resource whose supply they must secure regularly. For producer states, it appears to be a gift of nature that provides a unique opportunity to receive the investment they need to escape underdevelopment (ibid). Due to the high value nature of oil and gas, and their demand by both local and international markets, it easily becomes an element of conflict. It has a direct link to the economic and social wellbeing of the people. Prices for these already valuable commodities have risen markedly in recent years and have seen a sharp decline in the last few years. These price fluctuations of oil and gas as a commodity on the international market makes it unpredictable and, in many cases, have distorted the budget of many countries including Ghana. Control over oil and gas resources is a source of enrichment and a potential driver of development. These qualities that are possessed by oil and gas in recent times has made the commodity a major interest for conflict entrepreneurs who capitalize on

the availability of the resource to cause or influence conflict. Countries like Nigeria, Angola, Libya, Sudan etc have had their fair share of resource-based conflicts.

An abundance of oil and gas resources invariably raises the hopes and expectations of governments, citizens, local communities, and the petroleum companies that provide the essential services of exploration, extraction, and distribution. Governments hope for large and consistent revenues, citizens expect that their standards of living will be raised, local communities hope to see a quick fix to poverty, and multinational companies expect high returns on the large-scale investments they are obliged to make. Other actors such as rebels, insurgents, secessionists etc. sometimes see the possibility of using the illicit control of petroleum resources and revenues to advance their own particular causes. Often, the high hopes and expectations of these various groups are tangled in problems of weak governance, social tensions, and corruption that further sow the seeds of conflict.

A variety of facts, figures, and correlations document the troubled relationship between oil production and economic and political performance. In countries as distant and dissimilar as Venezuela and Nigeria, massive oil revenues have failed to overcome high rates of poverty and are linked to corruption and political strife. Of the thirty-four (34) underdeveloped countries currently producing significant quantities of oil and gas, a full two-thirds are non-democratic (Birdsall & Subramanian, 2004). Indeed, a major study using time-series, cross-national data from 113 states between 1971 and 1997 found the hypothesis that “oil impedes

democracy” to be valid and statistically robust (Ross, 2001). According to Transparency International’s “Corruption Perception Index” for 2004, out of one hundred and forty-six (146) ranked countries, nine of the twenty (20) most corrupt countries are oil-producing states.

Clearly, there is nothing inherent in oil and gas as a natural resource that serve to explain their apparent linkages with poverty, instability, and conflict. However, in combination with the pre-existing economic weaknesses, social tensions, and political and institutional inadequacies so common to developing countries, some of the characteristics of oil and gas production do have potentially destabilizing effects.

The controversial characteristics of the oil and gas sector, frame the contemporary debate on oil and gas and conflict. By generating tens of billions of dollars in actual and potential revenues, the oil and gas industry directly affects the global economy, the national security of numerous states, and the hopes for sustainable growth in many developing countries. With global demand on the rise and petroleum exploration and extraction efforts intensifying and expanding throughout Africa, Latin America, and Asia, reducing conflict linked to the oil and gas sector has become an urgent priority for the international community (Birdsall & Subramanian, 2004).

The growing debate on the influence of the oil and gas on conflict in areas that those resources are located explores those relationships in among a number of variables which include economic growth, security and stability, social justice,

transparency, governance, ethnic tensions, community participation, and the rule of law.

To understand the ways in which natural resources might lead to or exacerbate conflict, one should consider the degree to which the given resources can be easily looted and transported (“lootability”) and the degree to which access to these resources can be obstructed in order to prevent a government or political faction from benefiting financially from their presence (“obstructability”). A resource’s “lootability” and “obstructability” are important keys to understanding not only why a conflict developed, but also to understanding how conflict is maintained (Ross, 2003). For example, a “lootable” resource can be used by opposition groups to generate revenue and support their movements, while access to an “obstructable” resource can be denied to government forces, stifling their ability to raise revenues to counter opposition movements or limiting the government’s ability to wage war.

Security and Insecurity

Security refers to the state of being safe and it is the state when an individual is not worried about his or her safety. This kind of safety refers to both personal safety and material safety. Over the decades and with the end of the Cold War, there has been a tremendous shift from the traditional notion of security where the state and its institutions were at the center of national and international security considerations. This Cold-War idea of national security focuses on the state as the primary referent actor and the security of citizens is acknowledged and warranted by the state; and those who stand outside it represent potential or actual threats (Onigbinde, 2008). Okubo and Shelley (2011), argue that the idea of security has a

“dizzy complexity” that can be characterized by four attributes. First, security is extended downward from security of nations to security of groups and individuals. Second, it is extended upward from nations to the biosphere. Third, it is extended horizontally to different entities, such as individuals, nations, systems, and in contexts from military to political, economic to social, environmental to human security. The fourth extension is that of political responsibility in all dimensions to ensure security.

Insecurity on the other hand refers to the state of not being safe and in this research, insecurity is linked with crime. Although crime is defined as an illegality, it is argued that being in a criminal environment makes one insecure or increases the level of insecurity. In this research, crime will be regarded as a state of insecurity.

Attacks on oil and gas installations have become the weapon of choice for international terrorism irrespective of the political system and the social-financial boundary conditions of the society under attack (Steinhausler & Deublin, 2008). These attacks and many more have made it necessary for oil and gas companies to employ more private security in order to protect their lives and property.

In Ghana, the government provides security for its citizens through the security agencies such as the Police, Airforce, Army and the Navy etc. These security agencies defend and maintain law and order in the country. On the other hand, private oil and gas companies such as Tullow, Hess, Eni, Shell, Total etc contract private security companies to protect their installations and life. The presence of all these multi-billion companies in the Sekondi-Takoradi metropolis means that there

should be more security for the ordinary citizen of the metropolis. This also means that government has to deploy more security personal into areas that need extra security as well as individuals paying for the services of private security companies.

According to Tsamenyi (2010), the security threat posed by the oil and gas operations can be grouped into three thematic areas i.e. managing oil spills, navigational safety and maritime safety considerations.

Offshore oil and gas development will increase Ghana's vulnerability to major oil spills, necessitating a national and regional response framework under the International Convention on Oil Pollution Preparedness. Under the provisions of this Convention, Ghana will be required to ensure that operators of offshore units under their jurisdiction have oil pollution emergency plans. It will also be necessary to acquire appropriate equipment and logistical support for marine oil spill response in Ghanaian marine waters. The security of the environment is also of paramount interest because it adds up to the total security of the citizenry. By environmental security, we mean the act of making sure that no individual or company operating in the oil and gas sector does anything to harm the environment (Tsamenyi, 2010).

Navigational safety considerations are paramount in any offshore oil and gas development. Offshore platforms can be a significant hazard to navigation. Very often offshore platforms and merchant vessel traffic are in close proximity in many areas. Many fishing vessels and small craft also often operate in the vicinity of offshore platforms. Offshore oil and gas production will also result in increase in

maritime traffic to the installations, to Ghanaian ports and generally in the vicinity of the oil fields, increasing the risk of collision and other incidents of navigation.

Offshore oil and gas development come with many associated maritime security threats and concerns. A disturbing trend in recent years is the increase in several reported pirate attacks on offshore oil installations. Other security threats to offshore oil and gas installations include armed attacks, kidnapping for ransom, hostage taking and international terrorism. Ensuring the security of offshore oil and gas installations, productions process and transport system will require the implementation of appropriate maritime security measures established by the IMO.

As Tsemeyi (2010), based his research on the general issues concerning security in the oil and gas sector with its focus mainly on offshore security implications, my research rather focuses on the security implications of the oil and gas operations on STMA and looks at both offshore and onshore security implications of the oil and gas industry to the citizenry. The methodology is to extract data concerning violent conflicts, social protests and crimes in STMA and use them to make inferences on the nature or level of security and insecurity in STMA.

Empirical Literature Review

This review discusses the cases of oil and gas in view of existing literature on the extractive industry in Ghana. It looks at oil policy in the Gulf of Guinea, Africa's natural resource and underdevelopment, the status of oil and gas governance in Ghana, the extractive industry transparency initiative, the extractive industry; the state and their host communities. It then looks at the objectives and

methodologies adopted in these literatures and how it varies from the methodologies adopted in this study.

Oil Policy in the Gulf of Guinea

This collection of essays takes up the new challenges facing the Gulf of Guinea. It assembles papers presented during an international conference of the Friederich-Ebert-Stiftung (FES) in Yaounde, Cameroon on: “*Oil Policy in the Gulf of Guinea, -Security & Conflict, Economic Growth and Social Development*” (Traub-Merz & Yates, 2004). The conference brought together politicians, government officials, oil managers, NGO-activists, researchers and representatives of international and multilateral organizations to debate key issues as they revolve around the envisaged oil boom in the region. The key issues that was discussed at the conference include:

The Geo-Strategic Importance of the Gulf of Guinea which encompasses topics such as, “*The Gulf of Guinea and the Global Oil Market; Supply and Demand*”. In this essay, Dieterich (2004), describes the interest of the United States of America in the Gulf of Guinea. This looks at the interest of international oil players in the oil and gas reserves in the Gulf of Guinea. As Jim Musselman, head of US-based Triton Energy, agrees, “West Africa is one of the hottest spots in the world right now.” Tiny little states like Equatorial Guinea or Sao Tome & Principe, whose existence wasn’t even known in Washington until recently, are today referred to as “African Kuwaits” or “African Brunei’s.” Experts like the London based oil nerd Duncan Clarke are already talking about a “Third Scramble for Africa.” First came the European powers to divide up the continent more than 200 years ago. Later

came the capitalist and the communist super powers to secure the spheres of influence. And now the tycoons are coming with their oil tankers in tow (Dieterich, 2004). Experts predict that American oil companies will invest 60 billion US Dollars in West Africa in the next 20 years- this is by far the largest influx of revenue in African history. It is also more than all development aid provided by Washington since the dawn of independence of most African states in the early 60s. In this regard, the working group recommended that African oil be treated as a priority for the national security of the United States after 9-11, that the US government declare the Gulf of Guinea an “area of vital interest,” and that it set up a sub-command structure of US forces in the region (Traub-Merz and Yates, 2004).

Dieterich (2004), in his essay touched on other topics such as: *The Potential of the Gulf of Guinea in the Global Market, The Attraction of the Smelly Armpit, Big Players, Small Player and Emerging Champions and a Gas Boom Around the Corner*. He came to the conclusion that Africa is not going to become another Middle East but this doesn't mean that the commercial interest in this relatively neglected part of the oil-producing world hasn't increased. There is great interest in Houston and Washington. If we still lived in a polarized world, then perhaps we would see a new “Scramble for Africa.” An altogether different question is whether the discoveries- however significant – will be turned into “black gold” or “devil's excrement” (as OPEC founder Juan Pablo Alfonzo once put it). That is, will the fortunate African states and their people and perhaps even the rest of the continent indeed benefit from the bounty, or will the thick, vicious black muck only besmirch the pockets of a few and ruin the modest prospects for future economic

productivity. As Ed Royce lamented, “Oil development has proven to be more of a curse than a blessing for many developing nations” (Traub-Merz and Yates, 2004).

This essay adopted the qualitative methodology. It focused on emerging issues that surround the oil business and the interest of multinational companies and powerful countries in the Gulf of Guinea. It shares similar qualitative methodology with my own research but they differ in terms of scope. My study focused on the security implications of the oil and gas exploration and production on STMA.

Interstate Conflicts and Conflict Resolution in the Gulf of Guinea. In this essay, Eze and Traub-Merz (2004), were of the view that the Gulf of Guinea has come to assume a greater importance in security matters since it now represents a major source of oil for the industrialized countries (Traub-Merz & Eze, 2004). There are many ways that ownership of strategic raw materials like oil can create international security concerns. What come easily to mind are discriminative policies by a supplier or threats to traditional sources? A country, which can't substitute imported oil, may be in dire straits by a blockade and may be tempted to use violent means. Debates on the last war in Iraq in some circles followed such pattern or arguments but it may be pointed out, that since independence, West Africa has not witnessed an international aggression from overseas in securing access to strategic commodities (Traub-Merz & Yates, 2004, p.73).

There is a second group of inter-state security concerns which are more relevant to the Gulf of Guinea: conflicts arising from claims to and control of territorial boundaries and oil reserves therein. The coastal states of the Gulf of Guinea are prone to two sorts of territorial disputes that are linked to oil ownership. There may

be unclear delineation of borders that wouldn't create much concern in normal times but can become serious concern when oil is discovered in disputed territories. Additionally, oil fields exist in areas where the borderline itself may not be challenged, but where a deposit stretches across the border in uncertain quantities so that the drilling from one country may negatively impact the amount of oil available for exploitation by its neighbors (Traub-Merz & Yates, 2004).

This essay is divided into several parts. It looked at: The Hierarchy of International Law; the UN and AU and Conflict Resolution in Oil –Related Border Disputes. The qualitative methodology was adopted with case studies from West African countries. It differs from my own research in the sense that my research focuses on the security implications of the oil and gas exploration and production on the STMA. Also, my research did not adopt case studies. However, both research share similarity in the sense that they are all qualitative.

Oil Production and National Security in Sub-Saharan Africa. In this essay, Paes (2004), discusses national security issues in West Africa in relation to oil and gas exploration and production. Sub-Saharan Africa is in the middle of an oil boom. Oil production is set to double by the end of the decade, with much of the new production coming from the Gulf of Guinea in West Africa. Geo-strategic shifts after September 11th, 2001 have increased U.S. interests in this otherwise largely ignored part of the world as Washington seeks for new suppliers of crude outside of the volatile Middle East (Paes, 2004). As U.S. based oil giants are competing vigorously with established European producers and Asian Newcomers for the right to explore and exploit new fields off the coastline of Africa and the fact that

West Africa's long established petro states seem like a monument to hopes lost in a jungle of corruption, economic mismanagement and bad government (Traub-Merz & Yates, 2004).

Paes (2004), moved on to discuss topics such as *Resources and Conflict, Oil as a Conflict Commodity, Forms of Oil Related Conflict, States and Corporate Responses*. The methodology used was the mixed method where both quantitative and qualitative techniques were adopted. The objective was to examine how oil production has affected National Security in Sub-Saharan Africa.

It differs from my own research in the sense that I adopted qualitative techniques whereas Paes adopted the mixed method. My study was also limited to the Sekondi-Takoradi Metropolis in Ghana whereas Paes, limited his research to Sub-Saharan Africa.

Africa's Natural Resources and Underdevelopment

In his book titled 'Africa's Natural Resources and Underdevelopment: How Ghana's Petroleum Can Create Sustainable Economic Prosperity', Kwamina Panford explores seven main themes:

The Paradox of Africa's Natural Resource Wealth. This subchapter juxtaposes Africa's abject poverty, manifested in terms of low levels of material human development side by side with the region's almost unfathomable natural wealth, including a population estimated at a billion people (Panford, 2017). It expresses the view that amidst Africa's abundant resources such as gold, bauxite, manganese etc., one perplexing paradox is the fact that many measures of economic development affirm that Africa is on the bottom rungs of the global economy. It

lags behind Western Europe, North America, Australia, New Zealand and South Asia and is comparable only to other poor nations in the Indian subcontinent, the Caribbean, South and Latin America that are stuck in the poverty rut (ibid).

Can Natural Resources-Related Social and Economic Maladies Be Avoided in Africa. This subchapter captures key trends in the literature on the nexus between natural resources and development in general, with a particular focus on oil and gas in Africa. It draws attention to contentious issues linked to resource extraction and its impact on resource-rich African nations (Panford, 2017). The “natural resource curse” theory is scrutinized to unearth its key axioms and values. As indicated by Ross (1999) and Stevens (2003), some of the broader damaging effects of plentiful natural resources are deemed to occur beyond the macro economy. In addition to making it harder to reduce poverty, these resources are claimed to inherently induce high rates of social conflict.

