Ghana's Emerging Oil and Gas Industry: Livelihood

LINE PIPES Impacts of the Ghana Gas Processing Plant at

Atuabo in Western Region, Ghana



Vincent Kofi Asamaoh

Master's Thesis in Development Geography

Department of Geography

University of Bergen

May 2014

Ghana's Emerging Oil and Gas Industry: Livelihood Impact of the Ghana Gas Processing Plant at Atuabo in Western Region, Ghana



Vincent Kofi Asamoah

Master's Thesis in Development Geography

Department of Geography

University of Bergen

May 2014

DEDICATION

To my mothers Flora Akosua Duboh and Margaret Dede Okoto

ACKNOWLEDGEMENT

I am grateful to all who in diverse ways have contributed to the success of this thesis. First, I am thankful to my supervisor, Ragnhild Overå, for her guidance, support, criticisms and encouragement. They are the reason for this thesis. I want to mention Harvard my discussant, for his insightful comments. Tor Aase, you have been very helpful as well in your comments

Very grateful to the Norwegian Government for the financial support through the Quota Scheme. The Faculty of Social Science, I am grateful for the field work support. I am also grateful to the staff at the Department of Geography, UiB.

To Grace Abena Akese, I cannot thank you enough for finding time out of your very busy schedules to read through the entire work. Your comments have been insightful and critical to the success of this thesis. I am equally thankful to Lucia Kafui Hussey, Nicholas Kofi Deklu, Festus Boamah, Austin Ablo and Joanna Amiteye for contributing in diverse ways towards the success of this work. My colleagues at Department of Geography, you have been wonderful mates during our studies.

I say thank you to the informants at Atuabo for their inputs. In the same way, I am grateful to the Assemblyman of Atuabo for his support. My interpreter and good friends at Atuabo, I am grateful for your contributions. The traditional rulers (Chiefs and Elders), thank you very much of your education on Nzema culture. I appreciate the inputs from the Western Regional Office of the Land Valuation Division of the Lands Commission in Sekondi. I also want to express my gratitude to the Finance Directorate at Ghana Gas and particularly, Linda Akrasi Kotey for her help.

ABSTRACT

The discovery and subsequent production of oil at Ghana's Jubilee fields came with euphoria and heightened expectations of the oil and gas sector to provide quality jobs, revenue for investment in infrastructure, education and health. Many have cautioned for proper management of expectations following the resource curse lessons in African and the failure of Ghana's own mining sector to transform the economy. Mindful of the expectations and cautions, the government decided to build a gas infrastructure at Atuabo, a small coastal community in the Western Region. The community has attracted several oil and gas related businesses including Lonrho's oil servicing port. Consequently, land acquisition for various oil and gas related projects has resulted in loss of farming land by local farmers thus altered their livelihood options.

This study, examines the livelihood impacts of the Ghana Gas Plant at Atuabo. It explores the impacts that the project has had on the farmers who lost their farms to the project. Most particularly, the study asks questions of compensation to the farmers including: to which extent the affected farmers participate in the determination of compensation; whether the compensation package *adequately* compensates for the lost livelihoods; and if the gas project provides new livelihoods for the farmers. To answer the above questions, I use concepts of the livelihood approach as guiding theoretical tool. In addition, I mobilize the participatory and institutional approaches to guide my analysis. The study used a qualitative research methodology. Specifically, I employed interviews, observation, cases studies, category interpretation and thematic analysis to produce, interpret and analyse data to answer the research questions.

The study found that, farmers' involvement in the compensation process ended after farms had been identified and measured. The unfair compensation processes led to farmers feeling inadequately compensated for their lost livelihoods. Moreover, the Ghana Gas project at the construction stage failed to provide the jobs for the farmers. The study thus concludes that, Ghana Gas and it related businesses produced losers and winners. While other segments of the community are benefiting in vary degrees from the project through the capital investments and the Corporate Social Responsibility projects, the farmers have lost their most important capital,

the source of livelihoods without adequate compensation. This failure to adequately compensate the farmers the study shows is partly because of the institutional weaknesses within the state.

TABLE OF CONTENTS

ACKNOWLEDGEMENT	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
CHAPTER ONE: INTRODUCTION TO THE STUDY	1
1.1 Introduction	1
1.2 Statement of the problem	5
1.3 Research questions	7
1.4 The study area	8
1.5 Organization of the Thesis	11
CHAPTER TWO: THEORIES AND CONCEPTS	12
2.0 Introduction	12
2.1 The livelihood concept/approach	12
2.1.2 Livelihood Assets	16
2.1.3 Livelihood Strategies	17
2.1.4 Vulnerability Context	19
2.2 Institutional and Organisational Influences	19
2.2.1Customary land tenure	22
2.3 Participatory approach	23
CHAPTER THREE: METHODOLOGY	29
3.0 Introduction	29
3.1 Ontological paradigm and epistemological underpinnings of the study	29
3.2 Methodological approach	30
3.3. Entering the fieldwork communities	31
3.3.1 Staying at Atuabo: My Statuses and Roles	33
3.4 Oscillation between insider, outsider positional spaces	34

3.5 The sampling of informants	35
3.5.1 Selection of informants	36
3.6 Data production tools	38
3.6.1 Interviews	38
3.6.2 Interviews with key informants	40
3.6.3 Group interview	41
3.6.4 Observations and Informal Discussions	43
3.7 Data Processing, Interpreting/analysing data	45
3.8 Discussions of ethical issues in data production	46
3.8.1 Validity, credibility and transferability	47
3.9 Some Challenges of the study	49
CHAPTER FOUR: LAND TENURE AND EFFECTS OF GHANA GAS PROJECT ON FARMERS	51
4.0 Introduction	51
4.1 Livelihoods at Atuabo	51
4.1.1 Crops cultivated in Atuabo	51
4.1.2 Gender, crops cultivated and size of farm	53
4.2 Land tenure and access to land	53
4.3 Compulsory land acquisition by the state	55
4.4 Different views on farmers involvement in estimation of compensation	57
4.4.1 The takeover and Shocks	59
4.4.2 Compensation for crops	60
4.4.3 Adequacy of Compensation	60
4.4.4 Ghana Gas and Community Relations	66
4.4.5 Effect of Ghana Gas project on farmers livelihoods	67
4.4.6 Effect of the gas project on local businesses	69
4.4.8 Impact on activities not directly dependent on the local environmental resources	72

4.5 Compensation for Crops and Alternative Livelihoods	75
4.6 Fishing, an old livelihood with new importance	78
4.7 Ghana Gas' Alternative Livelihood Programme	79
4.8 The Lonrho Port Project at Atuabo, the representation of hope for the local people	80
CHAPTER FIVE: DISCUSSION OF FINDINGS	84
5.0 Introduction	84
5.1 The role of institutions in granting and denying access to land	84
5.2 Involvement in the determination of compensation	86
5.2.1 Fair and adequacy of compensation	87
5.3 The gas project and the farmers' livelihoods	89
5.4 New Livelihoods at Atuabo	91
5.5 Ghana Gas' Alternative Livelihood Programme	93
5.6 The winners, the losers: the impact of the Ghana Gas Processing Plant	95
CHAPTER SIX: SUMMARY AND CONCLUSION	98
6.0 Introduction	98
6.1 Summary of the research findings	98
6.1.1 Customary institutions and access to land	98
6.1.2 Involvement in the determination of compensation	99
6.1.3 Adequacy of compensation	99
6.1.4 Impact of the Ghana Gas Project on Atuabo	100
6.5 Conclusion	101
BIBLIOGRAPHY/REFERENCES	104
Appendix 1: Interview guide for affected farmers	116
Appendix 2: Interview guide, Ghana Gas	121
Appendix 3: Interview guide for Land Valuation Division of the Lands Commission	122
Appendix 4: Interview Guide for the Traditional Authorities	123
List of tables	
Table 1: Group interviewed in the Ghana Gas Project, Atuabo	36

Table 2: Age and Gender of farmers interviewed	8
Table 3: Crops cultivated by informants	2
Table 4: Incomes of selected coconut farmers and compensation received	2
Table 5: Farms under Ghana Gas (GG)	8
List of Photos	
Photo 1: A Certificate of Farm Ownership (Form) Issued by LVD	5
Photo 2: Auntie B's truck load of Copra	1
Photo 3: Ready Copra for Export to Nigeria	1
Photo 4: Mr Suako and Daughter at his Coconut Oil Extraction Enterprise	8
Photo 5: Suako's Daughter helping him	8
Photo 6: Fishers at Atuabo	
Beach.	
Photo 7: A fish waiting for pricing8	1
Photo 8: Lonrho's Compensation Agreement on a Public Notice Board	1
Photo 9: Kosmos Water Project, Benyin	5
Photo 10: Water Collection Point at Atuabo	5
List of Tables	
Figure 1: DFID Livelihood Framework	5
Figure 2: Arnstein's (1969) Ladder of Participation	4

List of Maps

Map 1: West African Gas Pipeline Project	. 3
Map 2: The Map of the study area in Ellembelle District of the Western Region, Ghana	10



"I think involvement includes many things. Can you imagine going to the market and take somebody's items only to pay the person without asking about the price? That's what happened in this case. What about the fact that we had our crops destroyed? It's not as though they paid us at that time. I think they were just poor in dealing with us", a farmer from Assemnda Suazo.

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.1 Introduction

The discovery of oil in 2007 and subsequent commencement of production in 2010 in Ghana by the Jubilee Partners have opened a chapter on emerging oil and gas industry in the country. Despite the euphoria that surrounded the discovery, many have for cautious optimism. A caution that justifiably arose as a result of a variety of reasons. First, failure of the country's mining and other resource sectors to transform the structure of the economy and lives of the citizens (Gyimah-Boadi and Peprah, 2012). Second, the fear of conflict arising out of mismanagement of expectations and the failure of the oil resource to respond to the needs of the citizen in reference to the resource curse debate. Niger Delta region of Nigeria where demand for development in the oil region has led to bigger than expected conflicts (Frynas, 2001; Ukiwo, 2007) has become the guiding principle. In the ensuing debate, Attafuah (2010) warns that, 'mismanagement of these high expectations can lead to disturbance of social and political order in the country'.

Despite this, there are huge expectations of income from the oil and gas to provide quality jobs, investments in education and health and improve lives in general. Yet, the extent to which revenues from the oil and gas sector can translate to tangible benefits that meet the high expectations of the citizenry depends on proper management backed by strong institutions (Amoako-Tuffour and Owusu-Ayim, 2010) and setups that add value to the resource. The quest for proper management has led to the emergence of some institutions and laws aimed at governing the oil resource for optimal outcome. The National Petroleum Commission was set up to regulate activities within the sector. The Petroleum Revenue Management Bill; the Local Content Bill were passed in to law while the Exploration and Production Bill is at advance stage of being passed. (Ministry of Energy, 2014).

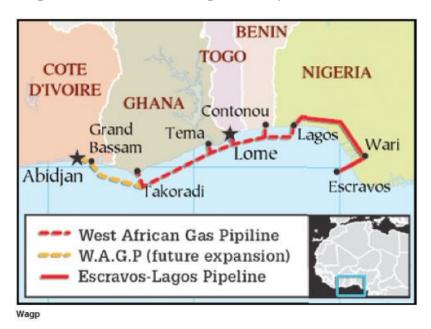
The country's representative in the Jubilee Partnership¹, Ghana National Petroleum Corporation (GNPC) holds a 13% stake in the oil. The other Jubilee partners hold the following in Ghana's oil: Tullow Oil 34.70%; Kosmos Energy 23.49%; Anadarko 23.49%, Sabre Oil & Gas Holding 2.81%; E.O Group 1.75 (Rupp, 2013: 116). The country is expected to earn about USD 1billion annually in the short to medium term from the Jubilee Field alone (Adjaye, 2010). Note that there are other oil fields yet to start production. However, the yearly income of USD 1billion from the oil production will not have a massive impact on the structure of the economy and meet the huge expectations of the people without any serious attempt at value addition.

Ghana's oil fields also contain substantial amount of gas deposits and the country is expected to have a higher stake in the Gas from the subsequent production fields compared to the current 13% in the Jubilee Fields. Consequently, there are many expectations on the gas to play important roles in the country's development. First, it is expected to save the country much needed foreign exchange spent on importation of gas. Secondly, the gas is expected to serve as the base for the country's petrochemical industry. The petrochemical industry is expected to provide much needed quality jobs for the country's unemployed graduates as it sets to industrialize the 'Western Corridor' of the country. Petrochemicals, limestone and clinker industries are expected in the corridor (Ghana Gas, 2012). Thirdly, with the current energy crises in the country, and the unsustainable cost fueling the thermal plants from crude oil (VRA, 2013) and uncertainties surrounding gas from Nigeria under the West African Gas Pipeline Project (WAGPP) (Daily Graphic, 2014), the gas is seen as the needed savour to complement the country's hydro² generation. It is not only expected that the country becomes energy sufficient, but also, a net exporter of power to Togo and Benin (VRA, 2013).

¹ Jubilee Partners are companies that have stake at Ghana's Jubilee Fields. The fields were named after Ghana's 50th Independece Anniversary in 2007, the same year oil was discovered.

² VRA and Independepent power producers now generate about 48% of Ghana's electricity from thermal using Light Crude Oil and Gas from WAGPP (VRA, 2013)

Map 1: West African Gas Pipeline Project



Source: http://piazzadcara.wordpress.com/

To meet the huge expectations of the people, the government made it a point to make good use of the accompanying gas leading to the government's adoption of 'no gas flaring' policy (Ministry of Energy, 2012) from the beginning of the operation of the Jubilee Partners. To achieve this target, the government had set up the Ghana National Gas Development Taskforce to review all aspects of the proposed Gas Commercialization Project. From the recommendation of the task force, Ghana National Gas Company (Ghana Gas) was established in July, 2011 (Ministry of Energy, 2012). The company's task is to build, own and operate natural gas infrastructure to process, transport and market the gas to satisfy high domestic and industrial demand. This aims to ensure that gas associated with the country's oil is harnessed to the fullest (Ministry of Energy, Ghana, 2012).