Ghana’s Petroleum: Will the Myth of Ghanaian Exceptionalism in Africa Be Sustained or Broken. This chapter looks at the effects of other natural resources that has been extracted in Ghana before the discovery and production of crude oil. It also examines both international and local regimes that have led to the current state of the extractive industries in Africa.

Petroleum Production Challenges in Ghana. This chapter looked at the governance challenges related to the oil and gas sector of the economy. As clearly articulated, that in spite of its relative impressive achievements in its quest for democracy, Ghana still faces a number of “teething” governance hurdles which it needs to come to grips with in managing its natural resources including oil and gas

(Panford, 2017, p.122). This chapter identifies the 1992 constitution of Ghana as being the main factor which has led to the weakening of some arms of government since it blends the Westminster Parliamentary form of government with the US executive type (ibid.)

Actual and Potential Conflicts off and onshore in Ghana's Oil-Producing Region. In this chapter, he dealt with issues or topics such as, 'High Seas No-Go, No Light Restrictions and the livelihood of Artisanal Fishermen and Local Communities', potentially combustible mix of land, chieftaincy, petroleum and CSR funds on-shore, and latent anger, escalating rent, land, housing and other cost of living in Ghana's new oil hub in Sekondi-Takoradi. As stated by Panford (2017), that it is necessary to stress that there are genuine or legitimate interests among artisanal fishermen which are in conflict with the interests of oil companies and their Ghanaian backers. In this chapter, he also alludes that there have been few substantial land-based conflicts in Ghana since the beginning of oil and gas production. However, a number of issues needs to be tackled by Ghanaian policy makers in order to avoid the Niger Delta scenario. These include land management, traditional rule in the form of chieftaincy and how potentially explosive they could become if mixed with CSR funds and community projects that costs millions of cedis or dollars (Panford, 2017, p.149). On the issue, of latent anger, Panford (2017) was of the view that some residents of Sekondi-Takoradi, have not seen much of the dividend from the oil and gas sector in the form of improvement in their lives. Instead there are growing signs of rapid social inequality in the municipality.

Policies for High-Value Contribution of Africa's Resources to Sustainable Development. This chapter reflects on the valuable lessons learned about Ghana's and Africa's natural resources and their relationship with sustainable development. It focuses on what Ghana and other African/developing nations can learn and apply to improve the management of their natural endowment in order to improve their lives (Panford, 2017). He also looked at what to put in place in order to lay the foundation for a robust economic growth that is shared broadly and lasts across generations. These include: Robust local content, Pivotal roles of tertiary institutions in science, engineering, technology, education, training and work, and converting petroleum into value added and a socially transformative national asset.

In all these chapters under review, chapter six bears some resemblance with my own research or study with the exception that my research focused on the security implications of the oil and gas exploration and production on STMA. We both adopted the qualitative methodology in research. One other difference that this research stands apart from my own is that I looked at the security implications of the oil and gas on STMA in relation to actual violent conflicts and potential conflicts in STMA five years before the oil exploration and production and five years after the oil exploration and production. In the area of peace and expectations, these two studies share similar sentiments.

Status of Oil and Gas Governance in Ghana

In their report, the Civil Society Platform for Oil and Gas (CSPOG) identified that there are deep and conflicting emotions of hope and trepidation that has played out strongly in the public discourses around the development of the governance framework for the emerging oil and gas sector in the years preceding first (2007 to 2010). This was predominantly because Ghanaians have come to appreciate from firsthand experience, how weak and unaccountable governance of the country's mining sector have led to the creation of an enclave that has no forward and backward linkages with the rest of the national economy and how that situation has returned poor development outcomes to the country and its people (Ghana Oil and Gas for Inclusive Growth, 2016).

The lessons most Ghanaians draw from the mineral sector are reinforced and well documented experiences of how increased dependence on oil wealth in nearby Nigeria, Chad, Sudan, Equatorial Guinea, Angola, to mention, but a few have ended up eroding democratic accountability in these countries and in the process pushed them into the 'resource curse' trap.

Their assignment was to undertake an assessment of the progress made in developing the full complement of policies, laws and institutions for the effective and efficient management of Ghana's oil and gas sector since 2008 'Oil for Development Conference in Accra'. The progress assessment is based on the findings and recommendations of the Oxfam America ISODEC report on Oil's Challenge to Ghana's Democratic Development (2009); the semi and annual reports of PIAC from 2011-2015, and GHEITI reconciliation reports and

recommendations from 2011-2014. The findings in terms of progress made are compared with the prescriptions of the African Mining Vision (GOGIG, 2016).

The objective of the assignment was to assess the country's progress in establishing a governance framework that compares favorably with internationally recognized standards, using the EITI, the Natural Resource Charter, AMV, etc. as benchmarks; It also identified existing governance gaps that threaten the country's ability to reap the full benefits of oil and gas extraction; to provide information for citizens' advocacy around oil and gas governance in the run-up to 2016 elections; assist political parties with appropriate, timely and relevant information for developing and/or reviewing their party positions on oil and gas sector governance and to facilitate citizens' assessment of policy proposals that best respond to the identified governance gaps.

The methodology adopted for the study was to review documents and papers that establish international norms and best practices in the management of natural, as well as policies and laws developed to manage Ghana's petroleum resources. Key informant interviews were conducted with policy makers, regulators, industry players and civil society activists to obtain further insight into the status of oil and gas governance in Ghana. The benchmark used in establishing gaps in the country's governance framework was the African Mining Vision (GOGIG, 2016).

One way that this research differs from my own research is that it did not look at the security implications of the oil and gas. Also, this research did not focus on STMA and was a general report on oil and gas governance on the entire country.

However, we had similar methodological approach in the gathering of data through the use of key informant interviews.

Extractive Industries Transparency Initiative

Admittedly, the discovery of oil in itself does not automatically translate into development. Instead, it is the strategies, the economic framework and policy decisions of the government which create the environment for investment.

However, such decisions should be guided by empirical research. The Extractive Industries Transparency Initiative (EITI) which was launched at the World Summit on development in Johannesburg, September 2002 sets a global standard for transparency in the oil and gas sector. EITI aims to enhance transparency around the generation and spending of revenues from the extractive sector so as to improve development outcomes, reduce the potential for corruption or large-scale embezzlement of funds by host governments and to provide citizens with a basis for demanding a fair use of its resources.

The Government of Ghana formally committed itself to implementing EITI in 2003, when it signed on to the initiative in London. As part of its commitment, Ghana commenced publication of extractive industries' payments and government receipts with reports on the mining sector. The initiative was extended to oil and gas sector in September 2010. In November 2010, the EITI International Board announced that Ghana has attained EITI compliant status.

The methodology used by Messrs Boas & Associates who conducted the research on the Ghana Extractive Industries Transparency Initiative-GHEITI was in three phases. These are inception, reconciliation and validation, and feedback.

The inception phase was the stage where the Reconciler interacted with participants and other stakeholders in order to gain a better understanding of their operation. Situational analysis was also conducted at this phase in order to put the assignment in the best perspective.

At the reconciliation phase, data was collected and analyzed. Data collected from Departments, Agencies and producing Oil and Gas companies were collated and analyzed. This included comparing consolidated Oil and Gas company templates with Government templates. Detailing all discrepancies including those that have been resolved and any unresolved discrepancy.

The GHEITI research was set out to find out how revenue was collected from the Oil and Gas sector and ascertain whether what the International Oil Companies have in their receipt books correspond to what the Government of Ghana has. The linkage that it has with my research is that if the citizens perceive that oil revenues are being mismanaged by the state or individuals or the oil companies are evading taxes and are not giving government the needed revenue, it may lead to suspicion and anger at those in charge. This anger and negative perception may lead to violent conflicts or insecurity in the country. However, this research differs from my own in terms of methodology. My research adopted an exploratory approach whereas this research used more of the descriptive approach.

Extractive Industries in Ghana, the State and their Host Communities

In their research on the Extractive Industries, the State and Host Communities, Agbesinyale et al. (2012) sought to conduct a retrospective review of researches carried out in the extractive industry's environmental impact (EI) in Ghana;

conduct a field work on the current conditions and dynamics among the various stakeholders in EI; and provide recommendations of priority indicators for future assessment.

The methodological approach to the study was based on quantitative and qualitative data collection; with assessment particularly drawn on field reality, practice of players and their forms of representation. Two large mining companies- Newmont and AngloGold Ashanti were purposively selected in the study. Several institutions, agencies, NGOs, community members and key informants which relate to the issues under the study were also purposively selected across the various districts.

The study results showed that the two companies-Newmont and AngloGold Ashanti have acquired large tracts of land in mining concessions, with severe consequences for their host communities. Complaints from stakeholders related to land alienation, loss of livelihoods, environmental degradation and pollution as well as social and health problems were rife and widespread in the mining communities. The study also revealed that mining has led to unemployment as it threatens agriculture and food security as well as deepening economic and social inequalities in the mining areas. Further, the study revealed that within the mining areas, the competition for natural resources is heavily skewed in favor of mining companies as they exude the greater economic power and political clout. This power relation creates the tendency for both the state and the companies to perceive the local communities as obstacle to resource expropriation and not as holders of rights. This situation has thus resulted in cases of human rights violations across the

mining communities with the main culprits being the mining companies and their respective security agencies, whilst the main victims are community members, including small scale miners (galamsey operators) and the youth (Agbesinyale et al., 2012).

The issues raised in the above study has a similar bearing on what is happening in the oil and gas sector just that the extraction of Ghana's oil and gas takes place offshore whilst gold mining usually takes place onshore. That notwithstanding, the power relations between the state, the IOC (International Oil Companies) and the host or surrounding communities still has much to be desired in STMA since much is not seen in the improvement of the livelihood of the people of STMA with the discovery and drilling of oil.

In another sense, my research on the Security Implications of Ghana's Oil and Gas exploration and production differs from the Extractive Industries the State and Host Communities in the sense that it looks at the underlying factors that may lead to violent conflict or crimes as a result of the impact of the O&G, the expectations of the residents of STMA with regard to oil and gas and the perceptions on the state of the peace in STMA as a result of the oil and gas exploration and production.

CONCEPTUAL FRAME WORK

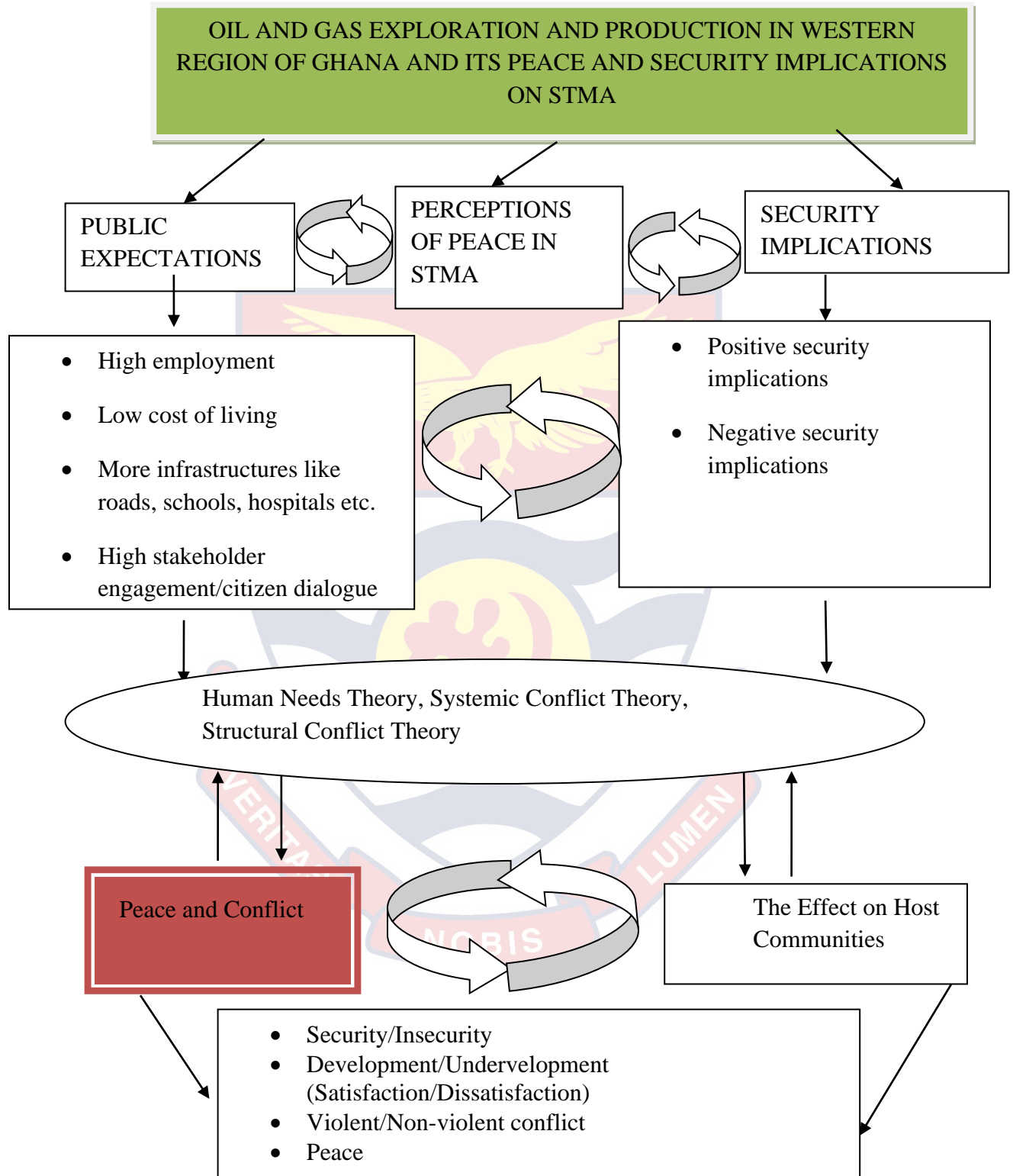


Figure 1: Conceptual Framework

Source: Adopted from Best (2006), Traub-Merz and Yates (2004), Okubo and Shelley (2011).

The conceptual framework underlying this research seeks to describe Ghana's oil and gas exploration and production in the Western Region which is at the very apex of the framework and the security implications that the oil and gas exploration and production have on the citizens or inhabitants of the Sekondi-Takoradi Metropolis.