The first phase of the Gas Infrastructure project, i.e. laying of pipe from the Jubilee Field to the processing plant, the building of the gas processing plant, laying of transporting pipeline from Atuabo to Takoradi is being financed with 850 million dollars from the China Development Bank. Under the agreement, Sinopec (Chinese Petroleum Company) is pre-financing the start of the ongoing work and will be reimbursed from the USD 3 billion China Development Bank loan. USD 850 million of the loan amount has been approved by the parliament of Ghana. Parliament

has also approved USD 150 million for ICT Surveillance and Monitoring Facilities for the Oil and Gas enclave (Ghana Gas, 2012). Part of the first phase (laying of pipeline from the Jubilee Field) started in the 2nd quarter 2011 but the construction the plant started around the last quarter of 2012.

The gas processing plant and its related service industries hold great potentials for job creation. As a result, it appealed to competing traditional councils (Atuabo in Nzema East and Bonyere in Nzema West) backed by their respective local governments (district assemblies). The ensuing maneuvering led to the project being moved from Atuabo in Ellembelle District to Bonyere in Jomoro District before it finally settled at Atuabo for what was described as 'technical reasons' (Ministry of Energy, 2012). The back and forth did not come without much debate in the media and much insinuations from the locals of the two Nzema Traditional Areas, most of whom believed the movement of the project was more political than technical. Subsequently, the government had acquired 300 acres of land at Atuabo for the building of the gas processing plant.

The nature of land the tenure system in Ghana where customary ownership accounts for almost 80% of unused land (Kasanga and Kotey, 2001) necessitates compulsory acquisition of land by the government for most development projects deemed to be of public interest (Larbi et al, 2004: Kotey, 2012). The acquisition in the name of 'national interest' and payment of compensation for government acquired land in Ghana is characterised with abuses, non-payment and sometimes partial payment (Obeng Odoom, 2010; Kotey, 2012) with negative consequences for land tenure security (Deininger, 2003; Kotey, 2012). The emerging oil and gas sector has brought into prominence the issue of 'compulsory land acquisition' and related issues of 'just and fair' compensation. More so when the government is bent on pushing through the project at a high speed.

The construction of the gas processing plant at Atuabo is attracting several related businesses and projects to the area. One such company is Lonrho Ghana. The Lonrho Ports Ghana is a proposed Oil and Gas Servicing Port to be built on the Coast of Atuabo. The Lonrho Port project is to be

undertaken by Lonrho Ghana Ports Limited, and will be known as Ghana Oil and Gas Freeport Service Terminal Complex. It is expected to be in full operation by 2016. It involves the construction of temporary workshops, work areas and material staging areas. It also includes the construction of a harbour protected by a rock breakwater to the west and a rock groin to the east, a dredged approach channel, a turning circle, berth pockets and quays. Other components will be service facilities to be located in the port along the quays to provide support services to the offshore oil and gas industry, including rig repair, waste treatment and management, fabrication and supply facilities. The project will also deliver an airstrip and a helipad to facilitate aircraft and helicopter transportation, as well as other infrastructure like power generation, boreholes, accommodation, offices, a naval base, a hydrocarbon fuel storage area and roads (Daily Graphic, 2013). The company has acquired 514 hectres of land at Atuabo, which the company has agreed to use as the Atuabo community's equity in the project (The Ghanaian Times, 2014; Fieldwork, 2013).

1.2 Statement of the problem

While the emergence of the oil sector especially as it relates to its development impacts on Ghana, and the gas business as it relates to solving the country's power crises, are attracting interest both in the academia and policy circles, (see Adjaye, 2010; Atiffuah, 2010; Obeng-Odoom, 2012) not much is being said about those whose livelihood will be sacrificed for the development of the oil and gas industries

In total, 1498 farmers ranging from food crop farmers to plantation owners from 57 communities in 8 districts, in the Western Region, have been or will be affected by the Integrated Petrochemical Projects. The government has paid GH¢ 5.6 million (US\$ 2.8million) to the affected farmers for lost crops and property while that for the land is expected to be paid later (Ghana Gas, 2012). For the processing plant alone, over 120 farmers have been affected and have received compensation for their lost crops. The amounts paid to the farmers had been estimated by the Land Valuation Division of the Lands Commission, which is the state agency with the vested power to conduct such an activity (Land Commission Act, 2008). An important issue in that regard is the kind of compensation regime the company and the government plan to follow. What constitutes fair and adequate compensation is a matter of contestation (Kotey,

2012). There are often contestations between companies and members of their host communities prompting the passage of Mineral Mining Act, 2006, Act 703 to ensure prompt payment of fair and adequate compensation in the case of compulsory acquisition of property. Of interest to this study is to examine what is compensated and the extent to which the amounts paid to farmers for their lost crops and livelihoods constitute 'fair and adequate compensation'. The fairness in this sense implies the amount agreed by the parties for the destroyed crops while adequate suggests the degree to which compensation packages represent the true value of what is lost.

Moreover, the fact that giving money alone to affected persons may not constitute fair and adequate compensation means that my interest will be to examine what in the farmers view constitute fair, appropriate and adequate compensation and how these expectations are being met. In line with this, the study will examine how compensation paid enhances the livelihood of the affected farmers and whether the compensation regime adopted will improve their livelihoods. In short, the study will attempt to determine the extent to which the compensation regime adopted in the project adequately compensates for the lost livelihoods.

This study also aims at going beyond compensation payment to examine whether the farmers find new livelihood opportunities through the Ghana Gas project and if the new livelihood opportunities will diversify the livelihoods of the farmers through creation of jobs in the paid formal labour market or the informal economy, and if such jobs provide sustainable livelihood To enhance livelihoods, Ghana Gas has proposed an Alternative Livelihood Programme (ALIPs). First, it will be of interest to examine levels of involvement of the affected residents and the traditional authorities in the design and implementation of any livelihood programme. Second, is to examine how the local resources of the people are considered in the design and also how people adjust to their changing livelihoods will be interesting to study as well.

Apart from Ghana Gas, there are other companies acquiring land at Atuabo for investments as Public Private Partnership (PPP) or as wholly private entities. One of such companies is Lonrho Ports Ghana Limited. Though, not the main focus of this study, the processes Lonrho Ports adopts in the estimation of values of crops may provide useful insights into how Ghana Gas and

Lonrho Ports dealt with the issues of compensation, alternative livelihood projects and community relations. A related concern is how the local population benefits at various stages of the projects, since oil and gas industry requires highly skilled workers and how the local population's inability to find work provides grounds for accusation of the gas company of bad community relations. It is will be interesting to explore whether livelihoods programmes extend to training of residents to participate in the oil and gas industry. I will therefore the compensation processes and it related issues.

Too often, compulsory acquisition and sales of land produces winners (chiefs and other land owners) who are usually the custodians of land for the people and losers (usually farmers who depend on the land for their livelihoods) (Ubink, 2007; Larbi, 2008). Chiefs receive compensation for land while farmers, who are not the owners of the land on which they farm (though a small number farmers own their own land), receive compensation for lost crops and property on the land. This phenomenon creates tension in communities between chiefs and subjects with consequences for the land acquiring body and their businesses. At Atuabo, where no outright sale of land policy has been adopted, the study investigates how the traditional authorities in the area help in the provision of alternative livelihoods to affected farmers.

1.3 Research questions

The broad aim of the study is examine the impacts of the Atauabo Gas Project on the livelihoods of local residents. Specifically, the study uses the following research questions as a guide:

- To which extent are the farmers who lost land to the project involved in decisions about determination of compensation?
- Can the compensation regime adopted by Ghana Gas adequately compensate for the lost livelihoods?
- In which ways does the gas project impact on livelihood of those who lost land; are they able to find new livelihoods?

Finding answers to these questions require analytical approaches to livelihoods, institutions and participation. Scholars such as Arnstein (1969), Pretty (1995), and Cornwall (2000, 2008) have

advocated for participatory approaches for understanding levels and reasons behind participation. Chamber and Conway (1992), Scoones (1998, 2009), Carney (1998) de Haan and Zoomers (2005), Bebbington (1999) help in the understanding of rural livelihood as it relates to shocks, assets, institutional influence and livelihood strategies. Also useful to the study is the institutional approach (North, 1990; Agrawal and Gibson, 1999). These distinct but related approaches are therefore important in understanding livelihood impact of the Ghana Gas project on the farmers in the study area. I discussed these approaches in chapter two.

1.4 The study area – Atuabo, Ellembelle District, Western Region

Atuabo is a coastal town in Ellembelle District of the Western Region, Ghana. The district is located on the southern part of the region between longitudes 2°05'W and 2°35'W and latitude 4°40N and 5°20N (Ellembelle District Assembly, 2009). It shares boundaries with the Jomoro District to the West, Wassa Amenfi West District to the North, Nzema East Municipal to the South – East, Tarkwa – Nsuaem Municipal to the East and 70 km stretch of sandy beaches to the south. It covers a total area of about 1,468 Square kilometers, which constitutes about 9.8% Percent of the total land mass of the Western Region (See Map on page 10).

The district is within the semi-equatorial climatic zone and experiences all-year round rainfall with annual mean of 1700 mm (ibid.). There are two seasons the rainy season and the dry season. The highest rainfall occurs between May and August and relatively dry periods between November and February (Ibid). The average monthly temperature is 29°C. The high rainfall in the area explains the presence of many rivers some of which made part of the land marshy and unsuitable for cultivation. Land for cultivation is therefore a scarce commodity in the study area.

The combination of high rainfall, temperature and humidity support semi-deciduous forest vegetation in the northern section of the district, but the southern part is now secondary vegetation due to human activities. The coastal stretch is a mixture of savanna and secondary forest with relatively fertile soil which suffers leaching sometimes. It supports the cultivation of many crops, including food crops and cash crops such as cocoa, oil palm, coconut, and sugarcane. In the study communities, however, coconut is the main cash crop, but oil palm is also very important. Groundnut and pineapple cultivation as a non-traditional cash crop has

gained currency in the study communities. The major food crops grown include cassava, yam, maize, paddy rice, beans, cocoyam, and vegetables. Prior to the discovery and commencement of oil production in Ghana, the land use pattern has been dominated by agricultural use with cash crops such as cocoa and coffee, in the northern part of the district and coconut is the main cash crop in the coastal strip, which include the area of study in this research.

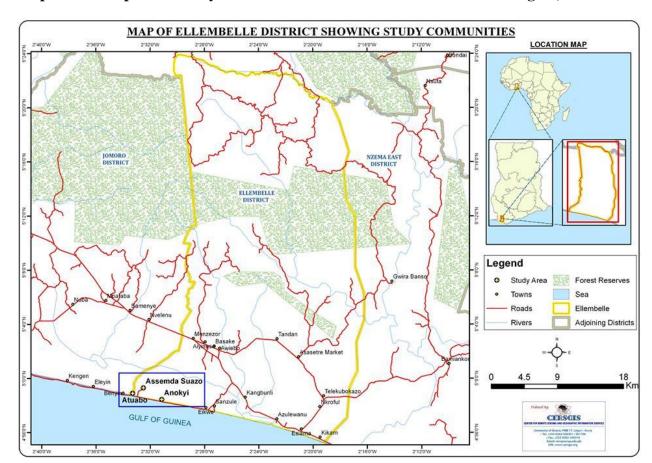
Even though I make reference to Anokyi and Assemnda Sauzo in the study, Atuabo is the main study area unless otherwise stated. The other two communities are under the Atuabo paramount chief (*Omanhene*) but have their own chiefs who are subordinates to the *Omanhene*. The *Omanhene* of Atuabo is therefore the owner of the land and reference is made to the gas plant as Ghana Gas, at Atuabo. I will therefore make it clear when referring to the two other communities for any clarification.

The district's population stood 87,501 in the 2010 Population and Housing Census (PHC) (Ghana Statistical Service (GSS), 2013). The district is basically rural with only 20.6% of the inhabitant leaving in urban areas, a rate far below the regional average of 42.4% (ibid: 32)³. The population structure is in line with rest of the country. 39.4% of the population in the district is below 15 years, 55.6% between 15 and 64 while 4.9% are above 65. There is therefore high dependency⁴ rate with 79.6% depending on the 20.4% of active work force (ibid: 35). Agriculture (farming and fishing) employs about 70% of the active population in the district while significant percentage of the remaining 30% work in the private informal economy (ibid: 115-118).

_

³ A place is described as urban if its population is at least 5000 people (GSS, 2013)

⁴ The dependency ratio is a measure of the dependent population made up of those below 15 years and 65 years and older, to those in the "economically productive" ages of 15-64 years. This ratio is used to measure the pressure or burden borne by those in the "economically productive" ages (GSS, 2013)



Map 2: The Map of the study area in Ellembelle District of the Western Region, Ghana

Atuabo, is one of the coastal communities in the district and the historical relics of a trading post and colonial houses provide a constant reminder of its colonial past, a past that explains the community's early incorporation into the mercantile trade through the growing of coconut. Other study communities include Anokyi and Assemnda Suazo (see Map 2 on page 10) which are less than 1km away from Atuabo. According to oral history, early settlers came across the *Adwea* trees under which they rested most of the time. It continued that other members of the settling group who were behind called their colleagues to inquire of their whereabout. The response was *Adweabo* which translate as 'under the Adwea tree' because *bo* translates as under. The name therefore was to be *Adweabo* (under the *Adwea* tree) but has over the years come to be known as Atuabo. Its early existence explains its power base in the traditional system as the seat of the Eastern Nzema Traditional Council. Despite its coastal status, farming is the main occupation of

the inhabitants where coconut is the main cash crop and cassava as the main food crops. Fishing is done on a very small scale primarily during the fishing season (August –October). Extracting vegetable oil from coconut is a trade handed down from generations in the area.

1.5 Organization of the Thesis

The thesis is organised into six chapters. Chapter One looks at the introduction to the study, the background to the Ghana Gas Project, the statement of the research problems and theoretical questions. It concludes with the background to the study area. Chapter Two follows to treat the theoretical and conceptual frameworks. Within this chapter, I will present the relevant concepts of the livelihood framework. I further present institutional and organizational influences to give meaning to tenure and some of the Nzema ideas about life. I finally present participatory frameworks by treating two typologies as proposed by Arnstein (1969) and Pretty (1995). In Chapter Three, I unpack ontological and epistemological underpinnings of the study. Also, I explain the methods used in producing and analyzing data for the study and challenges faced in the data production. It also treats the topics of positionalities of the researcher and in this case the interpreter, validity and transferability. I finally discuss some challenges in doing this research. Chapter Four talks about the major findings of the study. Here, I look at the land acquisition processes, participation in determination of compensation, adequacy of compensation and new livelihood strategies that play out in the farmers' attempt to gain new livelihoods. In Chapter Five, I discuss the findings in light of the three approaches (livelihood, institutional and participatory) I use in the study. Chapter Six summarises the major findings, draws conclusions and provides recommendations based on the finding of the study.

CHAPTER TWO

THEORIES AND CONCEPTS

2.0 Introduction

Theories and concepts help in structuring and guiding the way knowledge is produced (Reeves et al, 2008). This study draws on various concepts of the sustainable livelihoods approach in addressing its objective which has to do with exploring the livelihood impacts of the Ghana Gas project in Atuabo. Yet, not all the issues covered in this study can be dealt with using the livelihood approach as it has been criticized for not treating the issues of power and institutional roles in livelihoods of people to the needed depth (Ellis, 2000). Consequently, I will complement the livelihood approach with the institutional and participatory approaches. Recall that issues of compulsory land acquisition by the Ghana government for the Ghana Gas project for which compensation must be paid (both property/crops and the land) is paramount to the study. Employing the participatory approach, I will look at the extent to which farmers and traditional authorities are involved in the project. Furthermore, because the Nzema norms and rules regarding access to land is important to the study, I will mobilize the institutional approach to examine issues of traditional practices and arrangement regarding the use of resource (land tenure). In what follows, I unpack in detail how each concept informs this study.

2.1 The livelihood concept/approach

The underlining ideas about development and its related concept of poverty have been changing constantly over the past centuries (Potter et al, 2008). This development has led to a number of development trajectories (ibid. 81), each development thinking dominates the debate at a particular era. The neo-Marxism, dominated the development thinking in the 1980s with emphasis on inequalities in individual access to assets and power and its successor actor – oriented perspectives which agrees with its predecessor, but argues that people are not passive but active participants in their lives (Haan & Zoomers, 2005). However, in the late 1980s and early 1990s, the neo-Marxism argument has lost its steam following the shift of attention to environmental sustainability following the publication of the Brudtland Report, 'Our Common Future'. Prior to that, de Haan and Zoomers (2005) note that, liberalization policies were at the forefront of the development discourse where the market is seen as the panacea for reducing

poverty. The earlier failure to identify and deal with issues of access to productive assets by the poor and the social relationships mediating this access are – the very issues the sustainable livelihood approach soughtt to bring into prominence making it appealing compared to the existing neo Marxian and market frameworks. Appendini (2001in Haan and Zoomers, 2005: 30) reminds us that, the central object of the livelihood approach is 'to search for more effective methods to support people and communities in ways that are more meaningful to their daily lives and needs, as opposed to ready-made interventionist instruments'. His assertion depicts a shift from pessimism usually associated with neo-Marxian studies to optimism in the affairs of poor people and a move from structural dominance to actor oriented thinking (Long, 2001).

Robert Chambers and Gordon Conway (1992) have been accredited with the current waves of the livelihood debates. Their work, however, drew heavily on earlier works by Amartya Sen (1981) 'entitlement approach' and the Brundtland Report (WCED, 1987). Since the publication of Chambers and Conway's 'Sustainable Rural Livelihoods', there have been a plethora of scholarly works on the framework (see Conway, 1998; Scoones, 1998, 2009; Bebbington, 1999; de Haan and Zoomers, 2003, 2005) and many others. These scholars have contributed to the shaping of the approach by stressing on diverse concepts within it. The contributions noted, de Haan and Zoomers (2005: 30) stressed that, the general understanding of the lives of the poor people has been inspired by Gordon Conway ad Robert Chambers. As a result of the scholarly works, which makes it impossible to review, I am focusing on the works of Chambers and Conway (1992), Scoones (1998, 2009), de Haan and Zoomers (2003, 2005). I will however make references to other scholars when necessary.

Conway and Robert Chambers (1992) who in an Institute of Development Studies (IDS) discussion paper put livelihoods approach at the centre stage of the development discourse defined the sustainable livelihood approach as:

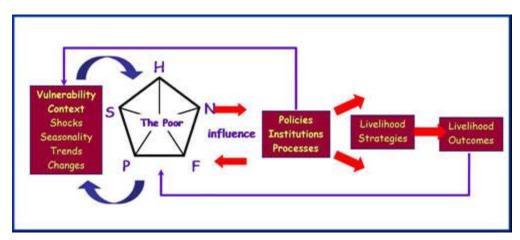
"A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living: a livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits

to other livelihoods at the local and global levels and in the short and long term" (Chamber and Conway, 1992: 7-8).

But scholars such as Arce (2003; 202) cited in de Haan and Zoomers, (2005:30) argues that, sustainability was not the focus of Chambers and Conway's work but rather security and income. Similarly, due Haan and Zoomers (2005) also note those intentions notwithstanding, issues of the environment were more dominating in the livelihood discussions in the 1990s. But, it is the adaptation of Chambers and Conway's definition by international development organisations such as UNDP, Oxfam and CARE and Society for International Development (SID) that put the definition into operation (Solesbury, 2003a). Amalric (2008) however, notes that even at that stage, the adopters of the livelihood concept focused more on organizations than on households or individuals and on political arena more than on making a living.

The sustainable livelihood approach (SLA) still has utility. Its contribution on participatory approach, environmental considerations and entitlements of the poor made it a useful tool for mainstream intervention in social change. Further, it made enormous efforts in its operationalisation to bring to the fore the need to look beyond profit maximization and that people for whom development programmes/projects are meant should be actively engaged in every stage of such programmes. The rather optimistic approach to development by recognizing varieties of resources which are both tangible and intangible (Haan and Zoomers, 2005). Some of the concepts of the approach such as livelihood assets, shocks, institutions and organizational assets, as well as power relation as expounded by Scoones (1998), Bebbington (1999), Carney (1998) are very relevant which I bring to bear in exploring livelihood impacts of the Ghana Gas project at Atuabo.

Figure 1: DFID Livelihood Framework



Source (Scoones, 1998)

- **H Human capital**: the skills, knowledge, ability to labour and good health important to the ability to pursue different livelihood strategies.
- **P Physical capital**: the basic infrastructure (transport, shelter, water, energy and communications) and the production equipment and means that enable people to pursue livelihoods;
- **S Social capital**: the social resources (networks, membership of groups, relationships of trust, access to wider institutions of society) upon which people draw in pursuit of livelihoods. A membership of a lineage is important of laying claim to land ownership.
- **F Financial capital**: the financial resources which are available to people (whether savings, supplies of credit or regular remittances or pensions) and which provide them with different livelihood options. Earnings from compensation, wages from Sinopec for those who have been employed formed important financial asset.
- **N Natural capital**: the natural resource stocks from which resource flows useful for livelihoods are derived (e.g. land, water, wildlife, biodiversity, environmental resources). At the study area, land for farming, coconut trees inherited, the sea, rivers are some of the most important natural resources.

Adapted from DFID (1999).

2.1.2 Livelihood Assets

Assets are basically resources individuals and households deploy in the pursuit of their livelihood. Carney (1998), asserts that, asset includes material and social resource stocks, thereby defining assets as capital, which is not limited to materials but also social. Within the livelihood framework, five capitals are identified; physical, social, natural, financial, and human (ibid: 6; see capitals in Fig 2.1). Assets, otherwise known as capitals (Bebbington, 1999) is one of the most important elements within the SLF. Its importance has led to such emphasis placed on it. It is this prominence that draws a sharp criticism from some scholars for the framework being limited to assets to the detriment of other important elements within the framework (Scoones, 1998; Canney, 1998; De Haan and Zoomers, 2005)

Capitals command multiple benefits. A natural capital as land produces other forms of capital. While land signifies wealth and sometimes collateral, financial capital can greatly add value to human resources which in turn generates financial capital and enhances social capital as well. In the same way, social capital facilitates access to natural capital leading to production of financial capital later. Physical capital such as infrastructure (roads, schools, treated water, etc.) enhance livelihoods. The physical assets mentioned facilitate access to life enhancing assets. For examples, roads facilitate access to health facilities, even though physical accessibility is not the only important variable in accessing health and market, it is still very important. Scoones (1998) notes that people's livelihoods depend on the combinations of different assets. Bebbington (1999), Scoones (1998) and Carney (1998) have expanded access and placed more emphasis on it rather than on the asset themselves. They view access to one form of capital as a means of accessing other forms of capital.

Bebbington (1999) argues persuasively for the broadening of the conceptualization of access to capital in situations where people's livelihoods changed from directly dependent on environmental resources to a range of other livelihood assets (Bebbington, 1999: 2022). He point is particularly important in my study because farmers who lost land will have to engage in livelihoods other than farming which takes them away from depending directly on the land. This also implies that what becomes the most important asset is dynamic through space and time. In stressing the importance of access and social capital, he criticises the static value usually given

asset as a means of making a living. He notes that 'assets are not simply resources that people use in building livelihoods: they are assets that give the capability to be and act' (ibid.: 2022). He explained that access and social capital are concepts for analysing the relationships and transactions between the members of a rural household and other actors-relationships mediated by the logics of the state, the market and civil society. As rural people try and access resources they do so 'through engaging in relationships with other actors who are both present, but more often than not, usually absent from the day-to- day activities of rural people' (ibid.).

Access to livelihood assets (asset portfolios) can however be reduced or enhanced depending on whether access to such resources have been limited or totally denied due to several factors. It can however be enhanced when investments are made or structured are transformed from people who hitherto were denied access are granted the right to the use of such resources for their livelihoods (Scoones, 1998; Swift, 2006). Limited access or total denial of access to assets can lead to vulnerability of livelihoods while investment in any of the assets can greatly enhance livelihoods. Swift (2006) argues that investments are assets in themselves and can be in many forms, including infrastructure, farms, skills, children's education or social relations. Chambers and Conway (1992) further note proper investment enhances values of assets and capabilities, and serves a responsive mechanism against future stress and shocks. The situation of Ghana Gas in Atuabo and consequent location of oil and gas services industries in the area will necessitate the provision of certain facilities such as roads, hospitals, and water infrastructure. I will bring into the discussion the extent to which these investments enhance the life of the farmers and people of Atuabo.

2.1.3 Livelihood Strategies

Livelihood strategies explain various ways individuals, households and groups combine their assets to achieve livelihoods (Scoones, 1998). In the conception of livelihood strategies within the livelihood framework, Scoones (1998) outlines three broad strategies. The first strategy is agriculture intensification and extensification, where farmers either invest in their farms to increase output on the same plot or increase output by increasing the land under cultivation. The second strategy is livelihood diversification. Here, farmers usually combine assets to engage in a range of off-farm ventures to secure their livelihoods. The third strategy is migration where

people usually move either temporally or permanently and seek livelihoods in their new destination. Bebbington is implicitly critical of Scoones' conception of livelihood strategies is that, it concentrates on farmers and people who depend on natural capital for livelihoods to the detriment of others who do not. Bebbington (1999) notes that while farmers invest effort and income in their farms, non-farm workers in rural settings also invest in skills and businesses to improve their livelihoods.

To the extent that compensation paid to farmers constitute financial capital, which can be invested in diversifying of livelihood in non-farm activities or a mean to accessing natural land [natural capital] to continue on-farm livelihoods. Scoones (1998: 9) notes that livelihood diversification aims at "coping with temporary adversity or more permanent adaptation of livelihood activities, when other options are failing to provide a livelihood". Perhaps, it is the adaptation Scoones notes that prompted Ellis (2000) to point out that, 'the poor tends to more than anyone else engage in complex and multiple livelihood activities in making a living'. However, engaging in multiple livelihood activities is not a guarantee of higher incomes and better livelihoods (de Haan and Zoomers, 2005) but, the extent to which diversified livelihoods can succeed depends on a number of factors including the skill level, and health status. The conceptualisation of livelihood diversification above does not capture fully what the poor everywhere does. Ellis (2000) usage of 'complex and multiple livelihood' to describe diversification broadened the scope, but at the same time failed to specify what it meant in specified situations. For example, among Ghanaian farmers, diversification does not only imply engaging different livelihood activities, but also, planting a variety of crops on the same farm. These crops have different time of maturity and nutrient needs and crops. Yaro (2004) asserts that, 'providing against shocks, maybe more important to a farmer than increasing income through mono cropping'. This study specifically, examines the extent to which the compensation processes identifies the diversities in crops and compensate them appropriately. Secondly, how such compensations provide a means to diversify livelihoods at individual, household and community levels.

2.1.4 Vulnerability Context

The term vulnerability has many facets and faces as it is used in many fields (Wisner, 2009), including development studies, disaster studies, educational, public health studies. However, Robert Chamber (1983) popularized the term in his book, Rural Development: Putting the Last First where he highlights the fivefold analysis of the 'deprivation trap'. Carney (1998) in conceptualizing livelihood vulnerability in which he builds on Scoones (1998) conception notes three important elements: shocks; trends and seasonality. The conception of Shocks is the most important to this study for a number of reasons. First appropriation of land from the farmers can be likened to something occurring suddenly, an explanation that fits into Scoones conception of the term. The assertion of the two scholars that factors influencing vulnerability are external to the local people is important. Its vitality to my work lies in exploring how the decision for land acquisition, how much crops worth are all external to the farmers in the study communities and yet, they have to leave with the outcome. Rakodi (2002: 14) makes it explicit when he reasoned that policies, 'the interactions of processes and institutions are factors that affect the vulnerability of individuals, households and communities'. In this case, the policy of the state to build a gas plant and institutional processes leading to the acquisition of the land belonging to the farmers are important. The extent to which individuals, households and communities withstand vulnerability, however, depends on the capabilities and asset to deal with vulnerable situations. People who have other capital such as social networks are better able to cope with such shocks since they are able to fall on them to obtain land or any other form of help. The extent to which the compensation regime and alternative livelihood programmes provides buffers against shocks is explored through the vulnerability context. Compulsory land acquisition certainly falls into 'infrequent, unpredictable disturbance with the immediate impact' explanation given by Scoones (1998:7).