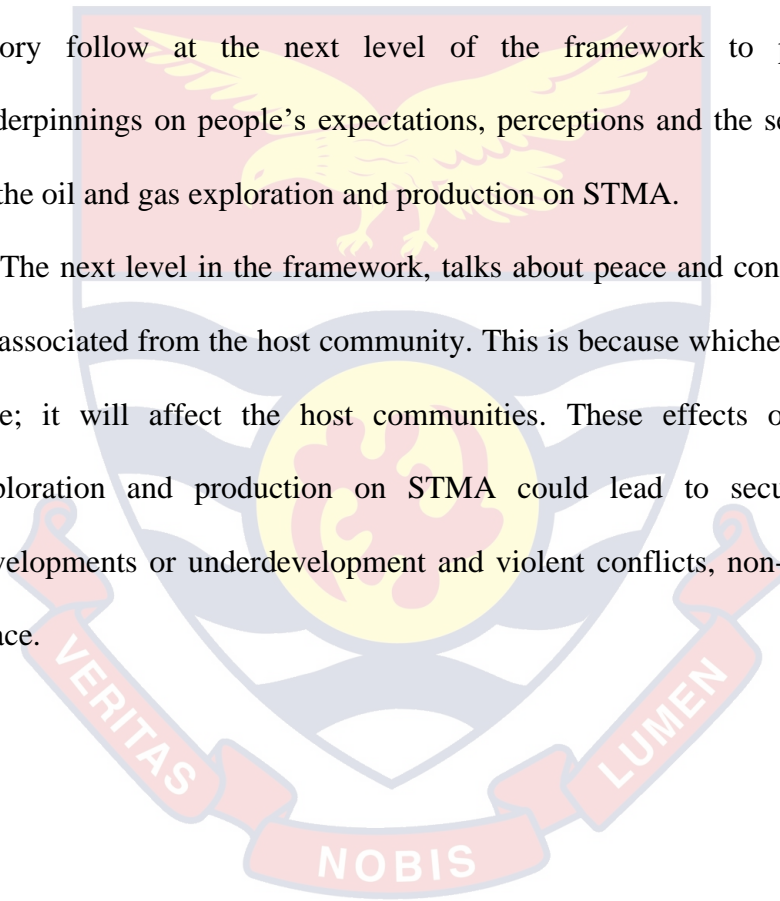
At the very top is the oil and gas exploration and production which trickles down to people's expectations, perceptions of people on the peace in STMA and the security implications on the citizenry and the area. There is an interplay between people's expectations, the security implications and the perception of the peace in the area. The conceptual framework demonstrates that there is a linkage between security or insecurity, expectations and the perceptions that people have on the peace in a particular geographical area; in this case S.T.M.A.

The expectations involve: high employment rate, low cost of living, more infrastructure like roads, schools, hospitals and more stakeholder engagements and citizen dialogues. The security implications sub divides into positive security implications such as the regular patrols of the Ghana Navy and the Marine Police offshore and the sharing of data and intelligence between the oil and gas companies and the security agencies like the Ghana Navy. The negative security implications in the framework deals with the negative security consequences from the oil and gas exploration and production such as theft from the oil rigs, arrest of innocent citizens, oil siphoning, protest, displacement of fisherfolks, collision between canoes and oil supply vessels, confiscation of fishing nets and other fishing equipment by the Ghana Navy when these fishermen stray into the advisory and

exclusive zones offshore etc. The peace component emanates from the perceptions of people and is more like a byproduct of people's expectations and the security implications. People's perceptions of the peace in STMA in the conceptual framework is an interplay between people's expectations and the security implications that the oil and gas exploration and production have on them.

The human needs theory, the systemic conflict theory and the structural conflict theory follow at the next level of the framework to provide theoretical underpinnings on people's expectations, perceptions and the security implications of the oil and gas exploration and production on STMA.

The next level in the framework, talks about peace and conflict which can't be disassociated from the host community. This is because whichever form that it will take; it will affect the host communities. These effects of the oil and gas exploration and production on STMA could lead to security or insecurity, developments or underdevelopment and violent conflicts, non-violent conflicts or peace.



CHAPTER THREE

METHODOLOGY

Introduction

This chapter discusses the research procedures used in the study. These procedures include; research design, study area, population, sampling procedures, data collection instruments, data collection procedures, data processing and analysis.

Study Design

Before you can observe and analyze, however, you need a plan in order to determine what you're going to observe and analyze: why and how (Babbie, 2005). The strategy for designing and conducting a study will vary depending on whether it is primarily quantitative or qualitative (Neuman, 2011, p.163).

The design adopted for this study is the qualitative research design. The qualitative design was adopted and was deemed appropriate to elicit the objectives and answer the research questions: in what ways has the oil and gas operations affected security in STMA, in what ways have people's expectations of the oil and gas sector been met and how do the citizens of STMA perceive the contributions of oil and gas to peace in the metropolis. This is because most qualitative research design involves languages of cases and context, examine social processes and cases in their social context, and study interpretations or meaning in specific socio-cultural settings (Neuman, 2011). The qualitative research design was preferred to the quantitative research design because qualitative research design is built on the

assumptions that certain areas of social life are intrinsically qualitative and for this reason, qualitative data are not imprecise or deficient but are very meaningful (Neuman, 2011). Although qualitative research does not try to convert fluid, active social life into variables or numbers, it borrows ideas and viewpoints from the people and situates them in a fluid natural setting. The only weakness of qualitative research design is that its data may appear to be soft, intangible and elusive.

Moreover, social research can serve many purposes. Three of the most common and useful purposes are exploration, description, and explanation (Babbie, 2005, p.88). The design adopted for this study is exploratory because oil and gas exploration and production in the Western Region of Ghana and its implications for peace and security in STMA is a relatively new field and thus exploratory research paradigm was deemed appropriate. According to Neuman (2011), we use exploratory research paradigm when the subject is very new, we know little or nothing about it, and no one has yet explored it. This is to satisfy the researcher's curiosity and desire for better understanding, to test the feasibility of undertaking a more extensive study and to develop the methods to be employed in any subsequent study (Babbie, 2005, p.89). This research uses the exploratory research paradigm to investigate the relationship between oil and gas activities in STMA and its implications on the peace and security in the metropolis. Exploratory research usually addresses the 'what' question. In what ways has the oil and gas operations affected security? In what ways have people's expectations been met? In what ways do people perceive the contributions of oil and gas exploration and production to the peace in STMA?

The weakness of the exploratory research paradigm is that it rarely yields definitive answers. It is also difficult to conduct because it has few guidelines, everything is potentially important, steps are not well defined, and the direction of inquiry changes frequently (Neuman, 2011). However, the explorative research paradigm allows room for creativity, open mindedness and flexibility. It allows the researcher to ask creative questions and enables him to take advantage of serendipity.

Study Area

Sekondi and Takoradi which are popularly called the twin city started as settlements growing around the 17th Century, Dutch, Swedish and English forts built along the coast. Sekondi, the older and larger of the twin cities prospered from a railroad built in 1903 to the hinterland to transport mineral and timber resources. It grew to become an administrative town and had many European settlements. On the other hand, Takoradi's growth was fueled by the construction of the Takoradi Harbor in 1928 to facilitate trade (Citizen's Report Card of STMA, 2010).

In addition to refining concepts and measurements, you must decide whom or what to study. The population for a study is that group (usually of people) about whom we want to draw conclusions (Babbie, 2005). Demographically, the Sekondi-Takoradi Metropolis which is now known informally as the 'Oil City' covers a land area of approximately 49 square kilometers, and home to a population of about 559, 548 and an estimated floating population of 80,000 made up of people from neighboring districts like Shama, Ahanta West, Mpohor and Wassa West Districts who commute into the city to do trading and achieve other purposes.

Population densities are generally high, with New-Takoradi being the most densely populated area with 74,672 persons per square kilometer, compared with Bakaekyir which has a density of only 20 persons per square kilometer (Citizen's report card of STMA, 2010).

The population of Sekondi-Takoradi metropolis, according to the 2010 Population and Housing Census, is 559,548 representing 23.5 percent of the region's total population. Males constitute 48.9 percent and females represent 51.1 percent. Ninety-six percent of the population is urban. The metropolis has a sex ratio of 95.6. The population of the metropolis is youthful (32.6%) depicting a broad base population pyramid which tapers off with a small number of elderly persons (6.1%). The total age dependency ratio for the metropolis is 58.2, the age dependency ratio for males is higher (58.6) than that of females (57.9). The characteristics of the accessible population reflect that of the target population in many ways. This is because the target population has a bearing on the accessible population in that they were chosen from each of the four sub-metros which give a fair estimation of the views of the target population (Population and Housing Census, 2010).

The metropolis has a household population of 532,516 with a total number of 142,560 households. The average household size in the metropolis is 3.7 persons per household. Nuclear households (head, spouse(s) and children) constitute 30.1 percent of the total number of households in the metropolis. Children constitute 17.0 percent of the household structure and single parent extended form about 15.3 percent (Population and Housing Census, 2010).

About 63.9 percent of the populations aged 15 years and older are economically active while 36.1 per cent are economically not active. Of the economically active population, 89.4 percent are employed while 10.6 percent are unemployed. For those who are economically not active, a larger percentage of them are students (52.0%) and 19.4 % perform household duties (Population and Housing Census, 2010).

Of the employed population, about 75.0 percent are engaged as skilled agricultural, forestry and fishery workers, 8.0 percent in service and sales and 5.0 percent are engaged as managers, professionals, and technicians (Population and Housing Census, 2010).

Of the population 15 years and older 32.7 percent are service and sales workers and 22.2 percent are craft and related trades. There are more females (47.6%) engaged as service and sales workers compared to males (16.8%). The private informal sector is the largest employer in the metropolis, employing 69.3 percent of the population (Population and Housing Census, 2010).

Sekondi-Takoradi metropolis is located at the south-eastern part of the Western Region. The metropolis is bordered to the west by Ahanta West District and to the east by Shama District. At the south of the metropolis is the Atlantic Ocean and at the northern part is Wassa East District. The metropolis covers land size of 191.70-kilometer square (km²) and it is the regional administrative capital of the Western Region. Though the smallest in terms of land size, Sekondi-Takoradi metropolis is the most urbanized among the 22 districts in the Western region (Population and Housing Census, 2010).

The metropolis is of varied landscape; the coast line has capes and bays, which have been largely eroded. The central portion of the metropolis is low lying with an altitude of about 6 meters below sea level. Otherwise, the area is undulating with ridges and hills. Sekondi-Takoradi metropolis is characterized by faulted shale and sandstone resting on a hard basement of granite, gneiss and schist. The faulting system has marked influence on the land formed especially along the coastline which clearly follows the main fault direction of North East. The surface of the metropolis is fairly watered, with the drainage pattern being largely trellis in nature with minor dendrite forms. The two main rivers flowing through the Metropolis are the Whin and the Kansawora rivers, while the lagoons are the Essei and the Butre. The Essei lagoon lies between Ekuasi town and the city of Takoradi. The predominate species of fish that populate these rivers and lagoons are tilapia and mud fish. The Atlantic Ocean provides not only sources of food and jobs for the people of the metropolis but also serves as recreational facility for the people notably during the festive occasion i.e. Christmas and Easter celebrations. This unique natural entity stretches from New-Amanful to Essipon (Population and Housing Census, 2010).

The political head of the Metropolitan Assembly is the Chief Executive. The Chief Executive is appointed by the president of the republic in-line with the 1992 constitution supported by a presiding member and Assembly members. The metropolitan Chief Executive is also a member of the Assembly. The administrative set-up comprises all 16 decentralized departments. In order to ensure effective administration, the metropolis has been divided into four (4) sub-metros.

The four sub-metros in the Metropolis are Sekondi, Takoradi, Essikadu/Ketan and Effia/Kwesimintsim. There are five (5) constituencies in the Metropolis namely Effia, Kwesimintsim, Sekondi, Takoradi and Essikadu/Ketan (Metropolitan Analytical Report, 2010).

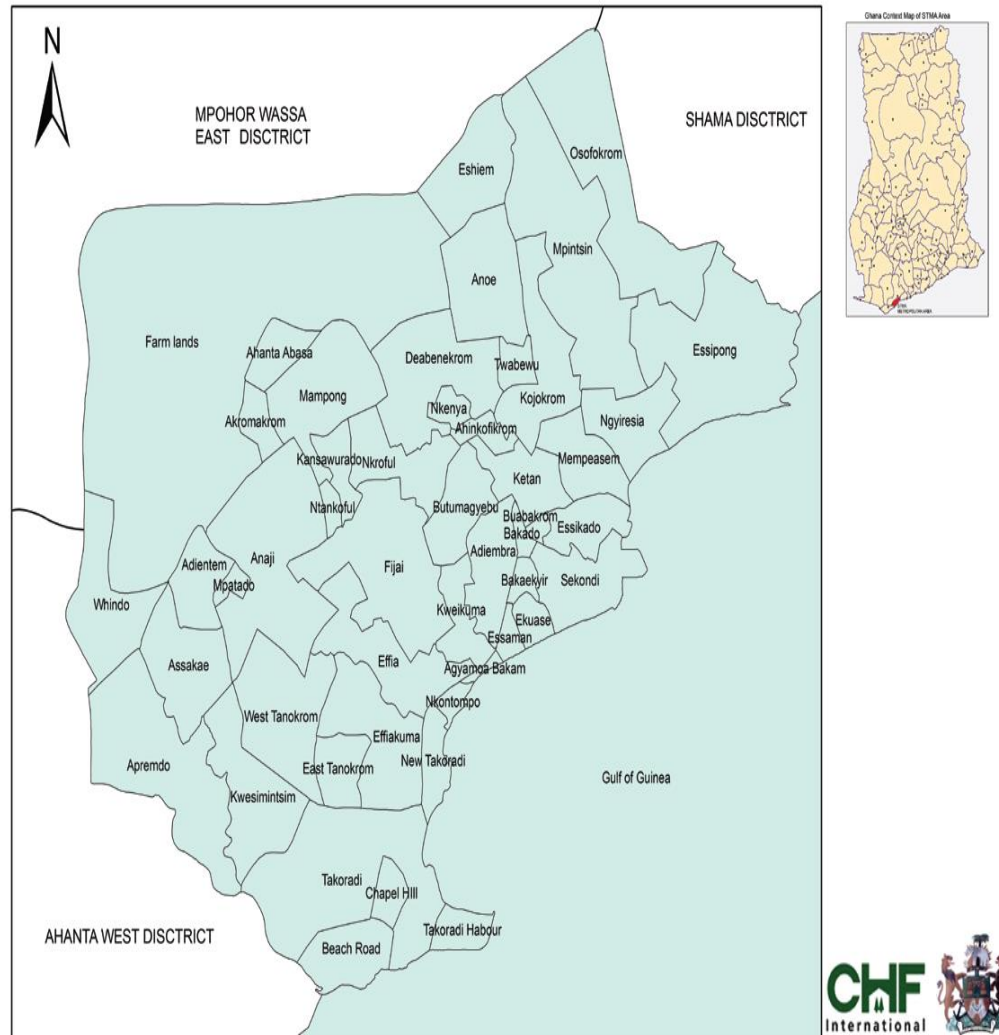


Plate 1: Map of Sekondi-Takoradi Metropolitan Area

Source: Global Community / CHF International (2012)

Fante is widely spoken in the metropolis. There are also some other languages spoken. The indigenous people are predominately Akans (Ahantas). The Akan language is also used as a medium of instruction and as an examinable subject at the basic level. The indigenous people exhibit a high degree of cultural homogeneity in areas of lineage organization, inheritance and succession. There are also non-indigenous settlers whose predecessors had migrated several years back from different parts of the world into the metropolis, primarily for economic reasons. The distribution of proportion of ethnic group in the Sekondi-Takoradi Metropolis is as follows Fantes 46.5 percent, Ahantas 12.2 percent, Asantes 12.2 percent, Nzemas 3.8 percent and Wassas 3.0 percent. The proportion of the rest of ethnic groups is below 3 percent (Population and Housing Census, 2010).

The economic potential of the metropolis lies in the existing infrastructure and human capacity. The economy of the metropolis is driven by service and administration with pockets of industrial activities aside the regional and metropolitan branches of the public and civil services, private multinational companies such as Tullow, Vodafone, Ghana National Petroleum Corporation (GNPC) etc., also operate in the metropolis. There are big hotels with notable ones such as; Raybow, Akroma Plaza, Planter Lodge and Atlantic. Tourism contributes significantly to the economy of the metropolis. The five (5) other economic activities in the metropolis include manufacturing, metal fabrication, agro/forest products processing. Examples include West Africa Mills, Cocoa processing companies and Dupaul Wood Treatment Plant and other small-scale businesses like sachet water producers, etc. Fishing is another key economic activity which is

actively undertaken along coastal towns in the Metropolis namely New-Takoradi, Sekondi, Essaman, Ngyiresia and Nkotompo (Population and Housing Census, 2010).