2.2 Institutional and Organisational Influences

Earlier works in sustainable livelihood studies have been criticized for not paying attention to the roles of institutions, organizations and power relations. Since then, scholars working within the arena (Scoones, 1998: 11-13; Carney, 1998: 8-9; Ellis, 2000: 38; De Haan & Zoomers, 2005: 34-37) have given these elements within the SLA considerable attention in exploring the role of institutional and organisational influence in access to and control over livelihood resources.

Following Giddens (1979), Scoones (1998: 12-13) defines institutions as 'regularised practices (or patterns of behaviour) structured by rules and norms of society which have persistent and widespread use'. He recognises the dynamic, varied and contentious nature of institutions when he states that 'institutions may thus be formal and informal, often fluid and ambiguous, and usually subject to interpretations by different actors' (ibid.: 12). Ellis (2000) makes this even clearer by distinguishing the often put together terms of social relations, institutions and organizations. He notes that 'social relations comprise gender, caste, class, age, ethnicity, and religion while institutions are made of both formal rules and conventions and informal codes of behaviour (including law, property rights and markets)'. Organizations, he contends, are groups of individuals, bound by certain aims and objectives and may include government agencies, association, private entities and non-governmental organizations (ibid: 38). North (1990) also made a similar distinction between institutions and organization when he refers to institutions as the 'rule of the game' and organizations as 'the players'. However, de Haan and Zoomers (2005) and Scoones (2009) want institutions to be seen more than just 'the rule of the game' but as 'something embedded with power relations through which stakeholders make claims and contestations for livelihood assets'.

The utility of institutional processes lies with the understanding it brings to the approach in identification of opportunities and restrictions; that is to say how institutions enable access and at the same time deny access to resources. Scoones (1998: 12-13) broadens the argument of power relations to cover the international arena and also recognises the complexities of such relations at different levels. Similarly, de Haan and Zoomers (2005: 36-37) explore the topic and examined power relations from gender and agency-structure perspectives. They note that, the mediating forces do not only determine what people can and cannot do, but through such processes, 'institutions are created and recreated' (ibid.: 36). In this study, both formal and informal institutions and structures such as the rules governing membership of a lineage, the land tenure arrangements and Nzema cultural norms regarding how people access livelihood resources. It is worth noting how through the same institutions such as, the laws allowing the state to compulsory acquire land for projects of 'national interest' farmers' access to productive resources (land in this case) is truncated. The very ways people have gained and lost access to

assets and are all negotiated within the informal (customary laws) formal (state laws) institutions (Scoones, 2009; Larbi, 2008). The Nzema concept of land as nourisher and the role the traditional leaders play to ensure nourishment of the people (Pavanello, 1995) is vital in understanding how social institutions and relations are important in accessing assets for livelihoods.

The institution of chieftaincy plays an important role in the lives of people in general. Consequently, chieftaincy plays out in and in Ghana Gas land acquisition, compensation and the expected roles towards achieving alternative livelihoods makes it indispensable. From the discussions on institutions, it is apparent the rules that guide social behaviours and/or practices may be written or unwritten (Holt-Jensen, 2009: 161). This thus distinguishes between formal and informal institutions in one way. Whereas formal laws of the state or written rules of an organization are classified as formal institutions, the unwritten norms and rules of governing local organizations and communities are classified as informal institutions (Holt-Jensen, 2009: 161). It is the latter informal institutions category, customary institutions (sometimes also called traditional institutions) such as chieftaincy fall.

The chieftaincy institution is one of the most important customary institutions in Ghana. Fortes and Evans-Pritchard (1940) cited in Nukunya (2003: 67) categorized the customary institutions into centralised and non-centralised. Under the centralized system, societies recognise the position and the authority of chiefs/kings as rulers over a clearly delimited area, whereas, in non-centralized societies are those societies, lineages or small kin groups provide the largest political units (ibid.). Most ethnic groups in the southern Ghana including the Akan, Ga-Adamgme and Ewe have centralized customary systems. The Nzema which is the main ethnic group in the study area are part of the larger Akan group made of seven acephalous, dispersed matrilineal clans found in South-Western Ghana (Grottanelli, 1988: 3-4). Like other Akan groups, "every person by birth is a member of his or her mother's lineage" (ibid.: 3).

Within this lineage social unit of the people trace their genealogical kinship relationships to others within the same lineage. This is important since land access (an important natural asset) is

vested in the lineage. The head of each lineage (*abusua kpanyinli*) is usually a male descendant from the matrilineal lineage and is seen as the leading representative of the lineage (he is not necessarily the eldest of the lineage). Among other things, he presides over legal issues, marriages, funerals, succession, and, importantly, the allotment of land to the lineage members. He and defends the lineage in all land arbitrations (Grottanelli, 1988; Pavenello, 1995).

The chieftaincy institution has persisted even though it has often been predicted to wither (Boafo-Arthur, 2003). Boafo-Arthur notes that, post-colonial governments have attempted to truncate the powers of the institution. The recognition of the chieftaincy institution in the 1992 constitution and the creation of the national and the regional houses of chiefs have actually strengthened the institutions (see Articles 271 and 274 of the 1992 Constitution of Ghana). The constitution also provides for the customary rights of chiefs and their right to royalties. Thus, there are instances where chiefs wield much economic power as a result of the natural resources in their jurisdiction (traditional area) (-Amanor, 2008: 55). Amanor also stressed on the governance role of chiefs as part of the re-emergence of the institution in the governance structure of the country (ibid) in reference to the important role chiefs played in governance before the colonial rule and during the colonial rule under the indirect rule system adopted by the British.

2.2.1Customary land tenure

Land in Ghana is predominantly owned by customary authorities (stool, skins, clans and families). This system of landholding forms about 78% of land ownership in the country with the state owning about 20% and the remaining, 2% owned jointly by the state and customary authorities (split ownership) (Larbi, 2008). Land management is therefore governed by both customary and common laws co-existing (Kasanga and Kotey, 2001). The ownership and management structure therefore has a bearing on access to land and by extension livelihood. The use of customary land and its management do not connote universality since the land tenure system varies spatio-temporally. In Southern Ghana, among the Ewes, and the Ga-Adangme, where a patrilineal system of inheritance ascension operates, land is usually vested in families (Agbosu et al. 2007: 31) whereas amongst the Akan group who have matrilineal inheritance, land is usually vested in stools even though families can sometimes own land (Ubink and Quan

2008: 199). The position of chief as the occupant of the stool is that of the custodian of the land in trust for the people (Agbosu et al. 2007: 32). It means, all subject of the chief have the right to the land for economic activities.

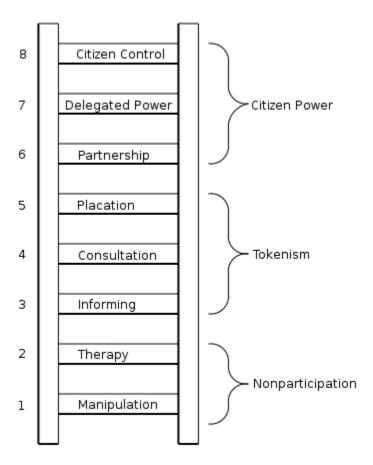
The institutional concept becomes relevance in this study for the following reasons. First, it provides insight into the concept of land ownership, how people get asset to land and the role of chiefs in the life of their people. Second, it shapes the understanding of who is entitled to compensation (compensation for crops and land) and consequently, the role chiefs play in finding alternative livelihood for his people through mediating with other organisations.

2.3 Participatory approach

What actually represents participation is difficult to explain due to the widespread usage of the terminology in the development discourse by varied institution ranging from NGOs, public and international organisations (Conwall, 2008; Arnstein, 1969). Cornwall (2008: 269) states that "participation can be used to evoke – and to signify – almost anything that involves people. As such, it can easily be reframed to meet almost any demand made of it. So many claims to 'doing participation' are now made that the term has become mired in a morass of competing referents". In the rural development discourse, however, Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRR) are some of the concepts used to induce development in rural settings (Chambers, 1994). Participatory Poverty Assessment was also introduced by the World Bank later. In this study, the participatory approach provides a framework with which participation of farmers and traditional authorities in the determination of compensation and development of an alternative livelihood programme of Ghana Gas are assessed.

Following that participation is an 'infinitely malleable concept' (Cornwall, 2008: 269), and many scholars have written about it, I present two typologies of participation; Arnstein's 'ladder of participation' and Pretty's participation from the giver to provide some clarity into the rather unclear concept. Though there are many typologies of participation, an early and one of the best known in the development arena is that of Arnstein's (1969) 'ladder of participation'. Developed in the late 1960s it still has relevance to current debates.

Figure 2: Arnstein's (1969) Ladder of Participation



At the bottom of the ladder are manipulation and therapy, which have been put into the category of non-participation. According to Arnstein, the aim of those giving the participation is actually to deny people at the grassroots participation and rather for the holders of power to 'educate' and 'cure' the participants. It manifests itself in placing people in rubberstamped committees creating illusions in the minds of the people that they have been involved. At the third and fourth levels (informing and consultation), the local people here and can be heard, but they lack the power to ensure that their voices are implemented in whatever they have been informed about. In fact, such voices are restricted. Informing is important, but in this case, there is always an emphasis on one-way flow of information, usually from the top to the bottom. Level five is what Arnstein refers to as the higher level of tokenism where the locals are given the chance to advice, but the powerful still decide whether such pieces of advice amount to anything. Arnstein however, notes

that, the extent to which locals can make use of placation depend on levels of organization within communities to demand for their priorities.

Beyond the levels discussed earlier, partnership (level six) allows the grassroots people to negotiate and engage the power wielders. At the last two levels (delegated power and citizens control), the locals have a majority in decision making and managerial power. At this stage, several things are important if communities are to make good use of their opportunities. First is the existence of a local power base and also financial resources for leaders to be paid for their time. That is to say, the community should be able to pay its leaders who represent them to be able to devote more time to achieve the collective interests.

Arnstein's (1969) typology has several limitations. First, it portrays homogeneity within what it calls 'the powerful' and 'the locals' or 'the have nots'. The power wielders are usually not from the same institutions and have different personalities and organizational characteristics. In the same way, the people at the grassroots are not homogeneous (Agrawal and Gibson, 1999), as differences exist in power relations, class, gender, and other differences. Emphasizing differences among people, Cornwall (2008) notes that failure to recognise the dynamism in people's social networks, power relations, and institutions and dimensions of the differences that matters, development efforts will be an illusion. She is concerned that, the categories into which people are put usually, by development agencies, i.e. 'the poor', 'women and men', do not tell the full story and that different categorizations may mean much more to the people being classified. Agrawal and Gibson (2001: 15) warn against regarding communities as a homogenous entity since there are "social and economic stratification within communities". Their admonitions however, do not rule out existence of similarity or at least cooperation. Similarly, Leach et al. (1999) also raised an important point when they state that communities are not static and undifferentiated as it often looks and that, multiples identities and conflict over claims over resources exist. These authors assertion only add to the concerns over Arnstein's categorization of communities into 'the powerful' and the 'locals' or 'the have nots'

Again, Arnstein's (1969) eight rungs typology is an oversimplification of issues as there could be several rungs of participation. Arnstein was not oblivious of that fact and notes that her typology is to provide a framework for putting the infinite concept into some perspective so as to make sense out of it. There are several competing typologies such as Pretty's (1995) typology of participation and White's (1996) typology which builds on Arstein's typology. Indeed, Arnstein's framework provides such utility. While most typologies look at participation from the perspectives of those giving it, Arnstein, looks at the concept from the perspectives of the receiver. This is helpful for those receiving who can able to tell if they actually participated and explain the level of their participation as actually received, but not as just claimed to have been given (Cornwall, 2008).

There are different stakeholders in the Ghana Gas project (the land losing farmers, the community, the traditional authorities, LVD, Ghana Gas) and these stakeholders have their own conceptualization of participation. This makes it inadequate to explore the topic through Arnstein's (1969) ladder of participation alone, which looks at the concept of participation from the receiver's perspective. I therefore explore Pretty's (1995) typology which actually explores participation from the perspective of the implementers/givers.

Her approach is equally 'normative' according to Cornwall (2008) from the worse to the best form of participation. The first level in Pretty's typology is 'manipulation', which she regards as a pretense where people just represent on boards and committees without any powers. Close to that is what she calls, passive participation where people are told what has been decided. The information shared belongs to the external body/body implementing participation. Closely following is consultation where the local people are consulted mainly through question. The implementing officers are under no obligation or whatsoever to work with any view expressed by the locals. Pretty identify the next stage as 'participation for material incentives'. People participate because of incentives they will get and such participation ends when incentive flow stops. At the 5th stage is what she calls, 'functional participation' where external agencies [implementers] only see participation as a means to achieving their project goals. She explained that, this could be seen as cooptation of local for achievement of externally determined goals.

There are two other stages of Pretty's (1995) typology which can be described as higher levels of participation. At the 6th stage is 'interactive participation' where local people take active part in the planning and implementation of projects and programmes. Participation is seen as right and not a means of achieving project/programme goals. Here, the local have greater motivation to keep project going. At the highest stage of her typology is what she calls 'self-motivation' where people participate independent of external bodies. People plan the best ways things should be done for example best ways of using environmental resource and invite external bodies for financial and mostly technical assistance.

Most of the criticisms against Arnstein's (1969) typology also hold for Pretty's. Exploring participation through the implementers' perspectives leaves out the perspectives of the receivers of the programmes and projects. This can make measurement of participation a bit difficult. The oversimplification rule also applies here where participation has been put into few groups (7). What is disturbing in this case is the lumping of the local into one group without much differentiation. The absence of differentiation hides the social differences in people such as race, social status, ethnicity, gender and power relation (Cornwal, 2008).