The metropolis is one of the most industrialized in the country and the most developed among the 22 districts in the Western Region. According to industrial classifications, there are three major sectors in the metropolis: Mining and Quarrying, Manufacturing (cocoa and forest products processing), and Electricity power generation thermal. About 60% of all industries in the Western Region are located in the Sekondi-Takoradi metropolis (Population and Housing Census, 2010).

Sekondi-Takoradi Metropolitan Area, due to its strategic position in the country, has adequate security presence. One of the two Naval Bases in Ghana is located at Sekondi. The facility is meant to protect the territorial integrity of Ghana. In the wake of the oil find in commercial quantities in Ghana and in the Western region, the role of security services in Ghana and for that matter in the Sekondi-Takoradi Metropolis cannot be over emphasized (Population and Housing Census, 2010).

Since the issue of peace and security in STMA does not pertain only to the onshore area, it is necessary for me to describe the offshore oil and gas enclave zoning in on the offshore of STMA. The major enclave for the oil and gas drilling is the Jubilee field although other fields like the TEN fields recently came on stream. The Jubilee field is located in the Gulf of Guinea; 60 km off the Ghanaian coast, near the Côte d'Ivoire border. It is spread out in the Deepwater Tano and West Cape Three Points blocks. The wells are at a water depth between 1,100 and

1,300 meters and at a total depth between 3,400 and 4,200 meters. The field covers 110 km², which is about the size of 155 football pitches.

The Tweneboa field (6 km east of Jubilee) was discovered in March 2009. In July 2010 the Owo-1 drilling confirmed the reasonably big amounts of the field. A maximum depth of 4,000 meters has been drilled. There does not seem to be an underwater channel connection between the Tweneboa and the Jubilee field. Apart from these major findings, there are also several smaller wells close by. In total, the companies engaged in the discovery have drilled more than 15 wells in the western Ghanaian sea territory.

The offshore of the STMA has seen exploration works with rigs and supply vessels berthing at the Takoradi harbor and the Sekondi Naval base. Between 2010 and 2014, the coast of STMA was scattered with numerous torque boats and some rigs. At the moments there is one explorative rig left in the metropolis whilst the number of torque boats have reduced due to the fall in oil prices.

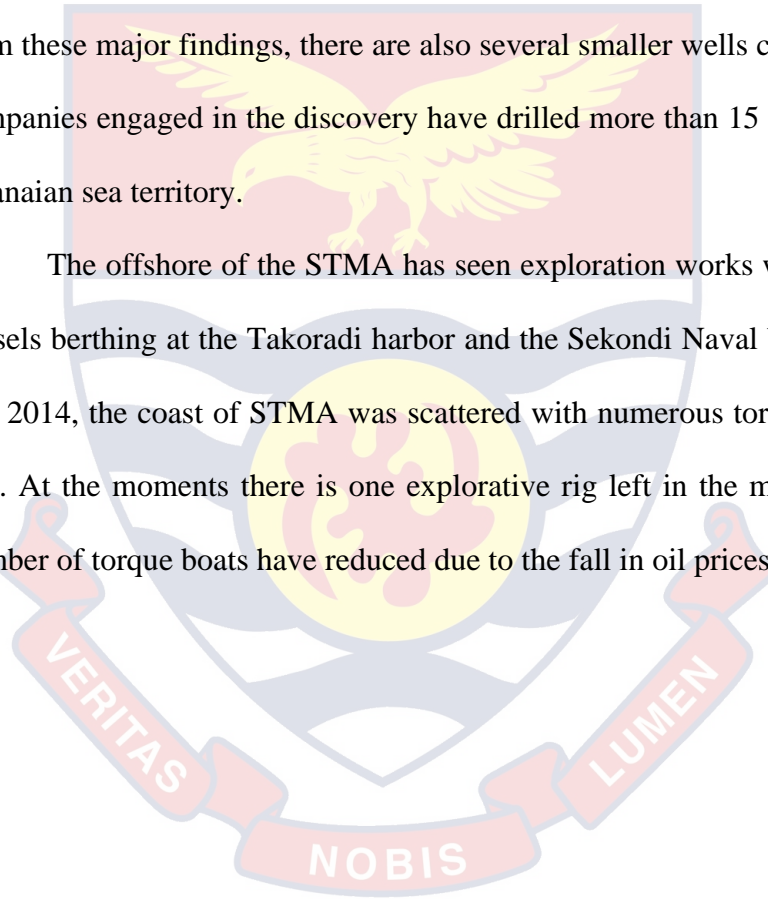




Plate 2: Map Showing Ghana's Oil and Gas Concessions

Source: Hufstader (2008)

This research was conducted in selected communities in the Sekondi-Takoradi metropolis within a time period of three years. It examines the security implications of the oil and gas activities on STMA.

The reason why the Sekondi-Takoradi metropolis was chosen for this research instead of the Ellembelle district was because STMA is the regional capital of the Western Region and it is the only place in the Western Region which has a harbor for receiving goods and servicing equipments from the oil and gas sector. The rigs, torques, drill pipes and other activities such as bunkering all take place in the Sekondi-Takoradi metropolis. The regional offices of multinational companies such as Tullow, Baker Hughes, Modec, Schlumberger etc. and other national companies such as GNPC are all located in Takoradi. This makes it very relevant for this research to be conducted in STMA because the twin-city stands to suffer more if there is any security mishap emanating from the oil and gas sector than any part of the Western Region or Ghana.

Sampling Procedure

The non-probability sampling procedure was used in this research. According to Babbie (2005), the non-probability sampling procedure is used where probability sampling would not be appropriate. The convenient sampling procedure was used in this study to select forty-four respondents. The number forty-four was deemed appropriate because at forty-four (44), saturation was reached in the selection of respondents where respondents were seen to be giving responses that were the same or seems to complement each other. The collection of data ended at the number forty-four (44) when the point of saturation was reached.

Eight key informants, twenty group discussants and sixteen community people constituted a sample size of forty-four (44). The eight key informants were officials who have in-depth knowledge in security, oil and gas exploration and production and community affairs and were also willing to grant an interview. The eight key informants were representatives of the Ghana Navy (Western Naval Command), Western Regional Coordinating Director, the Western Regional Police Commander, the Bureau of National Investigation (BNI), Ghana National Fishermen and Canoe Council (GNFC), Ghana National Petroleum Corporation (GNPC), Tullow Ghana and a private security expert.

The twenty-group discussant were also community people who had in-depth knowledge in community affairs, were aware of trends in the community and were willing to be engaged in a group discussion. The sixteen-community people were also selected conveniently based on their thorough knowledge in community affairs.

Two groups making ten (10) individuals each were conveniently selected for group discussions. This brings the total to twenty (20) for the two group discussions. The two groups were labeled group one and group two and they were heterogeneous in terms of composition. The members of group one was: the chief of the community, a male opinion leader, a female opinion leader, a female youth in the community who is an ex-convict, a male youth in the community who is a drug addict, a fisherman, Assemblywoman, one landlord, a working tenant and a female fishmonger. The members of group two were: the chief of the community, assemblywoman, an ex-convict in the community, a policeman living in the

community, a drug offender, a nurse living in the community, a farmer, a market woman, a female opinion leader and a male opinion leader. Members of group one was selected to provide their views on matters relating to oil and gas exploration and production and its security implications offshore and how these implications affect fishing and the fishing value chain in the community. Members of group two were also conveniently selected to give their views on the oil and gas exploration and production and its security implications on onshore activities like farming, economic hardships and prices of foodstuffs. The two groups had ex-convicts and drug abusers in order to solicit their views on crime and oil and gas exploration and production. The members of these groups were given an introductory letter stating the purpose of the discussions, the time and the venue. These group discussions were moderated by the researcher using questions from the group discussions guide which relates to the specific objectives of this research.

Sixteen community respondents were also conveniently sampled to add additional information to the study. This was because information from community residents was deemed appropriate to buttress that provided through the group discussions and also saturation was reached at the number sixteen. In view of that, four respondents were selected conveniently from one community in each of the four sub-metros of STMA for further interviewing. They include; a teacher, taxi driver, trotro driver, a police officer, a petty trader, a fish smoker, a fish monger, a student from primary school, an SHS student, a tertiary student, a farmer, a landlord, four Unit Committee members from each sub-metro, four assembly members from each sub-metro.

Table 1: Conveniently sampled size of forty-four (44) respondents

CONVENIENTLY DETERMINED SAMPLE SIZE OF FORTY-FOUR (44)				
No.	EIGHT KEY INFORMANTS (8)	GROUP ONE, DISCUSSANTS	GROUP TWO, SIXTEEN DISCUSSANTS	COMMUNITY MEMBERS (FOUR SUB-METROS)
1	Western Command, Ghana Navy	Chief	Chief	Teacher
2	W/R Coordinating Director	Male Opinion Leader	Assembly woman	Taxi Driver
3	W/R Police Commander	Female Opinion Leader	Ex-convict	Trotro Driver
4	W/R Head of BNI	Youth: convict	Ex- Policeman	Policeman
5	GNFC, Secretary	Youth: addict	Drug Drug Offender	Fishmonger
6	GNPC, PRO for W/R	Fisherman	Nurse	SHS Student
7	Tullow, PRO	Assembly Woman	Farmer	Primary Student
8	Private Security Expert	Landlord	Market Woman	Security Man
9		Working Tenant	Female Opinion Leader	Four Assembly Members
10		Fisherman	Fisherman	Two Fishermen
11				Two Farmers

Source: Author's Construct.

Data Collection Instruments

The research instruments used in the study was the interview guide, group discussions guide and documentary evidence guide. The interview guide was used to interview key informants and selected community respondents while the group discussion guide was used to conduct the group discussions. The documentary evidence guide was used to gather documentary evidence such as that of newspapers etc. Both the interview guide, the group discussion guides and the documentary evidence guide were structured in line with the specific objectives of the research. The interview guide was used to conduct interviews on key informants and selected community respondents because interviewing has the ability to solicit contextual and subjective responses. The group discussion guide also enabled the researcher to check responses and get feedback on responses from other group members. Documentary evidence guide also assisted the researcher in collecting documented data to support the claims of respondents. Questions were formulated in order to elicit answers to the specific objectives of the research.

These instruments were developed based on their purpose and appropriateness to get the required answers from the target groups. Both the interview guide and the group discussion guide were deemed appropriate to solicit subjective or contextual responses and the documentary evidence guide was deemed appropriate to capture documented information. These instruments were developed by me and its contents were informed by the research objectives.

The interview guide has a heading, which tells of the particular target group it was made for. The same applies to the group discussion guide and the documentary evidence guide. These instruments are divided into three sections. Section one dwells on the specific objective one: which is on the security implication of the oil and gas on STMA. Section two dwells on specific objective two: which is to find out about expectations from the oil and gas. Section three dwells on specific objective three: which is to find out the perception of peace in STMA before and after oil and gas production.

The strength of the interview guide is its ability to solicit contextual responses and its weakness is that those responses may be subject to different interpretations. The group discussion guide also has a strength of being able to solicit responses from a selected few who usually have in-depth knowledge on the subject matter under study and the strength of the documentary evidence guide is its ability to capture both qualitative and quantitative data from the print media.

The weakness of the group discussion guide is that it is not able to get response from a larger section of the population. The weakness of the interview guide is its difficulty in capturing quantitative data (Babbie, 2005).

The interview guide, the group discussion guide and the documentary evidence guide were pre-tested in the Nkotompo community. The pre-test result enabled me to identify the weaknesses and the strengths of the instruments and to correct and strengthen the areas that were weak. This contributed to the perfecting of the instruments through the elimination of inappropriate wording and the addition of text deemed appropriate in that context.

Data Collection Procedures

Three research methods were used in collecting data. These are interviewing, group discussions and capturing documented data. The interview was conducted on September 2016, December 2016, April 2017 and May 2017, August 2017 and September, 2017 between 10:00 am to 2:00 pm. The group discussion was also held in September 2016 between 1:00 pm and 4:30 pm. The documentary evidence was captured in April, 2017.

The interviewing and the gathering of documented data was done by the author. Each interview session took about one hour. The group discussions took about four hours and the documentary data collection took five hours.

Some other problems encountered in collecting the data was the fact that some of the respondents especially those working for oil and gas companies were not willing to avail themselves for interviews for reasons best known to them. All the same, Tullow and GNPC availed themselves for interview. The same was with the security agencies with the exception of the Ghana Navy and the Ghana Police Service who supported this research by granting interviews and also provided vital data to support the interviews. Time constraints and resource constraints also restricted the researcher in the number of respondent and key informants that were selected.

Data Processing and Analysis

The approach used to analyze data was the qualitative approach. Contextual data was transcribed verbatim with detailed analysis in relation to the objectives of the study, the theoretical framework, literature reviewed and the conceptual framework. Pictures were also used to support the evidence and responses from respondents.

Measures were taken to minimize errors in data entry. These measures were made by aligning the various responses to the particular type of question from the interview and the group discussions in order for the responses to match exactly with the questions and then transcribed verbatim in the results and discussions.

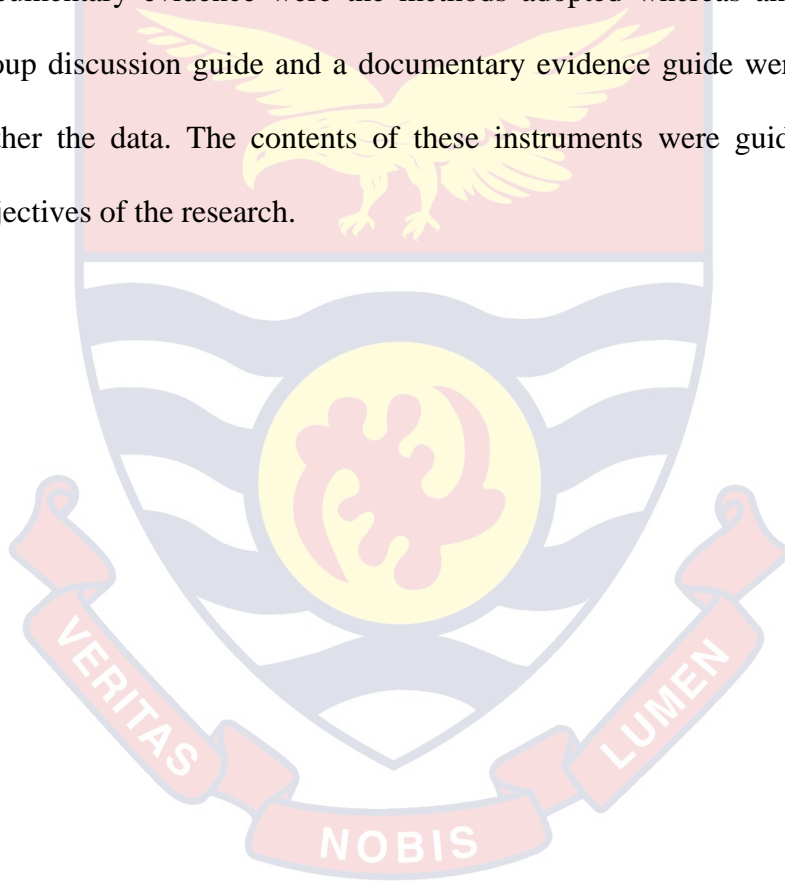
Content analysis and interpretive analysis were used to analyze and interpret the data. In content analysis you gather and analyze the content of a text. These contents are themes, words, meanings and pictures. The text is anything written, visual, or spoken that serves as a medium for communication (Neuman, 2011, p.361). In this study, the text includes responses from interviews, group discussions and newspapers. To interpret means to assign significance or coherent meaning (Neuman, 2011, p.177).

Ethical Consideration

The study took into considerations the ethics and codes that guide scientific research. These ethics were strictly adhered to and even though issues of ethics surfaced in the study, they were not compromised. Names of respondents were not revealed and other issues of confidentiality were strictly adhered to. Respondents' consent was sought before being interviewed or engaged in the group discussions.

Chapter Summary

Chapter three looked at the research methods used in the study, how sampling was done, how the data was interpreted and the challenges in gathering the data. It used the qualitative research design in gathering and interpreting the data. The purpose of the design was exploratory. Interviewing, group discussions and documentary evidence were the methods adopted whereas an interview guide, a group discussion guide and a documentary evidence guide were the tools used to gather the data. The contents of these instruments were guided by the specific objectives of the research.



CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

Ghana's discovery in June 2007 of one of the most important reservoirs of both crude oil and associated gas has created a new and formidable potential hornet's nest comprising political, economic, social and even governance challenges (Panford, 2017).

In view of the challenges accompanying the oil and gas exploration and production, this chapter presents and discusses the security implications of the oil and gas exploration and production in STMA by looking at the results from the two group discussions and the outcome of the interviews conducted with the various stakeholders in the oil and gas sector with some documentary and pictorial evidence. These results enabled us to find answers to the specific objectives which was: to examine how oil and gas operations in STMA has affected security, to measure people's expectations from the oil and gas sector and to measure people's perception of peace in STMA and how it has been affected by oil and gas operations.

Content analysis and interpretive analysis were used in analyzing responses from respondents. Results were presented and discussed with photos, sentences, words and symbols.

Security Implications of Oil and Gas in STMA

Oil and gas as a natural resource can be a great asset to a nation. No economy can as of yet flourish without it, and those countries that consume it most have it least under their own soils. For consumer states, it is a strategic natural resource whose supply they must secure regularly. The oil boom in the Gulf of Guinea is a blessing which carries its own security risks (Traub-Merz & Yates, 2004). In the same way, Ghana's oil and gas production and exploration in STMA presents some security benefits as well as security challenges to the locals and this can be categorized as positive security implications and negative security implications.

Positive Security Implications

Out of the forty-four respondents who were sampled, ten males and eight females were of the view that the oil and gas exploration and production in STMA has positive security implications for the metropolis.

This is what a key informant from the Western Naval Command had to say about the positive security implications of the oil and gas production and exploration.

".... with the mounting of oil and gas installations, it naturally requires actions that strengthens security. This has led to more patrols on the sea by the Ghana Navy. There has been no incident of pirates or robbery on our Ghanaian waters due to the regular and frequent patrols on our Ghanaian waters." (Interview with FOC, Western Naval Command, November 24, 2017).

As this was confirmed by Okubo and Shelley (2011) that sovereign nation-states offer security for the people. The traditional concept of " security" was defined as the relationship between state and individuals, and assumed that the nation-state eliminated external threats by its military capability and the people as a nation enjoyed their peace and freedom under constitutional order within its boundaries. Onigbinde (2008), also asserts that the security of citizens is acknowledged and warranted by the state; and those who stand outside it represent potential or actual threats. In accordance with the specific objective of the study which is to explore the security implications of the oil and gas activities on STMA, the activity of the Ghana Navy, under the auspices of the Western Naval Command is in line with the mandate of providing security for the citizens of Ghana through routine patrols on Ghana's territorial waters. These patrols and routine drills ensure that the oil installations and logistics supplies to the oil installations are well secured. The security of the coast of Ghana and that of all activities taking place on the coast of Ghana's territorial waters including fishing, merchant vessels etc. are also strengthened with these naval patrols.

The structural conflict theory is relevant in understanding the role that the Navy plays in providing security for the oil and gas operations in the Western Region and STMA. The structural conflict theory posits that conflict is built into the particular ways' societies are structured and organized (Ademola, 2006). The liberal structuralism sees incompatible interests based on competition for resources, which in most cases are assumed to be scarce, as being responsible for social conflicts (Collier, 2000 p.,2). The role of the Ghana navy as a state institution which has the

mandate to provide security for Ghana's territorial waters goes a long way in ensuring that there is sanity and serenity on our territorial waters by making sure that activities on our waters including fishing and oil and gas get the maximum security offshore.

The conceptual framework of the research talks about security implications of the oil and gas exploration and production on STMA. These security implications are sub-divided into positive security implications and negative security implications. The routine patrols of the Ghana Navy fall under the positive security implications of the oil and gas exploration and production. The conceptual framework of this research has the oil and gas sector in STMA or the Western region of Ghana and its security implications. This sub divides into public expectations, perceptions on oil and gas exploration and production on the peace in STMA and security implications of the oil and gas exploration and production on STMA. Therefore, the role of the Ghana navy in providing security for Ghana's territorial waters situates properly in the second layer of the conceptual framework in the area of security implications.

The FOC of the Western Naval Command of the Ghana Navy further revealed that;

".....due to the collaboration the Ghana Navy has with its sister country navies, the Ghana Navy is able to interdict any criminal who veer into our territorial waters. This has led to more security for the oil and gas installations and the areas they are operating. Also, through the Regional

Security Council (REGSEC), the Navy, Army, Air force and Police collaborate to ensure security in the Western Region and STMA. (Interview with FOC, Western Naval Command, November 24, 2017).

In relation to the security implications of the oil and gas exploration and production in STMA, the remark by the FOC of the Western Naval Command goes to improve human security in the metropolis. According to Okubo and Shelley (2011), human security comprehensively covers all menaces that threaten human survival, daily life and dignity. Issues of transnational organized crime, illicit drugs, refugees, pirates, environmental degradation, violation of human rights borders on human security. As these are cross border issues, the collaboration between the Ghana Navy and its sister navies contribute positively towards ensuring maximum security for the populace and the oil and gas installations. It further argues that coordination by the international community will be important, as will linkages and cooperation among governments, international organizations, NGO's and other parts of civil society in maintaining human security (Okubo & Shelley, 2011 p., 20). The internal security collaboration between the Ghana Navy, the Army, the Air Force and the Police under the Western Regional Security Council (REGSEC) goes a long way in maintaining security in STMA. This action by the Ghana Navy sits in well with the structural conflict theory which posits that conflicts are built into the particular ways' societies are structured and organized (Best, 2006). The security agencies like the Ghana Navy, Army, Air Force etc. are state institutions that are there to ensure maximum security.

As the structural conflict theory put it across, that if these institutions fail to deliver on their mandate in providing security for our daily activities and businesses, such as oil and gas exploration and production, there will be conflicts, which will lead to chaos and eventually insecurity in the Western Region and STMA.

The collaboration between the Ghana Navy and its sister security agencies both internal and external goes a long way to fit into the conceptual framework of this research. From the conceptual frame work, oil and gas production and exploration will lead to public expectations and security implications. These security implications can be positive such as the collaborations between the security agencies as stated by the FOC of the Western Naval Command or negative.

Another key informant from the Ghana Police Service and the Western Regional Command also had this to say about the positive security implications of the oil and gas exploration and production on the Western Region and S.T.M.A;

“.....because of the oil and gas exploration and production and the fact that these activities take place offshore, the Marine Police Unit of the Ghana Police Service was formed in order to provide security for the oil and gas infrastructure offshore” (Key Informant Interview, Western Regional Police Command, November, 2016).

The response from the Western Regional Police Commander of the Ghana Police Service indicates that the discovery of oil and gas in commercial quantities has brought about the formation of a specific unit of the police to deal with security

issues offshore of the coast of Ghana. This statement by the Regional Police Commander is in line with the first specific objective of this research which is to examine the security implications of the oil and gas operations on STMA. According to Traub-Merz and Yates (2014), petro-states are particularly prone to armed conflict, despite the fact that they spend more on their security forces than most other developing countries. This is because exploration and production of oil and gas is capital intensive and greatly rewarding at the same time when the price of a barrel of crude is attractive. The use of expensive equipments like the oil rigs, torque boats etc. sometimes attract criminals and the millions of dollars accrued also become the envy of neighboring states particularly when they share boundaries close to the area where production is taking place. Examples of these inter-state disputes is that between Nigerian and Cameroon, Ghana and La Cote D'Ivoire etc. The fact that oil and gas assets are expensive and in most cases lure criminals require that there is a boost in security and this led to the formation of the Marine Police Unit of the Ghana Police Service. The dispute between states is also sent to the International Tribunal of the Law of the Sea (ITLOS) when it takes place offshore for arbitration. The Marine Police and the Ghana Navy had jointly protected Ghana's territorial waters and still continue to do so.

The human needs theory of conflict posits that humans have basic needs which they seek to fulfill, and that the denial and frustration of these needs by other groups or individuals could affect them immediately or later, thereby leading to conflict (Ademola, 2006). Maslow (1970), in his *Motivation and Personality* identified physiological needs, safety and security needs, belongingness and love,

esteem and self-actualization. Burton (1979) lists response, stimulation, security etc. as what constitute need. The security aspect of human needs as provided by the Ghana Navy goes a long way to ensure that those operating in the oil and gas sector offshore, within Ghana's territorial waters are provided with the needed security to ensure their basic need of security is attained.

The evidence provided by the Western Region Police Commander fit into the conceptual framework of this research in the area of the security implications of the oil and gas on STMA. The formation of the marine police unit goes in to boost security in STMA which aligns with the positive security implications of the oil and gas exploration and production in STMA. This is captured under the security implications in the conceptual framework.

Another stakeholder from the multinational oil companies said this about their contributions towards security in STMA and Western Region;

" ... oooh, we have been able to collaborate with the security agencies in sharing sensitive data in the arrest of criminals offshore and oil smugglers which has come in to improve the general security in STMA both offshore and onshore" (Interview with GNPC, August,28 2017).

The revelation from the Ghana National Petroleum Corporation indicate that there is a strong collaboration between the security agencies and the multinational companies operating in the oil and gas sector in sharing sensitive data in order to improve security both offshore and onshore. In line with the first specific objective of the study which is to examine the security implications of the oil and gas

operations in STMA. The collaboration between the state security agencies and these multinational companies involved in mineral extraction was also expressed by Agbesinyale et al. (2012) in describing safety and security issues in mining communities. They were of the view that apart from the private security of the companies, government deployed state security personnel (especially police and military) to protect their property and concessions. Almost all the companies operating in the communities visited have established permanent posts in their concessions for the military, the police or both (Agbesinyale et al., 2002, p.84).

The structural conflict theory becomes relevant in explaining the collaboration between the state security apparatus and the multi-national companies in maintaining or providing maximum security for their operations. Since the structural conflict theory posits that conflicts are embedded in the particular ways in which societies are structured, thus the collaboration between the state security apparatus and the private security of these companies ensure that the assets and operations are well secured. This collaboration if not properly managed to the benefit of the masses, can in itself lead to violent conflict between the indigenes, the state and the companies. This can happen if excessive force is used against some of these indigenes who will try to circumvent the law in order to benefit illegally from the oil and gas operations. Example of this is the Niger Delta case where excessive force from the state and private security of these companies amidst poverty among the indigenes have led to the formation of militant groups.

On the conceptual framework, the assertion made by GNPC reflect the second layer of the framework where security implications of the oil and gas operations

can lead to an increase or decrease in structural conflicts when people get contentment or discontent. The conceptual framework captures the essence of having good security and what will happen when security is lacking. All of these falls under the security implications and the collaboration between state security agencies and the private security of the companies all go into the security implications.

Negative Security Implications

Aside from the positive benefits derived from the oil and gas operations in STMA, it also comes with some negative consequences on the people. As Panford (2017) put it, that even though Ghana's commercial oil and gas extraction is in its infancy, some conflicts have already flared up while others are lurking in the oil producing coastal districts. These conflicts are both on-shore and off-shore and it involves fisher folks, farmers and local residents. Below are some of the responses;

“.....because fishermen are restricted from entering certain zones in the ocean, that is the advisory zone which is five (5) nautical miles from the rig and the exclusive zone which is a few meters from the rigs, it has sometimes led to confrontations between the fishermen and the Navy who patrol and enforce these laws (Field Interview with Western Regional Coordinating Director, April 2017).

This view was corrected by the Flag Officer Commanding of the Western Naval Command. This is what he said;

".... naturally fish get attracted to the light from the rig. This in turn draw fishermen to the rig who even try to fasten their lines and nets to the rig support. When they enter the advisory and exclusive zone, we try to drive them away by explaining to them the consequences of them fishing in those zones. Generally, these fishermen are not happy when you try to drive them away from these fishing grounds. We have never had a violent confrontation with these fishermen as we always persuade them to move away in a non-violent manner"

(Interview with FOC, Western Naval Command, 29th December, 2017).

In relation to the responses from the interviews, it is true that sometimes when fishermen stray into the advisory and exclusive zones, which are not to be entered by these fishermen, the Ghana Navy confiscate their fishing equipment which in most cases have not gone down well with these fishermen.



Plate 3: Naval Officers from Western Naval Command on Patrol Offshore.

Source: Western Naval Command, Ghana Navy.



Plate 4: Officers from Ghana Navy on Duty Offshore

Source: Western Naval Command, Ghana Navy

Plates three (3) and plate four (4) demonstrates how the Western Naval Command of the Ghana Navy patrol the coastline and offshore installations of Ghana's oil and gas sector. In plate *three (3)*, you see the Naval ship with officers and men ready to fight any threats that will be posed to the oil and gas operations offshore. In plate *four (4)*, you see the officers and men in a speed boat, offshore safeguarding Ghana's territorial waters.

North and Choucri (1983), posits that conflict emerges whenever two or more persons (or groups) seek to possess the same object, occupy the same space or the same exclusive position, play incompatible roles, maintain incompatible goals, or undertake mutually incompatible means for achieving their purposes. One aspect of conflict is the fact that conflicts themselves are the result of not what is actual but what is enraptured in potentiality. In other words, conflicts are borne out of what the parties think may happen rather than from any phenomenon that is actually threatening. This explains the potentiality-actuality dynamics of conflict in human societies. In fact, there might be no conflict if it is the case that the parties are not really in possession of the desire to carry out the means or achieve the ends which are or appear to be incompatible (Albert, 2005). It is in line with this preliminary analysis that Nicholson (1971), states that conflict is said to occur where there is interaction between at least two individuals or groups whose ultimate objectives differ. Oquaye (1995), also states that conflict is a sequence of interactions between groups in society, between groups and governments, and between individuals. The causes of such interactions, the methods employed and their consequences may lead to conflict. Conflict may not necessarily be destructive; but violence is, in

most cases, destructive. This differentiation between violence and conflict expresses the situation offshore between the fishermen who are deprived of fertile fishing grounds by the Navy with the aim of protecting and safeguarding the oil and gas operations offshore. Even though this exercise is carried out non-violently by the Ghana Navy, it does not uproot the underlying conflict of deprivation of space and lack of access to fertile fishing grounds. This also falls in line with the first specific objective of this research.