Combining the Arnsterins's (1969) and Pretty's (1995) typology which explore participation form the perspectives of the receivers and implements respectively, however, covers to some extent the inadequacies of the two typologies when treated individually. In her paper, Unparking 'Participation': models, meanings and practices, Andrea Cornwall (2008) asked two important questions: First, she asks 'who participates?' and second, 'participation in what?' In the first question, she critiques the typologies for not giving a clearer clue on who actually participates in projects and programmes as well as who participates, who is excluded and who excludes themselves. While it is usual to see the external agencies setting out the broader framework, as to who participates, much also depends on the characteristics of those who participants can exclude very important constituents whose interests may not be represented by the participants selected (ibid.: 277). There are many complexities surrounding 'participation of the rural poor'. Cornwall (2008) quotes Cohen and Uphoff (1980: 222) as contending that 'to talk about "the participation

of the rural poor" is to compound one complex and ambiguous term with another, even more complicated and amorphous'. They note that 'there are significant differences in occupation, location, land tenure status, sex, caste, religion or tribe which are related in different ways to their poverty. (Cohen and Uphoff, 1980, p. 222 in Cornwall, 2008).

It is almost impossible to involve everybody in a community in decision making as outlined by the two typologies being examined. But the question of who participates in what activity at which stage of the programme/project is important. Making people aware of how and at what levels and basis different people are engaged, Cornwall (2008) helps in making sense out of participation. It is clear from the two typologies that depending on who is using the term, different meaning can be adduced. From the perspective of the receiver, it could mean being involved from planning to evaluation while informing or consulting could mean participation to a programme implementer.

The two typologies of participation will therefore help in serving as an important analytical tool with which to analyse contentions of participation and non-participation from the stakeholders in the Ghana Gas project. The two covers 'the implementer' [Ghana Gas, LVD] and 'the receivers' (affected farmers, the traditional authorities and the affected communities).

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The chapter presents the reasons for the choice of the study area and discusses the techniques of producing data for answering the research questions in the study. It starts with ontological and epistemological underpinnings of qualitative research methods and arguments for the use of this method in the study. It further presents how the researcher entered the researched communities, the research design, methods of selecting the informants, tools for producing data, methods of analysing the data produced. It also briefly discusses the researcher's positionality and that of his interpreter and reflexivity, validity and credibility. The chapter closes on challenges faced during the fieldwork.

3.1 Ontological paradigm and epistemological underpinnings of the study

Methodology, methods of collecting data is closely linked to ontological and epistemological positions one about reality (Grix, 2004). Social science researches have largely been informed mainly by positivism and interpretivism (Bryman, 2012). The quantitative paradigm is based on positivism. Science is characterized by empirical research; all phenomena can be reduced to empirical indicators, which represent the truth. The ontological position of the quantitative paradigm is that, there is only one truth, an objective reality that exists independent of human perception. Epistemologically, the investigator and investigated are independent entities. Therefore, the investigator/researcher is capable of studying a phenomenon without influencing it or being influenced by it, inquiry therefore takes place through a one way mirror (Guba and Lincoln, 1994). Its goal is to measure and analyse causal relationships between variables within a value-free framework. Randomization, highly structured protocols and written or orally administered questionnaires with limited range of predetermined responses. Sample sizes are usually large. The purists of this method (quantitative method), pride themselves in objectivity of the researcher and ability to generalize outcomes (Bryman, 2012).

Contrastingly, the qualitative paradigm is based on interpretivism (Altheide and Johnson, 1994) and constructivism (Guba and Lincoln, 1994). Ontologically speaking, there are multiple realities

or multiple truths based on one's construction of reality. Reality is socially constructed (Berger and Luckmann, 1966) and so is constantly changing. On an epistemological level, there is no access to reality independent of our minds, no external referent by which to compare claims of truth (Smith, 1983). The investigator and the object of study are interactively linked so that findings are mutually created within the context of the situation which shapes the inquiry (Guba and Lincoln, 1994). This suggests that reality has no existence prior to the activity of investigation, and reality ceases to exist when we no longer focus on it. The emphasis of qualitative research is on processes and meanings. Techniques used in qualitative studies include in-depth and focus group interviews and participant observation. Samples are not meant to represent large populations. Rather, small, purposeful samples of articulate informants are used because they can provide important information, not because they are representative of a larger group (Bryman, 2012).

3.2 Methodological approach

The purpose of this study as stated in chapter one is to investigate the livelihood impacts of Ghana Gas project on the affected residents of Atuabo. It is to look at the extent to which the land losing residents are involved in the determination of what is paid as compensation, issues of adequacy of compensation and whether compensations paid will enable farmers to have the same levels of livelihoods prior to the start of the project. Questions for which data was to be produced to answer the research questions made the choice of qualitative research method the most appropriate for this study. As a result, the methodological approach and research tools associated with qualitative research method were used in producing data for the study. Semi-structured interviews, in-depth interviews, group interviews, field observation, informal conversations, documentary analysis were used.

Among the reasons for settling on qualitative research methods was epistemological, or theories of knowledge, associated with qualitative research. The study was to unearth the plurality of truth (Fraser 2004) by assigning an explanation of causal relationships. The method allows for tracing the processes that have contributed to differences in participants' experiences and by collecting participants' own explanations. Through that, I will be able to understand and explain responses of various participants in the research. Bryman (2004) notes that qualitative research is

concerned with seeing the object of study through the lenses of the people being studied. In this case, in order to fully understand the issues at stake in this research from the perspectives of local communities, the regulatory body and the land acquiring party, it is important to explore the factors that went into decisions arrived and explanations given to phenomena by various actors.

3.3. Entering the fieldwork communities

Producing data for this study involved working in three different places; Accra where the head offices Ghana Gas and Lands Commission (Land Valuation Division) are situated, Sekondi-Takoradi where the regional office of the Lands Commission (Land Valuation Division) is and Atuabo, where the gas plant is situated. I started my fieldwork in Accra at the Ghana Gas office, first to book an appointment with the officer in-charge of compensation payment and also to ask permission to visit the site of construction during my stay at Atuabo. As a result, a meeting was to be scheduled within two weeks with officers from the Finance, Welfare and Communication Departments of the company. That meeting did not come off. Still in Accra, I had discussions with the Land Valuation Division of the Lands Commission. The discussion was fruitful with a recommendation that my interview with the organisation should be with the Western Regional Valuer in Sekondi since that office was directly responsible for all the works on the land acquisition and determination of compensations for crops and land in the gas project.

Atuabo, located about 350 km from Accra. It takes between six and 8 hours by road depending on traffic situations. I have not been to the Nzema area of Ghana but I had an experience of travelling to Asuboi and Princes Town in Ahanta District in 2009 for a rural development project. With that experience as 'morale booster', I set off to Atuabo on a Saturday afternoon with the plan of dividing the journey into two; spending the night in Takoradi and continuing to Atuabo the next day. I set off from Takoradi to Atuabo the next morning. It was a smooth journey until I branched off the main Agona – Ellubu road at Allabukaso. The South-Western part of Ghana experiences the highest rainfall and the peak of the rainy season lies between June and August. The road therefore was muddy, full of water as it rained that morning. Large tipper trucks were the commonest form of vehicles on the road. When I arrived in Atuabo the

afternoon, I looked for the Assemblyman⁵ of the Atuabo Electoral area. A young man I approached whom I call Victor, assisted me by inquiring of the whereabouts of the Assemblyman but we realised he had gone to another community. We traced him to where he was and while we waited for the Assemblyman to complete his mission, we discussed Atuabo and related topics of the gas project, the employment opportunities it brought and others. Victor happened to be one of the youth employed by Sinopec and had quite a lot to say about Sinopec and the gas project.

I introduced myself to the Assemblyman as Ghanaian student from the University of Bergen, Norway and my reason for coming to his community was to research on the on-going gas project. The Assemblyman decided we should visit some elders of the community where he could introduce me to him as it was too late to see the *Omanhene* (the paramount chief). There were three elderly men at the meeting. After listening to the Assemblyman, they asked him to make sure I felt comfortable until he was able to organise a meeting with the *Omanhene* for me. Looking for an accommodation was next, but the Assemblyman had earlier on ruled out staying in a hotel even for a night (the only available one was too expensive). When we finally found a room, it was with a woman who is a 'copra merchant'; she buys dried coconut and exports them to Nigeria. She jokingly told us: "this is the second time I am hosting a student from Norway, I think the third should take me to that country". The first had been a Norwegian student from the University of Oslo.

The Assemblyman works with the local office of Ghana Gas at Atuabo. He did not only become an important key informant, but also my gate keeper as well. Gate keepers are those who by virtue of their positions control or permit access to others for the purpose of research (Saunders, 2006; Reeves, 2010; Miller et al, 2012). Research access here is explained by Coffey (2006: 216) as "the process of gaining and maintaining entry to a setting or social group, or of establishing working relations with individuals, in order that social research can be undertaken". The Assemblyman in this case fits into the descriptions given above. He led me to the elders and

⁵ Assemblyman/woman is an elected member of a District Assembly from an electoral area and serves as a liaison between the electoral area and the district assembly. They play a critical role in the development of their communities and have become even more important in rural communities. Article 244 of the constitution of Ghana provides for the position of assembly member and duties of the member is provided for by Act 462

chiefs of the communities and he helped in the selection of an interpreter (the interviews with the farmers was in the local *Nzema* Language which I did not understand). The Assembyman further facilitated access to workers of Ghana Gas and Sinopec. At Anokyi for example, the Assemblyman provided the list of specific informants and facilitated the interviews with them. He even decided where I stay throughout my stay in the community and ensured my research went on successfully to the end as tasked by the paramount chief and elders.

3.3.1 Staying at Atuabo: My Statuses and Roles

Society puts its members in certain social standings and where one finds him/herself comes with privileges and responsibilities. Status is a position of individuals in a society with its associated rights and expectations (Linton, 1936). Researchers are not different, once they live in a society, they occupy certain statuses with which comes expectations from the members of that society. Hartsock (1987: 188) notes that, since researchers occupy positions within various power structures, they may have certain privileges over others. During the first few days and before I could declare my status as a student, some of the community members who saw me always moving with the Assemblyman and my interpreter thought I was from Ghana Gas or an investor looking for a plot of land to set up a new business. That status quickly changed to the copra merchants's visitor and later to a student researcher as I began interviewing the farmers.

The expectation of me as a student researcher was to interact with my target group and perhaps study in the evenings. Anything apart from that was seen as a deviation from the norm. A woman who met me at an informant's copra oil extraction industry asked him if I was his new apprentice. At another time as we helped in leveling the forecourt of the chief's palace for the final funeral rites of the former traditional ruler, several people asked the Assemblyman and my interpreter who exactly I was. As the work progressed, the youth always wanted to know what I thought about the work and I how I felt it should progress. I however insisted we put our heads together in coming to a conclusion on what was desirable. Community members however greeted me with *ayeekoo* ('well done') when they chanced upon me conducting interviews. It was as if to say, this is what we expected of you. As time went on, community members who passed by the house in which I lived greeted my land lady and always asked of her 'son' (it is common in Ghana to use kinship terms). Here, I was not only considered as a student researcher

but also a son and a member of the community. The acceptance of me as 'son' of my landlady opened for me broader avenue for observation without much suspicion. With my status as a friend to my interpreter, I had access to most of his friends and accessed information from those employed by Ghana Gas and Sinopec regarding remuneration and working with Chinese very useful. We also discussed their expectations of the Lonrho Port Project.

3.4 Oscillation between insider, outsider positional spaces

The power relations between a researcher and the researched and how to obtain a balanced information has been a matter of intense debate over the years (Abu-Lughod, 1988; Hill-Collins in Mullings, 1999). The argument of who gets more balanced information is very important in this debate. Mullings (1999) notes that a researcher becomes an *insider* if he/she studies a group in which he belongs and an outsider if the researcher studies a group he/she does not belong. Mullings (1999) argued that 'insider', researchers who study a group to which they belong, have an advantage because they are able to use their knowledge of the group to gain more intimate insights into their opinions. She also notes by not belonging to a group under study, the researcher is likely to be perceived as neutral and could obtain much information. Reducing the argument however to insider/outsider binary do not only obliterates according the reality by freezing out positionalities in place and ascribed the insider/outsider a fixed attribute but also that, it ignores the dynamism of positionalities in time through space (ibid).

Warning against the dualistic thinking that characterised the insider/outsider debate, Mullings, instead, suggests researchers seek what she refers to as *positional spaces*, that are areas where situated knowledge of parties in the interview encounter and engender a level of trust and cooperation (Mullings, 1999:340). Going by Mullings' admonishing, I assumed insider/outsider positions depending on the situation at the time. In the broader sense of being a Ghanaian, I was seen as Ghanaian but when it comes to language and culture my outsider position came to the fore. The local language spoken in the area was Nzema and that necessitated the use of an interpreter who is an insider since he hailed from the community. It meant therefore that at any point in time as I interviewed the farmers, there was always an insider/outsider effect. When it comes to Nzema customs on land tenure, and rules of inheritance, I was always seen as an outsider. This outsider position helped because, farmers took their time to explain to me how the

system works. Some of the farmers felt good about themselves assuming the position of an instructor on their custom. I had to constantly remind my informants of my outsider status in order to get deeper understanding of certain cultural issue because my name Kofi Asamoah was seen as Akan name but I am an Ewe. Some informants therefore wanted to build on knowledge they thought I had as an Akan. In such situations, I had to explain that I am an Ewe and therefore was not so familiar with the Nzema for that matter, Akan cultural practices.

Though, I tried to represent myself as an insider, some of the informant believed I had a power or at least the connection to make their grievances heard. That happened when I interviewed two farmers who did not receive compensation (as I shall explain in the finding chapter). When I interviewed elders from the Eastern Nzema Traditional Council, I presented both insider and outsider positions where necessary. I projected my outsider status on matters of customs and customary land tenure and that gave me the opportunity to learn more but I tried to be as neutral as possible when discussing issues of land acquisition, compensation, and involvement of the locals in the determination of compensation for example. My insider presence was not visible as I did not conduct that interview with my interpreter since the elders spoke fluent English. My being a student of a foreign university did raise some eyebrows and I had to play out my insider position as a Ghanaian in order to get the required information.