This case of the potential conflict between fishermen and the Security agencies operating offshore is further buttressed by Panford (2017) who states that even though Ghana's commercial oil and gas extraction is in its infancy, some conflicts have already flared up while others are lurking in the oil producing coastal districts. There are two sides to the off-shore conflicts: local fishermen (called artisanal fishermen in literature) who fish in the Gulf of Guinea close to oil installations and ships servicing the industry versus MNCOs, including Jubilee Partners, the Government of Ghana (GoG) or Ghana Navy and other security agencies guarding oil and gas facilities on the seas. "There are two competing needs that, if not managed properly, could result in clashes or even loss of life and damage to expensive equipment, some of which cost millions of Ghana cedis or dollars. Local, small-scale fishermen seek fish while oil companies and their associated interests want to drill for oil and protect their equipment from colliding with fishermen's boats" (Panford, 2017, p.145).

The human needs theory of conflict plays a role here, in the sense that if these fishermen are constantly deprived of those fishing grounds by the security agencies

operating offshore, without providing them with alternative fishing grounds which are equally abundant with fish, they might sooner or later engage in violent conflict with the security agencies. This makes the human needs theory of conflict relevant in explaining this response because the human needs theory of conflict posits that humans have needs and when these needs are deprived over a long period people will resort to violent conflicts in order to demand or satisfy their needs (Ademola, 2006).

This response also fits into the conceptual framework of this research. The second layer of the conceptual framework captures the security implications of the oil and gas exploration and production on STMA. The fact that fishermen prefer fishing close to the oil rigs because of the presence of light which attract most fishes and the role of the Ghana Navy to drive them away from these areas with the possible confiscation of their fishing gears stirs up conflict within these fishermen.

Another respondent had this to say

"the rigs which are located close to the shore needs to be guarded because we have seen and heard that people go into the rigs when they are not guarded and loot valuables from them. This exposes innocent people to criminal charges and unannounced security raids in our communities"

(Interview with Assemblyman of Essaman, August 2017).



Plate 5: An Unguarded Oil Rig at Poasi Beach.

Source: Field research, 2017.

According to Okubo and Shelley (2011), an open letter on human security submitted to the Commission on Human Security raised some fundamental issues. The letters warned that discussions on human security often avoid critical evaluation of specific structural and institutional issues. These issues include: everyday insecurity, the most vulnerable, pluralism and multilateralism. Issues of petty crimes such as stealing from the rigs due to the fact that some of these abandoned rigs have not gotten the needed security poses a threat to the everyday security of those living close to the rigs. This is demonstrated in *plate 5* where you have an abandoned rig at Poasi beach. Some people have taken advantage of the lack of security around the abandoned rig to loot all the valuable in the rig. This

incident has attracted the Ghana Navy and the Marine Police who frequent Poasi community to arrest people and sometimes innocent people get arrested. In the case of arrest as stated earlier, sometimes the security agencies do not scrutinize and are quick to arrest any passerby on the scene which leads to insecurity and harassment of innocent citizens. This point was emphasized by Traub-Merz and Yates (2004), on the 'Oil Policy in the Gulf of Guinea '. In looking at criminal activities against oil installations and personnel, the point was made that in the case where oil is produced onshore, or where land-based pipelines are present, "bunkering" (the theft of oil from wells and pipelines) is increasingly becoming a problem for oil companies. What has often started as a small-scale survival strategy of the local population shows increasingly the characteristics of organized crime (Traub-Merz & Yates, 2004, p.96).

In examining the security implications of the oil and gas exploration and production on STMA. Issues of petty crimes and organized crimes affect the security of the metropolis. When oil rigs are left exposed without security, it lures the locals to take advantage of the situation. The structural conflict theory which posits that conflicts are embedded in the ways in which society is structured comes to play here. This has to do with the strengthening of institutions that is in charge of security and by making sure that companies properly secure their rigs or dispose them appropriately. This is because the structural conflict theory looks at social problems such as economic and political exclusion, injustice, poverty, disease, exploitation, inequity etc. (Ademola, 2006). In this context, the oil rigs themselves and their contents are expensive and hold expensive valuables. Amidst poverty in

the local coastal communities such as Poasi, Nkotompo, Essaman etc, these abandoned rigs and their contents are an opportunity for some daring locals to take advantage of, sometimes at the peril of their lives since there have been recorded deaths from people trying to steal from the rigs. They sometimes get drowned in the ocean or get hit by metallic objects which leaves them disabled.

This situation also fits into the conceptual framework in the sense that when oil rigs are left unguarded and the locals tend to take advantage of, it brings certain security consequences on the locals because the theft can lead to unannounced raids from the security agencies which can take anybody as a suspect until proven guilty. The second layer of the conceptual framework captures this by breaking the security implications into either an increase in security or an increase in insecurity which involves petty crimes and organized crimes such as stealing from the oil rigs.

Expectations from Oil and Gas

Humans are social beings and as such we have social expectations. The moment we gain consciousness of the environment in which we dwell, we set standards for ourselves and measure our successes and failures by making comparison with the successes and failures of others in our consciousness. Human expectations may be in the form of good living conditions such as good roads, hospitals, schools or it may be spiritual and intangible.

The advent of oil and gas exploration and production in the Western region raised the expectations of the people in the region and particularly STMA as buttressed by the fact that humans have basic needs which they seek to fulfill, and that the denial and frustration of these needs by other groups or individuals could

affect them immediately or later thereby leading to conflict (Ademola, 2006). In essence, to provide one individual with their basic needs such as food, clothing, shelter, roads etc., and deny or hinder others of such basic needs could make people resort to violence in an effort to protect or demand those basic needs which is the position of the human needs' theory.

This research discovered that some people in STMA had unrealistic expectations when the oil and gas exploration and production began in the Western region and were of the view that within five years of production, their standard of living will change for the better but five years after the production of oil and gas in commercial quantities in the Western region, most of these expectations have not been met.

The situation in the Sekondi -Takoradi Metropolis is quite unique since the Government of Ghana through the Ghana Ports and Harbours Authority (GPHA) is undertaking a port expansion project at the Takoradi Harbor. This development has sparked conflict between the indigenes of Poasi and New-Takoradi which are two fishing communities in the metropolis. The fisher folks are protesting the fact that their landing beaches are going to be used as a berth for ships whilst they will be relocated to Sekondi Fishing Harbor. Their initial expectation was that they will be accommodated in the harbor as is done in other countries such as La Cote D' Ivoire but they were disappointed as they heard that they will be relocated.

These sentiments below were expressed by some community people;

"we have no place to go when this landing beach is closed. Here to Sekondi is far and will lead to extra expenses when we want to go and buy fish" (Interview, fishmonger, September 2016).

A resident expressed similar view when interviewed;

".....when these fishermen are relocated to pave way for the port expansion in order to accommodate the oil and gas sector, the economic activities in this community will be greatly affected in a negative way because all those who depend on the fishing sector will have to spend more money in order to get to Sekondi Fishing Harbor and back" (Interview, teacher, January 2017).



Plate 6: Takoradi Port Expansion; Land Reclamation from the Sea

Source: Field research, 2017.

Kendie et al. (2014), in conceptualizing conflict were of the view that consensus exists among scholars that a key fact about conflict is that it cannot be prevented in social life but it can only be contained. The expectations from the oil and gas sector among the indigenes of STMA is to have the port expansion, paving way for the local fishermen to have a better place for fishing along the harbor or to have a special harbor for artisanal fishermen side-by-side, the main harbor, but due to conflicting interests, there is a misunderstanding between what the fishermen want and what the government want. *Plate 6*, demonstrates how the Takoradi port expansion project is being carried out with the dredging of the sea bed and spilling the rocks to fill or reclaim the nearby land. This process of reclaiming the land around the port has posed an existential threat to the landing beaches of these artisanal fishermen who are not ready to compromise on terms of relocation of the landing beaches to pave way for the land reclamation. These fishermen want to have their fishing harbor close to the main harbor and that is their position. Expectations of these fishermen, if not met or well managed can lead to disappointments and disappointments may lead to conflicts. In the case where people's livelihoods are at stake, the level of conflict may escalate to violent conflicts. According to Oyeniyi (2011), conflict usually occurs primarily as a result of a clash of interests in the relationship between parties, groups or states, either because they are pursuing opposing or incompatible goals.

The expectations from the oil and gas sector coupled with the fact that most of these expectations are yet to be realized and the subtle discontent among some locals have made relevant the human needs theory of conflict which states that

when people are frustrated over a long period of time, they would resort to violence in order to demand their basic need. The structural conflict theory also comes to play here, in that state institutions such as GPHA, GNPC, PC etc. who are to ensure that oil and gas operations in STMA does not affect the indigenes negatively have to exercise their mandate to protect the vulnerable in society. If these institutions fail to deliver on their mandate, then the structural conflict theory will come to play as it posits that conflict is embedded in the way society is structured with reference to institutional efficiency in preventing violent conflicts.

The conceptual framework of this research also captures the expectations of the indigenes or the locals from the activities of the oil and gas sector. Expectations of fishermen who want the oil and gas sector to come in to improve their lot are rather threatened with eviction and relocation of their landing beaches.

On his expectations from the oil and gas sector, the Western Region Coordinating Director, had this to say,

“.... If the oil and gas sector can offer employment to people, it will help the local economy through the paying of more taxes and helping with social interventions. I also expect that there will be peaceful co-existence through continuous dialogue with the communities and other stakeholders.”

(Interview with W/R Coordinating Director, March 14, 2017).

This view was buttressed with the view of another respondent and this is what he had to say about his expectations from the oil and gas sector:

“The operators in the oil and gas industry should give skill training to the youth in areas such as welding and fabrication, electrical, masonry, carpentry, dressmaking etc. We also want them to do more of social intervention projects like providing good drinking water, good roads, schools etc.”
(Interview with SHS Student, April 4, 2017).

Ghana joined the league of oil producing countries with mixed feeling of anxiety and great expectation (GOGIG, 2016). The deep and conflicting emotions of hope and trepidation had played out pretty strongly in public discourses around the employment opportunities that will arise from the oil and gas sector. Employment and economic sustenance have been one major expectation of people when minerals are being extracted in their locality. The lessons most Ghanaians draw from the mineral sector are reinforced by the well documented experience of how increased dependence on oil wealth in some African countries have ended up eroding democratic accountability, leading to corruption and unemployment. Indeed, in almost all these countries, we have witnessed a creeping, but steadfast tendency of elite capture of the benefits of resource extraction, that have confined the majority of the citizenry to a life of poverty and squalor, in the midst of plenty (GOGIG, 2016, p.3). The same can be said in other extractive areas in Ghana as was indicated by Agbesinyale et al. (2012), that the reality in most of the mining areas of Ghana today, point to enclaves of gold wealth in the midst of sprawling poverty. Employment is key in reducing poverty in areas where mineral extraction is taking place be it offshore or onshore.

The human needs theory of conflict explains that if the basic needs of people such as employment are not met over a long period of time they can resort to violence. Areas with high unemployment and poverty have a high tendency of violent conflict. In the Niger Delta, where oil and gas are produced in large quantities, there have been many incidents of violent conflicts and confrontations among the indigenes and the state. People's expectations of employment have to be met in order to lure them from negative social vices such as violence. The relevance of the human needs theory which posits that when people's basic needs like employment are not met over a long period of time, they will get frustrated and resort to violent conflicts comes to play here. This is what happened in the Niger Delta which led to the formation of militant groups.

Issues of employment as one of the expectations from the indigenes in STMA, is expressed in the conceptual framework of the research which has the oil and gas operations in STMA, dividing into the expectations and the security implications. The expectations include gaining employment from the oil and gas sector, improvement in infrastructure and the standard of living.

The Western Regional Police Commander had this to say about the expectation of the police;

“..... the expectation for the oil and gas industry was so huge that people scrambled for land. Therefore, issues of land disputes have increased; there has also been an increase in road traffic in the metropolis and the region. Increase in rent, immigrants from different backgrounds, both internal and

external have also entered the region in their numbers. In view of all these developments, my expectation of the oil and gas was that it will drastically transform the Ghanaian economy but this expectation has been short lived.” (Interview with, Western Regional Police Commander, 2nd May, 2017)

The expectations of the respondents were many and although they may not be right in some of their expectations and assertions, the basic fact remains that most people expect natural resources extraction to usually lead to employment of indigenes around where those minerals are being. This sentiment was captured by Panford (2017), that contrary to the expectations of, in particular, some residents of Sekondi-Takoradi, the main oil hub, the discovery of oil and gas has not paid much of a dividend. Instead, there are growing signs of rapid social inequality in the municipality. Contrary to the promises of the developers, fewer jobs than expected have been created. This is due to most upstream employment being high-skilled types with the exception of basic entry ones, such as Roustabouts or Roughnecks, which so far account for the bulk of local employment. Thus, after paying hundreds of cedis for basic safety training in oil and gas, few Sekondi-Takoradi residents are employed on the FPSO Kwame Nkrumah and other oil facilities (Panford, 2017, p.154). The oil and gas in the Western Region of Ghana is expected to bring about massive economic transformation to the region and its regional capital, STMA.

The structural conflict theory which posits that conflict is embedded in the particular ways in which society is structured, the systemic conflict theory which posits that conflicts can be explained from the social context in which they occur

and the human needs theory which posits that humans have basic needs and when these needs are not fulfilled for a long period of time, they will get frustrated and resort to violent conflicts all come in to explain the expectations of the people of STMA and the Western Region and the disappointments associated with these expectations. Since most of these expectations have not been met, it means that the potential for a social conflict is ever present.

The conceptual framework of this research also captures the expectations of the residents of STMA. Issues of high cost of rent, low employment opportunities coupled with poor road infrastructure leading to congestion and traffic is well expressed in the conceptual framework.

Another respondent had this to say about his expectations from the oil and gas sector in STMA:

“..... our hopes of getting employment in the oil and gas sector has faded since any time that we apply for jobs, where are constantly reminded that we are not qualified for the job and that skilled people and highly qualified experts are needed in that sector. Even when we go to school and acquired the skills, we are again told that we don't have enough experience to do the job”

(Interview, youth, October 2016)

Below is the response from GNPC concerning employment. This is what GNPC had to say;

"In terms of economic activities, GNPC has supported the six coastal districts of the Western Region with the Livelihood

Enhancement Project which is an economic venture /business training avenue which enables local business owners to stand on their own and function properly" (Interview with W/R PRO of GNPC, August 2017).

This is the sentiment expressed by some of the youth in STMA. That after spending lots of money trying to acquire skills and certificates to secure a meaningful job in the oil and gas sector, they are mostly not employed with the excuse that they do not have the needed years of job experience. Even with the passage of the Petroleum (Local Content and Local Participation) Regulations 2013, L.I. 2204 which had the purpose to: a. promotes the maximization of value-addition and job creation through the use of local expertise, goods and services, businesses and financing in the petroleum industry value chain and their retention in the country. b. develops local capacities in the petroleum industry value chain through education, skill transfer, and expertise development, transfer of technology and know-how and active research and development programs. c. achieves the minimum local employment level and in-country spend for the provision of goods and services in the petroleum industry value chain etc., most youth in STMA don't feel they have gotten their share of employment and skill training from the oil and gas sector even though there have been some meaningful interventions from civil society groups such as Global Communities to provide free skill training to the youth in STMA between the ages of seventeen (17) years and twenty-four (24) years. The program is called Youth Inclusive Entrepreneurial Development Initiative for Employment (YIEDIE) program. The Jubilee partners have also

provided an oil and gas training facility to the Takoradi Technical University which provides training and field ready experience to interested applicants and unlike that of Global Communities, people would have to pay for the training.