As noted earlier, my positionalities were not the only ones that mattered in the production of data for but also, that of my interpreter's. His insider status was very instructing as it gave people confident to speak to us while I played on my outsider position to as followed up questions in order to get deeper understanding of the issues we discussed.

3.5 The sampling of informants

Land acquisition for the entire petrochemical industry affected 2,313 farmers in eight political districts in the Western Region (Fieldwork, 2013). The Atuabo Gas project covered 300 acres of land and had affected over 120 farmers in three communities; Atuabo, Assemnda Suazo, and Anokyi (see map 2 of the study area). For the purpose of this study, 35 of the 120 farmers who had lost farms to the gas project and had received compensation were selected. In addition, I interviewed 10 farmers who were yet to receive compensation under the Lonrho Port project. I realised the 10 farmers were not part of the gas project when they claimed they did not receive

compensation package for crops. (Note that, farmers who received compensation were the main focus of the study). That notwithstanding, the views expressed by the 10 farmers provided very useful insight into the processes of Lonrho Ports regarding compensation. The 35 included food crops and perennial crops farmers. I also included business women and men whose businesses depended on the activities of farm produce. Some workers of Ghana Gas and Sinopec were also included. Data from these groups of people were produced through semi-structured interviews, group interviews, informal discussions and observations. I also did key informant interviews with the Eastern Nzema Traditional Council; a major player in terms of land ownership as the council controls and administers all stool lands in its jurisdiction. In the key informant interview category were Ghana National Gas Company (Ghana Gas) is the land acquiring party; The Land Valuation Division of the Lands Commission is a statutory body under the Constitution of Ghana to determine compensation in times of compulsory land acquisition and Imani Ghana (A policy think tank). Table 1 summarises the groups interviewed during the data production.

Table 1: Group interviewed in the Ghana Gas Project, Atuabo

Stakeholders	Participants selected for study	
Community members	Farmers who lost farms and livelihoods	
	Workers with Sinopec and Ghana Gas	
	Local business men and women	
	Eco-tourism Development Officer	
Eastern Nzema Traditional Council	Elders of the traditional council	
Lands Commission	Western Regional Valuer, Land Valuation Division	
	of the Lands Commissions	
Ghana National Gas Company	The Director of Finance, Ghana Gas (also in charge	
	of Compensation	

Fieldwork, 2013

3.5.1 Selection of informants

I selected informants from Atuabo, Assemnda Suozo and Anokyi; the three land contributing communities to the Ghana Gas project. Given the objectives of the study, informants were

selected to include food crop and cash crop farmers, farmers who worked on their own land owned by their families. Those who used stool lands and farmers who depended on other land owning families to access land under the *abusa* system.

At Atuabo, I produced a list of informants together with the interpreter and the Assemblyman. Since the interpreter knew all the people on the list, we moved from one area to another of the community interviewing the informants. In this community, a number of informants explained that they had not received their compensation and their farms were still intact. This explanation sounded strange because my initial investigation revealed that, farmers under the Ghana Gas project had received compensation for crops at least. This led to finding informants who were actually under the Ghana Gas project and have been paid compensation. Subsequent discussions on the issue of non-payment of compensation with the Assemblyman and an elder who revealed that people who complained of non-payment fall under the Lonrho Port project for which compensation will be paid later (the 10 farmers discussed earlier in the chapter belong to this groups)

At Assemnda Suazo, at a meeting with the chiefs and elders of the community, it was decided that a *gong gong*⁶ should be beaten to announce to community members under the gas project that they should answer questions from a student who had obtained permission from the community leaders for that purpose. Included in the announcement were date, time and venue of the interview. Farmers who came on their own volition helped in identifying other farmers under the Ghana Gas project. The Assemblyman explained that the people of Assemnda Suazo would not have granted the interview without hearing from their chief even if we explained to them that permission had been granted. At Anokyi, farmers were selected with the help of the Assemblyman and my interpreter. There were local business women and men who were also selected on purpose even though; they were not entitled to compensation, in order to explore how

⁶ A *gong gong* is a metal instrument beaten by *a gong gong* beater (village announcer). It is an ancient method of disseminating information but still holds utility in small towns and villages in Ghana. When the gong gong is beaten, total silence is demanded before the beater follows through with the announcement.

the activities of Ghana Gas impacted on their businesses. Four workers connected to the gas project were also selected with the help of my interpreter and the Assemblyman.

Table 2: Age and Gender of farmers interviewed

Age	Male	Female	Total	%
25 -34	2	5	7	20.0
35-44	5	3	8	22.9
45-54	5	4	9	25.7
55-64	3	3	6	17.2
65-74	2	4	5	14.3
Total	17	18	35	100

Source: Fieldwork, 2013

Table 2 shows the age and sex distribution of farmers interviewed at Atuabo, Assemnda Suazo and Anokyi.

3.6 Data production tools

Production of data for the study was mainly done through the use of tools from qualitative method. I used semi-structured interview for farmers whose lands were part of the acquired land while using in-depth interviews for the key informants to get a fuller understanding of the issues discussed. Some of the issues discussed with the key informants emanated from the interview held with the farmers and observations made. Observation was another important tool used in the production of data for the study. Informal discussion with community members and other visitors to the community was also essential to the data making process.

3.6.1 Interviews

Dunn (2005:79 in Valentine et al, 2010: 105), asserts, interviews are verbal interchanges where one person, the interviewer, attempts to elicit information from another person. I interviewed 35 local farmers in three communities in the local Nzema language with the help of an interpreter. The interview with the farmers took the form of semi-structured interview, which enabled the researcher to be more open to what he/she needed to know (Bryman, 2012:12). We moved from house to house and met the informants who received us warmly and asked the interpreter who I was. This mostly came from people who had not seen me in the community before or people

who wanted to compare my real status to what they held or might have heard. We usually sat in a very informal way which enabled the informants to continue with whatever they were doing.

Before every interview session, I introduced myself and explained to informants the purpose of the study and that everything they said will be used for the purpose for which it was collected, and that will be treated confidentially. This I said in English Language which my interpreter interprets to the informants. For the purpose of asking follow up questions in order the understand what informants meant, I preferred to write responses from informants as interpreted to me by my interpreter even though where permissible, interviews were recorded. I read out the questions which were then translated to the local Nzema before the informants responded. What they said was then interpreted to me in English which I noted down in my field notebook. I concentrated on asking the question and observed carefully all the non-verbal communications coming from the informants and in some cases other family members around them. Very few (5) of the interviews were recorded with permission granted and transcribed later in the evening the same day of the interviews.

In contrast to the situation where the interview sessions were held in the residences and work places of the farmers, at Assemnda Suazo, some of the interviews were conducted at a place provided by the Queen mother. I realised we had all their attention focused on the interview as compared to the what transpired at Atuabo but they were equally relaxed as those interviewed at their homes. That notwithstanding, interviews conducted at homes and work environment of informants added a lot to the research especially when discussing topics relating to livelihoods and expectations from the project.

The interview process was a bit slower in this community (lasted for one and half hours) because in most cases, recordings were not allowed. My interpreter, therefore, interpreted whatever was said to me to be written before we moved on but as it turned out, it proved to be more helpful as it enabled me to ask follow-up questions which only transcribing from tape may not permit. In addition, some of the informants came with their families; spouse and adult children (4 informants were interviewed with their spouses). They complimented each other in narrating their experiences and feelings. They therefore said same things from different perspective. I had no problem with this arrangement since I had enough time at my disposal and the fact that my

attention was on details provided by the informants but not how many informants I covered during my stay in the area. That is to say the sampling of the informants is more indicative than representative (Gatrell and Elliot, 2009).

Prior to meeting my interpreter, my questions covered four main headings ranging from basic information about the informants, access to land and compensation, involvement in the determination in compensation, livelihood choices in relation to compensation and Ghana Gas' Alternative Livelihood Programme. However, I had to add an additional dimension which covers the Lonrho Ports project. As previously mentioned, this is a private port to be built by Lonrho Group to provide specialised services to the oil industry. I only added it after the topic surfaced during discussions with my interpreter on the research and my expectations of him. He asked, "What about the port, people will like to talk about it, it is our hope." I sought to understand compensation processes as laid down by the Lonrho group. I listened to people's perceptions of how the two companies handled the compensation processes.

3.6.2 Interviews with key informants

In addition to primary informants, key informants are essential due to the positions they occupy and roles they play. Mikkelsen (2005) believes key informants give specialist information and have a broader scope of issues. Kitchin & Tate (2000) in support of purposive sampling argue that selection of informants should be on the basis of their relevance in answering the question posed in the research. I discussed with two elders in Atuabo (they had the blessings of the Omanhene to speak to me) using an in-depth interview guide. The selection of the traditional council represented by the elder was justified by the fact that land is usually held in trust for the people by family heads and traditional rulers in Ghana (Ubink and Amanor, 2008). I also held an interview with the Director of Finance, who is also in charge compensations and alternative livelihood programme at Ghana Gas, in October, 2013.

The importance of this interview lies in the fact that it concerned the actors at the centre of land the acquisition, compensation payment and implementation of Alternative Livelihood Programmes (ALIPs). At Ghana Gas, the interview was held at the office of the Director of Finance. He was together with his Personal Assistant (PA) who was instrumental in organising

the interview session after several attempts proved unsuccessful. I got to know the PA after complaining to a fellow Ghanaian student in Bergen about difficulties I had meeting with officials of Ghana Gas. She then introduced me to the friend who she once worked within another organisation. We discussed the topics regarding compensation for crops and land, adequacy of compensation, the extent of involvement of the locals in determination of compensation and Ghana Gas' Alternative Livelihood Programme. He also checked his facts and sometimes confirmed with his assistant when in doubt. The interview lasted for a little over and hour.

Another important key informant was the Western Regional Valuer at the Land Valuation Division of the Lands Commission. This institution is vital as it is the statutory body for measuring and valuing landed properties in Ghana (Kasanga & Kotey, 2001). The insight from this organisation deals with the position of the law when it comes to compulsory acquisition for 'public interest' projects, explanation of adequacy of compensation and other matters. The interview at the Land Valuation Division took place in the office of the Regional Director of the Division who was directly responsible for the determination of compensation in the project. The interview arrangements would have been easier if I had agreed to speak to any other officer apart from him. My insistence to speak to him in person and the fact that he had a very tiGHt schedule at the time made me spent over a week in Takoradi for the interview. He was the man whose table everything ends up so has much information which I considered authoritative. He crossed check his figures from his Desktop anytime he was in doubt about something. The atmosphere was cordial and professional. The interview lasted about $2^{1/2}$ hours, but we spent some time talking about Norway and that afforded me the opportunity to informally ask him few other questions regarding reports of increasing demand for land in the Western Region.

3.6.3 Group interview

Group interview is a form of interview in which there are many participants (Bryman, 2012: 502). The emphasis in the questioning on a fairly tightly defined topic and the accent is upon interaction within the group and the joint construction of meaning (idid.). While Dencombe (2007: 179) justifies the use of the method on the grounds that it provided the researcher with a method of investigating the participants' reasoning and means for exploring underlying factors

that might explain why people held certain opinions, perceptions and things they did, Bryman stresses on how group discussions serves as a check on the individual interviews (Bryman, 2012: 503). This group interview was quite difficult getting all the women together for the interview since they do different work and have varying free times. Participants in this group discussion were women who have been affected by the gas project (people who had lost lands and livelihoods due to the construction of the gas project) and participated in the semi-structured interviews earlier. No involvement of family heads and traditional rulers in the focus group to enable free discussions among members. All the women except one had received compensation for their lost crops. The one who had not received compensation was not around on the day of when the Land Valuation Division from Takoradi came in to identify, measure farms and issued certificates. We discussed several issues including opportunities for women, expected investments that address the specific needs of women, alternative livelihoods, and employment in the on-going projects. We also discussed a proposed port project which kept creeping into every conversation about the gas project.

My choice of women was necessitated by the need to listen to what women had to say about the entire gas project and the fact that I had fewer contact hours with women compared to men. I had contact with a lot of men in Atuabo even after the interview sessions and many others whose farms were not directly affected by the Gas project. My interpreter operates a 'drinking spot' where men usually met and talked about the day's work and I used the opportunity to talk informally about the Gas project. I had also gone to quite a number of places with the Assemblyman and in most cases had discussions with men.

There was not much difference in terms of social status between the women involved in the group interview, perhaps apart from age. They were all farmers whose farms were taken over because of the project. They therefore discussed the topics freely. My interpreter served as the moderator. I took notes and observed carefully. Here, the discussions were recorded and was transcribed later with the help of the interpreter. We discussed an array of topics, in particular, livelihood opportunities from the oil and gas sector and their expectations from the Ghana Gas'

Alternative Livelihood Programme. We moved through other topics quickly because, the women were not saying anything different from what they had said in the previous interview.

3.6.4 Observations and Informal Discussions

Observations in the field have been relevant in the study since the construction of Ghana Gas infrastructure and related concerns of the researcher are still on-going. According to Yin (1982), observations are a form of evidence that do not depend on verbal behaviour, and the method enables the investigator to observe the phenomenon under study directly. Similarly, Creswell (2009:181) states, "qualitative observations are those in which the researcher takes field notes on the behaviour and activities of individuals at the research sites". Observations made regarding livelihood choices in the informal economy at this stage were talking about informally or during interviews [visible economic activities people engaged in]. In appreciation of time constraints, and also, argue that observation do not explain reasoning behind certain behaviours, I have questioned my interpreter about some and also brought few of them up during the group interview. There were also problems of limited time and access to people's 'backroom'. For example, I had more access to men than women during my stay in the community partly due to my close association with my interpreter, the Assemblyman and Victor. Nevertheless, I made the most out of the situation as I sought understanding of observed phenomena through reflection, informal conversations with my friends.

In addition, members of my household also helped me to understand some of the observed behaviours. The phenomena under study, people's perception/categorization of adequate compensation, their involvement in decision making about compensation and the outcomes of relocation may not easily submit to observation. However, livelihood choices within the informal economy can be observed. I observed quite a lot when we went around, but also on the landing beach where men gather most of the afternoon waiting to help pull fishing nets. I sometimes observed carefully who bought what and at what price. The beach is actually 100 to 150 metres from where I stayed and I usually spent my break hours during which I observed fishers, some of whom I had already interviewed. My interpreter owns a Beer Bar. It has a big shady tree under which a lot of men sat after work, including workers from Sinopec and Ghana Gas. Chinese workers also came there. The place therefore provided me a perfect opportunity to observe and

listen to conversations even though the men hardly talked about compensation; they talked about their work and remuneration. Other matters regarding their community were discussed too. I listen to their conversation on local politics and whether the Lonrho port project will come to fruition or not. I observed closely the economic activities within the communities, especially Atuabo where I stayed throughout my fieldwork. I also observed home industrial activities, especially vegetable oil extraction from dry coconut (copra). For example, my landlady buys copra, dries it and exports it to Nigeria. Those observations and subsequent discussions on them were significant in many ways. First, it tells about livelihood opportunities available in the community in line with local resources and secondly, it helped in reading meanings into what some of the informants said about the amount of money they generated from coconut they used to harvest in their farms. I observed investments and developments along the coast in the hotel industry and some projects coming to the area as Corporate Social Responsibility (CSR).

Informal conversation formed an integral part in my work. I held informal conversations with several people in the communities. Informal discussion helped in eliciting additional meanings to things said during interview sessions. I also spoke to some workers working directly and indirectly with SINOPEC. I have also held such discussions with some of the local business women about the changing face of doing business in the community and how they are positioning themselves for the commencement of production. By this, I sought to understand income of workers with SINOPEC and also the influence of Chinese workers on the local economy. Through these conversations, people easily talk about their income levels, expectations and sometimes disappointments with the project thus far.

Aside the primary data I produced, I also made use of secondary data, I relied on data produced by institutions (both public and private), books, articles, scientific journals, the internet and the print media. I searched for such information in the best ways that met with the standards. For example, compensation regimes of major projects in Ghana that involved compulsory acquisition of land, such as Volta River Projects in Akosombo and Kpong and many other mining projects were examined. I also examined documents from Ellembele District Assembly and Ghana Statistical Service (GSS).

3.7 Data Processing, Interpreting/analysing data

Considering the number of methods used for producing data for the research, which were mostly qualitative, appropriate tools for interpreting and analysing data collected were important. Qualitative methods can generate large, cumbersome amounts of data (Bryman, 2012: 565). Finding ways of interpreting and analysing such data can be challenging, more so as there are no clear ways of doing this (Bryman and Burgess, 1994a). I analysed observations, interviews (semi-structured and in-depth) within the 'context' in which words, expressions, phrases, metaphors were used especially as related to social and political context. The interpretation and analysis was mainly through the use of words, expressions, phrases, maps, photos and narration.

Following the warning against the use of our own cultural categories in the analysis of concepts (Wadel, 1991 in Aase, 2007), I represent the informants' realities In relation to concepts such as 'participation in determination of compensation' and adequate compensation' in line with what Aase calls 'representation of informants reality'. I therefore used direct quotations from the interested parties in the Ghana Gas project to represent what the various concepts means in their categorization. In order to add meaning to words and expressions, I used figures, tables and numbers as well.

In processing the data, recorded interviews were transcribed verbatim after which detailed **thematic analysis**, taking into consideration various narrative categories. The interpretation and analysis are linked closely to the concepts of livelihood, livelihood capability and choices and alternative livelihood and compensation regime. Narrative analysis emphasizes the telling of stories from the perspective of the informants and allows avenues for exploration of competing narratives (Bryman, 2013: 584) and this was appropriate for this study as there were different stakeholders providing their own tails of the same stories. Research questions were kept in mind all the time in order to answer them adequately and themes built to illuminate answers to the research questions.

3.7.1 Case studies

Bryman (2012: 66) notes that case study "entails the detailed and intensive analysis of a single case". Getting a thorough understanding as possible about the issues/phenomena through a detailed study of a small number of cases primarily explains the idea behind the use of this

method (Silverman, 2010). The entire study can be described as a case study and what I sought to do is to use what I shall call 'illustrative cases' to provide a better understanding of the issues. In this study, I present three such case studies. The first is a coconut farmer whose case provides a fuller understanding into compensation and livelihoods to farmers in this category that could be described as 'rich'. The second involves a 42-year old food crop farmer who was trying to carve a new niche for his family and himself after the takeover, and compensation for his farm. This is also to provide insight into the cases of farm farmers' category. The final one was a study of a 'coconut merchant'. This study dug deep into how the clearing of coconut farms affects her business and how her role as provider of ready market and credit for the coconut farmers in the community impacted livelihoods in the study area.

3.8 Discussions of ethical issues in data production

A number of ethical issues were addressed in the production of data for this study. First, were the issues of consent, deception and confidentiality and anonymity (Baily, 2007). At every stage of the study, consent of communities, organizations and individual were sought well in advance. There was no point I sought to produce data by false pretense as I always introduced myself and produced a letter of introduction from my supervisor at the University of Bergen.

Access and acceptance, two related concepts remained important ethical issues in social researches like this. It involves being granted physical access and permission to a researcher to produce data in a particular way (Homan, 2001). Letters asking permission to have access were sent to the organisations involved during which appointments for interviews were sought. The elaborate process of seeking the access and acceptance during the fieldwork therefore addressed these concerns and has been well explained. I sought permission before recordings and taking photos. Similarly, all key informants have been presented for their records; letter of introduction from my supervisor. Every participant in this research therefore was aware of the researcher's true identity and had agreed to be part of producing this work. The data produced thus far have been used solely for the intended purpose (academic) and kept confidentially.

Confidentiality requires that information produced with informants should have no traces. To achieve anonymity of the data gathered from informants in the household survey, personal data such as names and addresses of householders who answered the questionnaires were left out in

the design of the in the interviews. This ensures that informants become untraceable. In presenting the interview data, names of the informants and their settings have been changed to make it impossible to identify those who provided the information. In the case of officials or elites who provided information in their official capacity, such information has always been presented in the name of the office.

3.8.1 Validity, credibility and transferability

Young-Hee (1998) explains validity as establishing the truth and authenticity of the research while Linclon and Guba (1985) assert that validity is achieved when 'the researcher is calling what is measured by the right name'. It is therefore important to demonstrate the participant's reality for example through quotations from their interviews and providing accurate information about the research processes (Kapborg and Bertero, 2002). It further concerns how appropriateness of the tools used in the production of data and whether data was produced validly (Merriaam 1995). In this research, validity has been enhanced through careful explanation of the research processes and the 'context' within which the data was produced and analysed. I tried as much as possible to obtain data from all interesting parties involved in the project to understand from their perspectives the issues at stake and in response to Lincoln and Guba's assertion above, research findings were reported in a manner that told the story from the perspectives of the tellers (informants) and as I have shown in the subsequent chapters, quotations and figures were used in that pursuit to make the report the actor's own.

Liamputong and Ezzy (1999) write that "in order to conduct valid research, the researcher must be aware of personal cultural perspectives or bias" which can influence the research process. This awareness is known as 'reflexivity and refers to assessment of the influence of the investigator's own background, perceptions and interest on the qualitative research (Mullings, 1999). I always reminded myself of my positionalities on the field at any point in time. I therefore reflected in order to stay out of biases as much as possible. There is always a threat to validity of a research when an interpreter is involved and this becomes even bigger when the interpreter is not properly trained and does not have the full understanding of the research project (Kapborg and Bertero, 2002) or has biased ideas. This may lead to distortion of information produced. My interpreter had interesting positionalities which I critically reflected upon during the field work. Apart from his obvious positions as a native of Atuabo, his family owned land

which had been split between Ghana Gas and Lonrho Ports. He therefore has an idea on how much the estimates from the Lonrho Ports Project amounts and how much the family received from Ghana Gas. He also had worked briefly as an interpreter with Kosmos Energy; one of the Jubilee partners. He also worked with Lonrho Ports in the registration of the youth for training and employment. Apart from the awareness of the positionalites of my interpreter, I had also spent ample time to explain what my project was about and the exact issues I meant to tackle during my fieldwork. I further explained to him what each question in the research was supposed to achieve.

His stints with the foreign companies over time could make him have certain level of expectations of professionalism from Ghana Gas in handling issues related to the compensation processes. Despite his deep understanding of the Nzema culture I crosschecked cultural issues which I did not fully understand from an elder of Atuabo who had opened his doors to me for any clarifications on culture and land tenure. Even though some of the interviews with the farmers were recorded, I preferred to write during the interview what informants said to my interpreter and by that, I could ask further questions or asked the question in a different way in order that it elicited the appropriate responses.

There are two other concerns relating to validity of the data and the trustworthiness of the findings. The first concern relates to language and shared understanding. That is, whether the interpreter ably transfers what I intended to ask the informants such that, the three parties have shared understanding of the concepts under discussion. I have tried to improve the shared understanding of the concepts by explaining the concepts in the research to the interpreter. I have also listened carefully to the translated answers and query any inconsistencies in the answers provided. By this, I was able to ask further questions that bring out desired answers. The second relates to whether, I asked the appropriate questions that produce data for answering the research questions. I have asked the relevant questions to produce my data thereby improving the trustworthiness of the research findings.

The question of generalizability in qualitative research has always been a thorny one. It refers to the degree to which research findings are applicable to other populations or samples (Ryan and Bernard, 2003). In this study however, generalizability was not the focus. Seale (1999: 107)

stressed on this point when he asserts "generalization is not always an important consideration for research studies". However, findings from the study are transferable to other similar situations even though there are significant challenges (Lincoln and Guba 1985). For this to happen, Glasser (1983) prescribes that there should be careful description of research processes including characteristics and settings of participants should be made. I satisfied these requirements by providing information on the research processes and characteristics of the participants in the study. Findings of this study can therefore be transferred provided the conditions carefully described in the study exist at the environment the findings are being transferred.

3.9 Some Challenges of the study

There were some challenges associated with the production of data for this study. First, there was a problem with identifying the targeted farmers. This led to interviewing ten farmers under the Lonrho Port Project as a later found out when I sought to clarify why informants insisted of not being paid compensation while the object of this study was to interview farmers under the gas project. Though I present it as a challenge here, that exercise was very useful in providing insight into how the farmers view the estimation of compensation processes under the two companies i.e. Ghana Gas and Lonrho Ports.

Getting access to and acceptance at some of the organisation was quite challenging. I had spent over a weeks in Sekondi-Tarkoradi for my interview with the Lands Commission. Even more difficult was the engagement with Ghana Gas. In fact the company was my first point of call in Ghana but the last to attend to me in October. This interview was the main reason for which I missed my flight back to Bergen and faced visa problems as a result culminating in my return to Bergen in November 2013 instead of September the same year.

The Nzema Area (South Western Ghana) where the fieldwork was conducted lies within the area that receives the highest rainfall figures in Ghana, the peak which is between June and August coincided with my fieldwork. It was therefore difficult sometimes to go out for interview sessions when it rained, which often were torrential. Informants also dashed out to farms and other places once the weather was clear enough.

My research fields were in three different locations; Accra where Ghana Gas Offices and the head office of the Lands Commission are located, Sekondi-Takoradi where the Western Regional office of Lands Commission is and Atuabo area where farmers and the Eastern Nzema Traditional Council are. Alternating between these three locations was quite problematic especially in the cases of 'elite' interviews where the interviewees were able to dictates when they could make themselves available for the interview sessions. Some of these interviews were postponed several times.

CHAPTER FOUR

LAND TENURE AND EFFECTS OF GHANA GAS PROJECT ON FARMERS

4.0 Introduction

The chapter looks at the local land tenure systems, which is about how to gain access to land for farming. The chapter also examines livelihoods in the study area prior to the inception of the gas project. It also looks at land acquisition and compensation processes. It continues to present what constitutes 'adequate compensation' from the perspectives of the different stakeholders in the project. The chapter also deals with some of the coping strategies by the affecting farmers under the gas project. Various concepts of the livelihood approach served as the main theoretical guide in addition to two typologies of the participatory approach.

4.1 Livelihoods at Atuabo

In the study communities, farming is the main economic activity even though there are several other economic activities from which people earn incomes. Farming is mainly for subsistence consumption but there are crops such as coconut and palm oil, which are produced for the external markets. One's ability to produce a particular crop (especially cash crops) depends mainly on the land tenure system under which he/she operates. Since the communities are coastal, fishing is another economic activity the people enagage in. Interestingly, fishing is not as intensive as in some other coastal communities in the region, and remained very traditional depending on unmotorised canoes, beach seine and traps. There are however few outboard motors which are used during the main fishing season (August – October). One economic activity linked to the agriculture system of the area is vegetable oil extraction from copra and palm nuts. The extraction of oil from the copra has declined through many generations. Also, informal businesses dominated by selling of merchandise and farm produce at nearby market towns are common.

4.1.1 Crops cultivated in Atuabo

As suggested earlier, climate alone does not determine crops people in this part of Ghana cultivate but also the prevailing land tenure regimes and historical factors. The area is within the tropical rainforest which is conducive to the cultivation of perennial crops, of which coconut remains the most important. Oil palm is another important cash crop. Cassava, maize, vegetables

are important food crops cultivated in the area. However, pineapple and groundnut are increasing becoming non-traditional⁷ cash crops in the area usually cultivated along the coastal savannah strip.

Table 3: Crops cultivated by informants

Crops	No. of Informants	Percentage of informants
Pepper	33	94%
Cassava	30	86%
Garden egg	29	82%
Beans	19	54%
Oil palm	19	54%
Cocoyam	15	43%
Pineapple	15	42%
Coconut	13	37%
Maize	9	25%
Groundnut	5	14%

Source: Fieldwork, 2013

The table above shows the number of the 35 farmers interviewed who grow particular crops. Pepper is cultivated by over 94% of the farmers and grown on a small scale. A particular type of pepper even grows naturally according to some of the informants. Coconut and oil palm are traditional cash crops while pineapple and groundnut are both food crops and non-traditional cash crops. Increasingly, pineapples and groundnuts were becoming important cash earners, especially for farmers who do not have enough land to produce coconut and oil palm due to land tenure regimes which may not allow them to produce long term crops such as the two mentioned. As shown above in the table, cassava is a staple and is cultivated by almost every household. Other important food crops are maize, beans and cocoyam.