The human needs theory of conflict and the systemic theory of conflict can be used to explain how unemployment and inadequate skill training for the youth can lead to conflict as a result of their expectations not being met. The human needs theory posits that when the needs of people are not met for a long period of time, they will get frustrated and resort to conflict. The systemic theory also posits that conflicts can be explained in the social context in which they occur. When the youth of STMA do not realize their expectations from the oil and gas over a long period, conflict can occur and this will depend on the prevailing socio-economic conditions at that moment which ushers in the systemic conflict theory.

The conceptual framework of this research captures issues of employment as one of the general expectations of people. In the conceptual framework, public expectations further subdivide into: high employment, low cost of living etc. The framework also captures it clearly that if these expectations are not met, it will eventually have an effect on the peace of the host communities.

Other respondents also expressed themselves of their expectations from the oil and gas operations in STMA.

“..... some of us can't rent certain rooms in STMA because the oil and gas workers have raised the standard of rents to exorbitant levels.” (Group Discussion, Assemblywoman, October 2016).

The response from this Assemblywoman is one that is related to the economic conditions that are driven by any major economic activity. The oil and gas exploration and production are a major economic activity and with that it carries along its own economic effects such as increase in rents, more money into the local economy. Much can be said about the oil and gas exploration and production in the Western region being a major driver in the increase in rent charges in the metropolis. This is because salaries and remunerations for workers in the oil and gas sector goes way above that of the average civil servant. This increases the purchasing power of these oil and gas sector workers who usually can afford exorbitant rents. This causes landlords to increase the rents in certain residential areas in STMA such as Beach Road, Airport Ridge, Chapel Hill, Anaji etc., which then becomes a disincentive to most civil servants, public servants and the general public.

The systemic theory of conflict comes in to explain the fact that the prevailing socio-economic effects of the oil and gas exploration and production in the Western region and STMA having an impact on rents. The theory stipulates that social contexts are relevant in explaining why and how conflicts occur in human society. Since there is the general feeling that oil and gas has led to the rise in certain economic factors such as rents, the systemic theory says that the prevailing socio-economic situation in STMA can explain the causes of conflicts in STMA.

The conceptual framework of this research also explains how people in STMA and the Western region expect to see a decrease in the cost of living. The conceptual framework has oil and gas operations, dividing into public expectations

and security implications. The expectations, subdivide into low cost of living including low rent charges.

An elder from the palace had this to say;

“..... the oil and gas gave us lots of hope, many people came to take records of our needs. These people were from the oil companies who need permit to drill oil. They said it was a requirement to do a community needs assessment before they can be given permit to operate in the area. To our disappointment, most of these companies do not return to implement what they said they will do.” (Group discussion, community Elder, September 2016).



Plate 7: Community Needs Assessment at Poasi Community

Source: Field research, 2017.

It is required by law; Petroleum (Exploration and Production) Act, 2016 Act 919 and the Environmental Assessment Regulation 1999 L.I. 1652, that every company that wishes to operate in any area should conduct a Community Needs Assessment. This is a requirement by GNPC before a permit will be issued to the company to start drilling oil. The rationale is that these companies will be operating in an area where people live and as such their activities will have to positively impact the lives of the people. This is the reason why a Community Needs Assessment had to be carried out before permit is issued by GNPC. *Plate 7*, demonstrates a community needs assessment being conducted by an oil and gas exploration company in Poasi community. Most of these companies take advantage of that and solicit the views of the community people on what they need but some of them fail to show up to implement it for them. This was expressed by Panford (2017), as he states that contrary to the expectations of some Sekondi-Takoradi residents, the discovery of oil and gas has not paid much of a dividend in the form of improvements in life. In most cases the needs assessments conducted by these companies are thrown under the carpet when they are given the license to operate. Most of these companies do not come back to the local communities to support them with their needs. GNPC would have to enforce or make sure that companies, will go back to the communities to support them with their needs as a form of corporate social responsibility.

The human needs theory of conflict becomes relevant in explaining why people will resort to violent conflict if their needs are not met over a long period of time. When companies are operating in a locality, it is proper for them to have positive

interactions with the local communities. One way they can achieve that is by performing some corporate social responsibility. After these companies have done their community needs assessment, it will be in their own corporate interest to create a positive connection with the locals by solving some of their local problems such as providing boreholes and other social interventions. This will go a long way to meet their expectations if not fully in a partial way which will in turn reduce the factors for violent conflict or insecurity. As posited by the human needs' theory, that disappointments will lead to frustrations which will in turn cause people to resort to violent conflicts in order to fulfill their basic needs.

The conceptual framework of this research captures public expectation and how it is connected with security and insecurity. In the conceptual framework, public expectations would want to see a high employment, low cost of living, improvements in infrastructure etc. When these expectations are met, then it is likely to lead to an improvement in security but when they are not met, it is likely that people may resort to violent and unacceptable ways in order to express themselves and achieve their basic needs. This is clearly captured in the conceptual framework with two arrows running into each other in an anti-clockwise direction. Meaning that there is a linkage between public expectation and security implications.

Perception of Peace in STMA

Creating peace obviously has to do with reducing violence (cure) and avoiding violence (prevention). Violence means harming and/or hurting. Life is capable of

suffering violence done to the body and to the mind, referred to as physical and mental violence and is also capable of experiencing bliss, the pleasure that comes to the body and mind (Galtung, 1996). According to Galtung, peace is the absence or reduction of violence of all kinds and also the nonviolent and creative conflict transformation. Take peace versus violence, of course these two words can be defined as each other's negative and a logical discourse can be constructed but Daoist epistemology yields better insight by pointing to the violence in peace (for instance, by being too passive) and the peace in violence (for instance, by being active). There is the presence of *yin* in *yang* and of *yang* in *yin* (Galtung, 1996, p.16). In this regard, peace can also be viewed in different angles that is in a positive light and also in a negative light.

Positive Perception of Peace

The perception of peace in STMA before the discovery of oil and gas has not actually changed so much five years after the production of oil and gas. All the same some respondents had a positive view that the oil and gas exploration and production in STMA has rather contributed positively to the peace in the metropolis.

Below are some of the views from respondents:

".....the Western Region is enjoying relative peace. It is difficult to hear that participants are taking up arms and fighting" (Interview with BNI, April, 2017).

He further expressed the view that;

".....the oil and gas exploration and production has not done much to disturb the peace in STMA but rather chieftaincy disputes and illegal mining are what poses threat to the peace of STMA " (Interview with BNI, April 2017).

Kendie et al. (2014) on the spatial analysis of conflict in the Western Region indicated that chieftaincy conflicts were the most preponderant and they were either characterized by a struggle for power or a veiled desire to control some disputed lands. They revealed that there were only two clear resource-based conflicts which is quite astounding given the abundance of natural resources in the area and this goes to underscore the point about the inextricability of chieftaincy from resource conflicts (Kendie et al., 2014, p.173). On the other hand, Panford (2017), has indicated that even though Ghana's commercial oil and gas extraction is in its infancy, some conflicts have already flared up while others are lurking in the oil producing coastal districts. The responses from the respondents is in line with the third specific objective of this research which is to explore people's perception of oil and gas operations on the peace in STMA. Even though STMA is relatively peaceful as expressed by some respondents, it does not remove the pockets of violence and discontent expressed by some residents in the metropolis.

The human needs theory of conflict comes in to explain that when the basic needs of people are not met for a long period of time, they will be frustrated and resort to violent conflict (Ademola, 2006). It means that if STMA is relatively peaceful now, it implies that the basic needs of the people are somehow being met.

It does not also leave out the fact that some people are yet to bust with their frustrations which will result in violence.

The conceptual framework of this research also captures the fact that when there is oil and gas operations in STMA, it will lead to public expectations and security implications and all that will lead to peace or conflict in the end which will lead to development or underdevelopment.

Another respondent also had this to say;

".....in terms of peace, the Western Region and for that matter STMA is usually peaceful. The oil and gas have come and we are hoping that it will create the needed employment so that people will not agitate for jobs" (FGD, Teacher, September 2016).

What this respondent is saying goes to support what has been previously said with the exception that this respondent links employment with peace in that if they are able to secure employment, then people can earn a good living and would not have to be hostile. This also goes to support Panford (2017), that the oil and gas in SMTA has not delivered on providing massive employment for the youth in STMA and it is in line with the third specific objective of this research, which is to explore people's perception of peace in STMA with the advent of oil and gas exploration and production.

The human needs theory of conflict also supports this assertion that if the basic needs of people like employment are not provided, for a long period of time, people will get frustrated and resort to violent conflicts. Employment is one tool that can give people economic independence and wean them from anti-social attitude and

behavior. What the human needs theory is saying is that when the employment need of people is met, it will empower them to acquire their basic needs and thereby avoid violent conflicts.

His response is also in line with the conceptual framework of this research in that issues of public expectation in the end affect the peace in the metropolis.

The conceptual framework captures this by linking the effects of public expectations with security implications and how both can lead to peace or conflict.

Another key informant from the Ghana National Canoe and Fishermen Council also supported Tullow and GNPC's claim in the area of corporate social responsibility by saying;

"they have helped to put up classrooms blocks and dormitory blocks in some senior high schools in Axim and supported in the renovation of the maternity ward at Essikado Hospital" (Interview with GNCFC, September 2017).

Issues of corporate social responsibility is important in winning the trust, support and confidence of the locals towards a particular corporate body. The remarks by the Secretary of the Ghana National Canoe and Fishermen Council goes a long way to prove that some of the multi-national oil and gas companies together with GNPC are doing a lot for the local communities and this goes a long way to cement a peaceful relationship between the locals and the companies.

According to Albert (2005), the structural theory of conflict is concerned with conflict or violence arising from abnormalities in the structures of public institutions. This shows that if regulatory bodies like GNPC, Petroleum

Commission, National Petroleum Authority do not regulate companies well to perform their core duties and also corporate social responsibility, it will lead to structural violence.

The conceptual framework of this research also captures issues that has to do with the positive effect of corporate social responsibility and the effect on host community when it is lacking. The conceptual framework looks at oil and gas operations in STMA, which trickles down to public expectation and security implications. If proper corporate social responsibility is performed, then it will lead to positive security implication and there will be peace and security and vice-versa.

Also, GNPC had this to say about how they contribute to the peace in the Western region and STMA:

".....GNPC and the Jubilee partners have been supporting STMA with basic logistics in their governance process such as organizing workshops and forums, engaging civil society and even helping them with special events such as farmers day. All these go in to contribute to the positive perception of peace in the metropolis and promotes good governance " (Interview with GNPC, August 2017).



Plate 8: Oil and Gas Dialogue Platform in Takoradi

Source: Friends of the Nation

In the same vein, Tullow Ghana Limited which is the main operator at the Jubilee and TEN fields also revealed during their District Assemblies Engagement that they have a dispute resolution mechanism which also promotes dialogue and peace. This is what Tullow had to say;

".....we have set up a grievance redress mechanism which we are able to use to address grievances from local people especially the fisher folks where people are duly compensated for any inconveniences that will arise as a result of our operations" (Interview with Tullow, 29th August, 2017).

The above statements from GNPC and Tullow indicate how meaningful, they have been contributing to national development through the use of dialogue and the peaceful resolution of conflict through dialogue. All these go in to contribute to the peace in STMA and reduce the likelihood of conflict.

In line with the human needs' theory and the systemic conflict theory, the activities of GNPC and Tullow in the Western Region and STMA is contributing positively towards the peace in the region. *Plate 8*, demonstrates an oil and gas dialogue taken place in Takoradi by Friends of the Nation, an NGO based in Takoradi. These dialogues are important so that citizens can express their worries to the companies involved in oil and gas exploration and production in the Western region and STMA to be precise. As argued by Kendie et al. (2014) that conflict is assumed to have occurred when two or more parties perceive that their interests are incompatible, express hostile attitudes, or pursue their interests through actions that damage the other party. In the same way Coser (1956), argues when two or more people engage in a struggle over values and claims to status, power and resources in which the aims of the opponents are to neutralize, injure or eliminate their enemies. As the human needs theory posits that people will usually resort to violent conflict if their basic needs are not met over a long period of time, the systemic theory posits that underlying factors of conflict lies in the social structures and systems of a particular society. The structural conflict theory deals with conflict from the institutional level and blames weak institutional structures for being the causes of violent social conflicts. In this case if we have institutions like GNPC and the Petroleum Commission (PC) doing their work effectively in monitoring these multi-nationals like Tullow, ENI, Hess etc. in performing the right corporate social responsibility, the perception of peace in STMA will be greatly improved.

The conceptual framework of this research also captures the operations of the oil and gas companies in STMA and its impact on people's expectation, security

implications and the perception of peace in the metropolis. By engaging in proper corporate social responsibility, GNPC with the multi-national oil and gas companies try to improve or contribute to the welfare of the people which in the long run lead to a peaceful co-existence between the locals and the companies. This is well captured in the conceptual framework which ends with peace or conflict having an effect on the host community which will in turn lead to security or insecurity.

Negative Perception of Peace

Contrary to all the positive contributions of oil and gas to the perception of peace in STMA in the past ten years, there had been other notable developments in STMA which has affected people's perception of peace in STMA negatively. An incident which happened on the 29th March, 2017 tells it all. On that day, there was a protest by the people of Poasi and New-Takoradi concerning the bad nature of the road leading to the community as well as the industrial enclave. This saw the presence of the police and all the other security agencies including the BNI, Military Intelligence, Fire Service etc. This incidence was well captured by the major media houses such as Joy News, TV3, UTV etc. The people were of the view that their road had deteriorated for over six year and nothing seems to be done about it and with the human needs theory in play which argues on the premise that when people's needs are denied for a long time, they become frustrated and will resort to conflict, the exact replica was witnessed in STMA. This theory justifies the incidence that happened on 29th March, 2017 as captured by the Daily Guide Newspaper:

“The youth of New-Takoradi in the Sekondi-Takoradi metropolis staged a mammoth demonstration yesterday to register their displeasure at the deplorable nature of the road linking the community and Takoradi as well as some industries in the metropolis. Some of the aggrieved youth who spoke to spoke to Daily Guide, noted that the road had been in bad condition for over six years, adding that vehicles plying the route pollute the atmosphere with dust. They asserted that the only health facility in the area had to be closed down due to the menace caused by the dust. The dust has also resulted in other respiratory conditions amidst other health challenges.” (Daily Guide, March 30, 2017).



Plate 9: A Protest at New-Takoradi, STMA.

Source: Field research, 2017.

Significantly, conflict is a pervasive occurrence in human societies. Interestingly, the manifestation of this pervasive phenomenon cuts across the psychological, political, social and anthropological dimensions and spheres of human existence. In its ramified form, conflict starts at the individual level with the possibility of its extension to the society at large (Albert, 2005). *Pate 9*, shows the case of citizens of Sekondi-Takoradi protesting for the provision of basic social amenities is a form of social conflict. This is because individuals and groups interact with one another at the social, political, economic, religious and cultural levels. According to Galtung (1996), conflict should always be taken as a hypothesis not as something obvious, even trivial, about which consensus is easily obtained. The conflict in the Sekondi-Takoradi metropolis concerns the people of New-Takoradi, demanding for better roads and this goes in to support some of the expectations from the oil and gas sector. It also falls in line with the third specific objective of this research which is to examine the perception of peace in STMA in relation to the exploration and production of oil and gas in STMA.

The human needs theory posits that when people's basic needs are not met over a long period of time, they will get frustrated and eventually resort to violence in order to demand the fulfillment of their basic needs. There is also the presence of a structural conflict in that the Sekondi-Takoradi Metropolitan Assembly which has the executive powers to construct the road to satisfy the needs of the people has reneged on its mandate and as the structural conflict theory posits that conflict is embedded in the ways in which society is structured. Context also plays a major role in this conflict which makes relevant the systemic conflict theory which posits

that conflicts can be understood in the social context in which they occur. All three theories that underpin this research explain the reasons why people resort to protests and demonstrations in STMA.

The conceptual framework of this research captures conflict and violence in the sense that when oil and gas operations go on in STMA and it doesn't transform into the minimal improvement in people's living conditions then, people will resort to anti-social acts. The conceptual framework looks at oil and gas sector in the STMA and how it divides into people's expectations and its security implications. Protests and demonstrations fall under the security implications under the conceptual framework.

Other respondents including the chief of New-Takoradi also commented on the support and also the inconveniencies that the oil and gas has brought on the activities of the fishermen and likely relocation of the fisher folks. This is what he had to say;

".....the port expansion which is to accommodate the oil and gas sector has caused some sea defenses to be constructed to protect our coastline and this is a laudable project but trying to relocate the fishermen will create violent conflict since they are not willing to relocate" (GD, Chief of New-Takoradi, October, 2016).



Plate 10: Construction of Sea Defense at New-Takoradi

Source: Field research, 2016.

From the view expressed above, it is clear that the people of New-Takoradi are not too happy of the relocation of the local artisanal fishermen to accommodate the oil and gas sector. *Plate 10*, demonstrates the construction of sea defense at New-Takoradi which has protected the landing beach of New-Takoradi from sea erosion. In the same instance, the rocky nature of the sea defense damages the canoes of these fishermen. Usually conflict is assumed to be present when two or more parties perceive that their interests are incompatible, express hostile attitudes, or pursue interests through actions that damage the other party (Kendie et al, 2014). *Plate 10*, shows the construction of a sea defense at New-Takoradi beach which is part of the Takoradi port expansion project. This port expansion led to sea erosion of the landing beaches which necessitated the construction of the sea defense. Plans of relocation has led to conflict between the Takoradi port authorities (GPHA) and the local artisanal fishermen.

The human needs theory of conflict, the structural conflict theory and the systemic conflict theory can be used to explain the possible violent conflict that will arise if attempts are made to relocate these fishermen to an undesired location. The human needs theory dwells on conflicts arising from frustrations and deprivations. Depriving or frustrating the local fishermen will lead to violent conflicts. In the same vein, the structural conflict theory explains conflict from institutional efficiency in that if institutions like STMA, GPHA, PC etc. play their required role in safeguarding the welfare of these fisher folks, conflicts can be reduced drastically. The systemic conflict theory also looks at the socio-economic aspect of relocating these fisher folks and the social and economic factors that makes them unwilling to relocate.

The conceptual framework of this research also captures the aspect of public expectations and security implications affecting the peace in STMA. From the conceptual framework, oil and gas exploration and production can lead to security implications which has to do with whether people are having a feeling of contentment or discontent. In the case where the fisher folks at New-Takoradi and Poasi are being forced to relocate to another area which they do not desire, then it can result in violent conflict. This has been conceptualized to mean that peace and conflict have an interacting effect on host communities which include security and insecurity, development or underdevelopment etc.

Chapter Summary

This chapter sought to bring to bear the security implications of the oil and gas exploration and production in the Western region of Ghana on the Sekondi-Takoradi metropolis. The key finding that I unearthed in this research is the fact that the oil and gas exploration and production in the Western region has brought both positive and negative consequences to the people of the Sekondi -Takoradi metropolis. Some of the positive contributions include the awarding of scholarships to brilliant but needy students in the region, creation of employment avenues, provision of basic social amenities like drinking water, providing assistance to and support to health facilities etc.

On the other hand, I discovered in this research that the oil and gas exploration and production in the Western region has some negative security implications which include the raising of the economic expectations of the people, the subtle conflict that exist among fisher folks and oil and gas industry players both offshore and onshore, the inadequate compensation for land use and the threat posed by oil pipelines and tank farms to local residents.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

Introduction

This chapter gives us an overview of the entire thesis which seeks to explore the security implications of Ghana's oil and gas exploration and production on the Sekondi-Takoradi Metropolis in the Western Region of Ghana. Answers were sought from respondents to questions such as: in what ways have the oil and gas operations in the Western Region affected security in STMA? by what means have people's expectations been met in STMA? and in what ways has the perception of peace in STMA been affected by the oil and gas operations in the Western Region? Qualitative approach to research was used in this study with interviewing, group discussions and documentary evidence gathering as the method. Content and interpretive analysis were then used to discuss and analyze the results supported by three theories of conflict and the conceptual framework.

Summary

In accordance with the research questions of the study, the summary of the key findings are as follows:

Security Implications of Oil and Gas Exploration and Production on STMA.

The study found out that the oil and gas exploration and production in the Western Region has had both positive and negative security implications on the Sekondi-Takoradi Metropolitan Area (STMA). The study revealed that there are positive security implications such as the oil and gas companies such as Tullow

supporting the Ghana Navy with logistics and sharing of intelligence, the formation of the Marine Police unit, frequent patrols offshore by the Ghana Navy and the Marine Police Unit which leads to more security offshore for both fishermen and the oil and gas industry etc. and negative security implications which has to do with conflicts between fisher men at sea in the area of accidents at sea between oil supply vessels, and also the dragging of nets by the sea current into the advisory zones and sometimes the exclusive zones which cause the nets of these fishermen to be confiscated by the Ghana Navy.

The study found that there have been accidents occurring at sea between fishermen and oil supply vessels. Also due to restrictions in the oceans, fishermen are prevented from fishing around the oil rigs and the FPSO's which poses a threat to the food security of these fishermen, their wives, children and other dependants since these areas attract lots of fish because of the light from the rigs and the pieces of food that drop in the ocean.

The study found that there have been some land related conflicts in the Western Region and STMA which has to do with the Takoradi port expansion and the closing of landing beaches to the locals which has led to some protests between the indigenes of the affected communities and some key players in the oil and gas sector. The economic security of Poasi and New-Takoradi indigenes who rely on the fishing industry is threatened with the expansion of the Takoradi Harbor to accommodate the oil and gas sector.

The study found out that oil and gas activities in STMA has led to the rehabilitation of the maternity ward of the Essikado Hospital at Sekondi, the

rehabilitation and the refurbishment of the casualty unit of the Effia-Nkwanta Regional Hospital, the provision of scholarships by GNPC and Tullow to over two hundred students to offer both master's and doctorate degrees all over Ghana.

The study found out that the data gathered by the oil and gas companies in the ocean has been used by the Oceanography department of the University of Ghana since hitherto did not have the equipment and resources to gather those data sixty-four kilometers offshore.

The study found out that the creation of the advisory and exclusive zones in the oceans which is supposed to be off-limits to fishermen have in a way served as a marine protected zone for endangered fish species such as whales, dolphins and other marine mammals. This in a way has ensured the successful breeding of these species which later move out of these zones to be caught by the fishermen. In the same way, fishermen complain of being restricted from these areas.

The study found out that the oil and gas companies have been assisting the security agencies like the Navy and the Marine Police with basic logistics to aid the work in ensuring maximum security protection to the oil and gas sector both offshore and onshore.

Expectations of citizens of STMA regarding oil and gas exploration and production in the Western Region.

The study found that the expectations of the people in the Sekondi-Takoradi metropolis were raised to an unrealistic level with the advent of oil and gas exploration and production but most of these expectations have not been met six years after the oil and gas production.

The study found out that people expected their standard of living to improve, high employment rate, good roads and other infrastructure developments. Most of these expectations have not been met.

The study found that some people have had their expectations in the oil and gas sector fulfilled partially or wholly. These people have one way or the other seen certain developments such as securing a job or contract in the oil and gas sector. Some have gained scholarships which were sponsored by the oil and gas sector to study abroad. Others have seen the provision of good drinking water in their communities and some have also expressed some delight in seeing asphaltic overlays in their communities.

Perception of citizens about peace in the STMA regarding oil and gas exploration and production.

The study found that STMA is relatively peaceful and that the factors that have triggered violent conflicts in other countries with respect to the oil and gas exploration and production are equally present in STMA and the Western Region. These factors are land grabbing, sporadic land disputes, unemployment, high cost of living, poverty amidst abundance of resources.

The study found that there have been pockets of protests in STMA with the recent one occurring on March 30th, 2017. These protests are usually staged without permit from the police which makes it more dangerous and unpredictable. These acts of defiance are to drive home the fact that some communities in STMA who

suffer most from the activities of the oil and gas and other industries do not get the needed social developments and amenities to compensate for their suffering.

The study found that the oil and gas players have contracted the Western Region Coastal Foundation to engage the various stakeholders and communities in the six coastal districts on a dialogue platform where their grievances can be heard and addressed.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

On the security implications of the oil and gas operations on STMA the study came to the conclusion that the oil and gas operations have had a minimal impact on the metropolis in terms of violent conflicts. However, there have been pockets of accidents at sea involving fishermen and supply vessels and the developments occurring at the coastal shore lines like land reclamations and ports expansions which has the potential to spark violent conflicts between affected coastal communities and the stakeholders in the oil and gas sector.

On the expectations from the oil and gas sector, the study came to the conclusion that the people of STMA harbored unrealistic expectations from the oil and gas sector and that even though some of their expectations like getting scholarships, employments and even basic infrastructure like school buildings have been partially met with proceeds from the oil and gas sector, much is still expected to be done. The study therefore concludes that the expectations of majority of the indigenes in STMA have not been met.

On the contributions of the oil and gas sector to the peace in STMA, the study came to the conclusion that the oil and gas operations in STMA has contributed positively to the peace in STMA even though there have been some minor violence in the metropolis concerning poor state of road infrastructure around New-Takoradi and Fijai.

Recommendations

1. The study recommend that GNPC, Tullow, the Ghana Navy, Ghana Police Service, Ghana National Canoe Fishermen Council and the Fisheries Commission should make an effort to strengthen and make more effective the grievance address mechanisms so that issues of accidents at sea and confiscation of fishing nets and equipments can be quickly resolved.
2. The study also recommend that the government of Ghana through the Ghana Ports and Harbors Authority (GPHA), the Ministry of Fisheries and the Fisheries Commission take effort to construct a proper landing beach for artisanal fishermen and rescind on the decision to possibly relocate these fishermen to accommodate the oil and gas sector.
3. The study recommend that the Sekondi-Takoradi Metropolitan Assembly should provide better services delivery and economic opportunities in order to meet the expectations of the citizens of STMA.
4. The study further recommend that Tullow, GNPC, the Jubilee and TEN partners should fit their corporate social responsibilities into the development agenda of STMA and this should also be based on the need's assessment conducted in the various communities which should reflect in the medium-term development plan of

STMA in order to bring synergy between the multinational oil companies and the local government structures.

5. The study further recommend that Tullow, the Jubilee and TEN partners should liaise with relevant governmental agencies in order to gather relevant intelligence on the security implications of their operations and assist the government with relevant logistics to promote positive perceptions of the people on Ghana's oil and gas exploration and production in the Western region and to further promote peaceful co-existence in STMA, Western region and Ghana as a country.

Suggestions for Further Research

There is the need for further research to find out how the oil and gas industry can be used as a tool for national economic development which can serve as a catalyst for the other sectors of the economy. This will ensure that the oil and gas sector become the engine of growth for the Nation and the West African sub region.

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APPENDICES

APPENDIX A

An Interview Guide for Key Informants

This interview guide is designed to solicit respondents view about the oil and gas exploration and production and how it has affected security in STMA. It is also to find out about people's expectations in the oil and gas sector and how oil and gas has affected the peace in STMA.

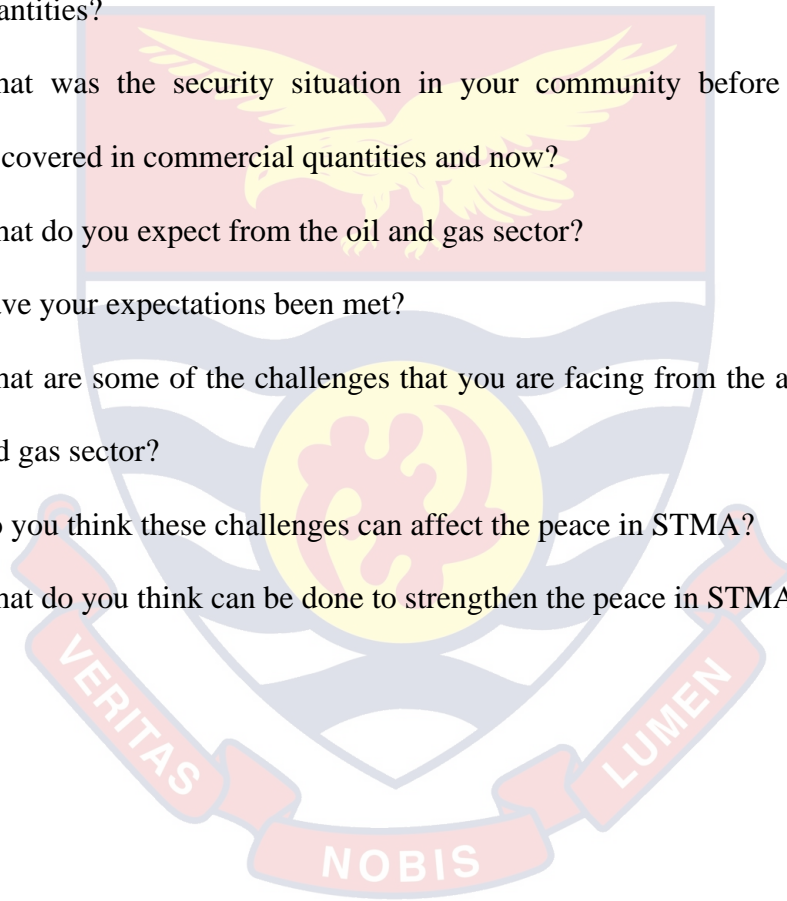
1. Tell me about the oil and gas in the Western Region?
2. Does it have any security implications on STMA? Please explain your answer.
3. Describe how oil and gas operation in Western region can threaten or strengthen the security in the region.
4. Tell me more about your expectations from the oil and gas operations in STMA.
5. Have your expectations been met so far?
6. What do you think can be done to meet your expectations from oil and gas?
7. Tell me about the peace in Western region.
8. How has the peace in Western region improved with the discovery of oil and gas?
9. Describe how oil and gas can lead to improvement or deterioration of the peace in STMA.

APPENDIX B

A Group Discussion Guide for Community Respondents

This focused group discussion is to find out views of community people on the oil and gas exploration and production and its security implication on their lives.

1. Do you think that it is good that Ghana is producing oil and gas in commercial quantities?
2. What was the security situation in your community before oil and gas was discovered in commercial quantities and now?
3. What do you expect from the oil and gas sector?
4. Have your expectations been met?
5. What are some of the challenges that you are facing from the activities of the oil and gas sector?
6. Do you think these challenges can affect the peace in STMA?
7. What do you think can be done to strengthen the peace in STMA?



APPENDIX C

A Documentary Evidence Guide for the Print Media

This documentary evidence guide is designed to capture documentary evidence in the print media which addresses the issues in the specific objectives of the research.

1. Which newspaper captures issues of security in the oil and gas sector?
2. In what context are these issues published?
3. Which newspaper has captured issues of citizen's expectations from the oil and gas sector?
4. In what context are these expectations captured?
5. Which print media captures peace issues related to oil and gas and STMA?
6. In what context are these issues captured?