Some of the traditional cash crops in Ghana include cocoa, coffee, cola, coconut, oil palm.

⁷ Non-traditional cash crops are crops that are not originally cultivated for as cash or export crops, but with time are being cultivated for such purposes.

4.1.2 Gender, crops cultivated and size of farm

Gender division of labour exists as 16 (87%) of the 18 female farmers interviewed, cultivate cassava and all the five farmers who cultivated groundnut are women. The gender division in the cultivation of crops is connected to gendered roles in households where women are more concerned with nourishing the family. There is no restriction on any group regarding crops cultivation, as such, women cultivate coconut and oil palm, but in most cases, they have farms inherited from their parents or husbands. Farms owned by female farmers are usually small, and most farmers were unable to mention the size of their farms in terms of acre (the unit in which the farms are measured for compensation as we shall see). The farms are small judging from the amount of money received as compensation. Where men cultivate food crops only, cassava, maize and pineapple are typical crops. Bean is a staple and cultivated by both men and women. 10 of the 19 farmers who cultivated beans were men.

4.2 Land tenure and access to land

Land remains a critical asset in livelihoods of rural people who depend on it (Scoones, 1998). Access to this crucial asset is, therefore, paramount to generating income for individuals and households. There are arrangements for accessing land and this is often referred to as land tenure systems (Larbi et al. 2004). In Nzema Traditional Area, ownership of land is intricately linked with a membership of a lineage that is also determined by their conception of life. This conception is the main reason for the matrilineal inheritance system. The Nzema conceives that the human being is made of solid substances (bones), the liquid (blood), the decaying (flesh) and the durable, the visible and the invisible. The regarded as durable comes from the mother, while the flesh, blood and sunnsum (personality) come from the father and the soul (\(\mathcal{F}kela\)) from God (Grotannelli, 1988). The Nzemas also conceives that blood signifies vitality, strength and growth, explaining the justification of the role of the father as the authority, who guides and nourish children (Grotannelli, 1988; Pavanello, 1995). The mother's provision of bones that are taken to be structural solidity and duration is the basis of matrilineal descent and grouping amongst the Nzemas. As pointed out in the theory chapter, every person within the Akan group is by birth a member of his or her mother's lineage. It is through this lineage that people lay claim to land. Under the Land Administration Act, Act 123, this is known as a freehold, and 14 of the 35 informants had accessed to the land they lost to Ghana Gas through this arrangement.

The study found that there are other arrangements for accessing land apart from being a member of a particular lineage. However, with these other arrangements, there are limitations on the crops that are allowed to be cultivated. The second land access category is usufruct rights to stool land. Stool land is under the custody of the Omanhene of Atuabo and he is responsible for keeping this land in trust for subjects who have the right to use the land for 'nourishment'. Nourishment (tilting the land for food) is the Nzemas conceptualisation of the function of the land (Pavanello, 1995) and the chief who is the custodian of the land must ensure that his people are well nourished (Eastern Nzema Traditional Council, 2013). Under the stool land, people can only cultivate food crops for their own nourishment. The farmer informs and asks permission from the chief for the use of a parcel of the land by paying a bottle of schnapps and GH¢5.00. This payment is only once, but farmers pay 'homage' to the chief as a way of appreciation. The same amount applies to indigenes who sought land for residential purposes. 15 of the 35 farmers interviewed had access to their land through this arrangement.

There is a third land access avenue land through the *abusa* system. *Abusa* is a contract where a portion of land is given out for cultivation (originally for the cultivation of cash crops, usually coconut). In accordance with the rules, a third of the produce from the farm goes to the landowner or the holder of the right to the land. The remaining two-thirds are for the tenant. According to the elders I interviewed, it is a responsibility imposed on landowning families to give land to those who do not have, so that they can feed themselves. This responsibility what referred to as *neazo* (Pavanello, 1995, Fieldwork, 2013). The elders explained that when it comes to *neazo*, subsistence is of paramount importance. The 6 of the 35 who had access to their land, though this arrangement [*neazo*], and they mainly cultivated food crops.

As alluded to in the theory chapter, rights of inheritance is only through membership of a maternal lineage (Pavanello, 1995) but children could also inherit farms or land from their fathers. When the child passes on, the farm could be passed on to the next generation (third generation), but it then reverts to *abusa*⁸ system where the maternal *abusua*⁹ of the grandfather

claims rent for the land or the land would revert to the man's maternal *abusua* after his passing. Such lands are limited to production of food crops. This is seen as an extension of the role of fathers as the nurture of children and wives (Pavanello, 1995). Also, under the *abusa* system some landlords/landladies cultivate coconut in-between the food crops of the tenants. In such cases, the tenant does not need to pay a third of his/her yield to the landowner but leaves the land when the shades of the coconut can no longer allow cultivation of food crops.

From the discussions, the prevailing land tenure system had implications for crops informants cultivated on the land and, therefore, forms of compensation they had. Farmers who owned the land were able to cultivate both food crops and perennial crops, in particular coconut. Informants who were using stool land or had access under the *abusa* or *neazo* systems were restricted to the cultivation of food crops. They were paid compensation in accordance with the size of their farms, while farmers who cultivated perennial crops like coconut and oil palm were paid a higher rate per acre, compared to what was paid to food crop growers. The food crops are of less value compared to the perennial crops which generate a lot more cash and stay on the farms for a considerable length of time. As I will argue in the discussion chapter, it appears the Land Valuation Division overlooks investments made in the farmland by food crop farmers and therefore paid unsatisfactory compensation to them.

4.3 Compulsory land acquisition by the state

In Ghana, customary institutions (families and stools) own 80% of the country's land under the customary tenure and governments have over the years found it difficult to implement infrastructural developmental policies without resorting to acquiring land compulsorily (Adu-Gyamfi, 2012). The land for the Ghana Gas project was also acquired compulsorily by the government. The law that provides for compulsory land acquisition for public interest investments also provides for the payment of fair and adequate compensation, which must be paid promptly to the landowners (Larbi, 2008). However, payments of compensation for land acquired compulsorily in Ghana do not go without problems. Adu-Gyamfi (2012) notes that there are usually discrepancies and irregularities in the determination and payment of

⁹ Abusua is the Akan name for family which is also true for Nzema

compensations depending on the purpose for which the land is acquired. He also notes that these discrepancies are even more pronounced where land acquired for commercial purposes attract higher compensations compared to that of public infrastructure.

There is a procedure for compulsory land acquisition in Ghana, as explained by the Western Regional Director of the Land Valuation Division of the Lands Commission in an interview. The first stage of compulsory acquisition by government is the determination of appropriate and suitable land. An application is then lodged to the regional minister (Western Region) where the land is to be obtained. The regional minister set up a 'Site Advisory Committee' (SAC) to consider the significance and purpose of the acquisition. At this point, SAC identified two areas, Atuabo and Bonyere. The committee (SAC) submitted its recommendations about the sites to the Regional Minister. The Regional Minister accepted the study on the sites and applied to the Lands Commission for its acquisition. Lands Commission is the state agency responsible for administering land issues in the country. The Lands Commission prepared an Executive Instrument (EI) for the acquisition and also forwarded it to the minister in charge of land. After the executive instrument has been accepted and endorsed by the minister of lands, the instrument was published in the newspapers to make the populace aware of the acquisition. In this case, they used television and local radio stations in broadcasting especially where the affected people do not understand the official language (English) and even if they do, access to them will be another problem. We also do this to educate the owner of the land the purpose and processes of the acquisition.

The property owners make claims to the LVD of the Lands Commission for compensations. The LVD is mandated by the state for assessing the value of properties and the Division's compensation estimates are based on defined principles ((Kotey, 2002). Compensation is then made to the property owners, and sometimes resettlement follows (Ghana Gas did not relocate anyone in Atuabo as would have been the case in Bonyere). In agrarian communities, alternative land is usually searched for and shared among farmers to help them continue their livelihoods. Note that Ghana Gas did not help in acquiring alternate land for farmers, even though, the communities are agrarian.

4.4 Different views on farmers involvement in estimation of compensation

Informants claimed they had no or very little involvement in the determination of what was paid to them as compensation for lost crops and livelihoods. The farmers participated in the identification and measurement of farms in order to avoid conflict over ownership and boundary disputes, but were not part of any discussions about how much was paid for any crop. The traditional leaders also claimed that they did not play significant roles apart from what they described as ceremonial. The Land Valuation Division (LVD) of the Lands Commission solely determined how much was paid for crops and land (compensation for land not yet paid). The Division claimed of using a statutory formula (a formulae they claimed is not constant but depends on several factors) to estimate the minimum compensation rates, below which the acquiring party (Ghana Gas) could not pay compensation for crops and properties on the acquired land. In an interview with the Western Regional Valuer, he explained that there were other factors they looked at in this case as in all other cases. First the LVD estimated the current value of the land and crops, and anything on the land, such as houses or any other structures and investments. He further stressed that, in most cases, the acquiring parties sit with the local communities where they negotiate additional compensation addition to the estimated compensation amounts by the LVD. However, this did not happen at Atuabo and Ghana Gas paid only the estimated amounts.

Ghana Gas claimed that they had met with rubber plantation farmers whose farms were on the path of the pipeline in the Ahanta Districts. The rubber farmers, therefore, had received additional compensation to what had been estimated by the Land Valuation Division. The company claimed that the rather preferential treatment of rubber farmers is based on two reasons. First, rubber plantation farming is an expensive venture and much money goes into setting it up. Second, the fact that those farmers took loans from the banks for such ventures. All other farmers received the exact amounts as estimated by the Land Valuation Division of the Lands Commission. The rubber farms are on the gas pipeline that will convey lean gas from the processing plant in Atuabo to Aboadze Thermal Plant in Takoradi. None of the farmers in Atuabo area interviewed had a rubber plantation. Ghana Gas asserts that, the alternative livelihood projects planned for the host communities will alleviate their plight of landlessness and poverty.

The stakeholders/interested parties 10 involved in the project presented different versions of what they regarded as involvement in the determination of compensation. Farmers, for example, explained that involvement would mean Ghana Gas meets with them, ask them how much they earned from the farms, and then they could negotiate how much should be paid them. As far as the farmers were concerned, failure of Ghana Gas to sit and negotiate with them constituted noninvolvement, and what transpired in the identification and measurement stages cannot qualify as involvement or at best very limited engagement. A farmer from Assemnda Suazo expressed her feeling in this way "I think involvement includes many things. Can you imagine going to the market and take somebody's items only to pay the person without asking about the price? That's what happened in this case. What about the fact that we had our crops destroyed? It's not as though they paid us at that time. I think they were just poor in dealing with us". Apparently, the farmer was complaining about some of her crops, which were destroyed because there was no information regarding the start date to clear the farms. Several other farmers interviewed expressed similar sentiments in addition to the fact that Ghana Gas' representative, LVD did not ask them any question regarding her crops before unilaterally deciding how much she had as compensation.

The traditional authorities also shared views related to the position of the farmers that, the compensation processes were non-engaging. The elders who spoke on behalf of the traditional council also did not believe the people and even the council were involved well in the whole compensation payment process. An elder interviewed said: "If they had engaged us well, we would have known exactly when they were coming and inform our people accordingly. Even though we knew Ghana Gas had acquired the land, people still had crops unharvested. The least they could have done was to inform the Omanhene, and we could keep our people informed. Their dealing with the community was just not the best".

 $^{^{10}}$ The interested parties in the Ghana Gas Projects are:

^{1.} The farmers who were interested in receiving 'adequate compensation' for their destroyed crops.

^{2. 2.} Ghana Gas is the land acquiring agency.

^{3. 3.} Land Valuation Division of the Lands Commission determines compensation of property on acquired land.

^{4.} *Omanhene* of Atuabo Traditional Area who gave out land to the government.

The Land Valuation Division, on the other hand, contended that what transpired was a complete involvement: "We could have stopped following up after issuing of certificates, but we wanted to be sure they [the farmers] get paid. On our part, we did involve them. How could we have identified the farms and their owners without their cooperation? If they told you we did not involve them, that can't be the case. Maybe, they were not talking about us", (interview with the Western Regional Valuer in Sekondi, August, 2013). What LVD called involvement include identification of farms, witnessing measurement of farms, signing of certificates by farmers. It did not include discussions about how much should be paid for crops or the views of farmers on what constitutes adequate compensation for lost livelihoods.

Ghana Gas n its part explained that the seeming lack of engagement with the farmers on determination of compensation estimates arose because of the farmers' lack of understanding of the position of the law. Ghana Gas' position is that, since, LVD a body with the mandate to carry out such functions (estimation of values of property) performed its role and their recommendations honoured, the accusation of the company for non-involvement is out of place.

4.4.1 The takeover and Shocks

Rural livelihoods depend greatly on natural resources (Scoones, 1998) in this case land. Farmers narrated different levels of shocks experienced as a result of the sudden loss of their farms that were their main source of livelihoods. The differences in shock experiences can be explained by the respondent's different asset combination: As one of the farmers pu it "It is hard to wake up one day realising that you do not have a farm anymore. Even though we have known about it for some time before they came, it was hard to imagine. The farm was all I had and unfortunately, my area was part of the earliest to be cleared. I felt even worse off when crops on the farm were destroyed because of lack of information before the start of the clearing. It was a hard moment" (A 42 year old male farmer at Atuabo). At the time of clearing the farms, compensations for crops had not been paid to any farmer. All those who had all their farms in the affected area complained bitterly about their shocks and desperations, but the extent to which these shocks were dealt with also depended on combined assets of skills, social networks and other forms of capitals. The takeover of the land therefore brought hardship and frustration. The shocks were in the form of loss of crops and land; loss of income and livelihoods and in a form of feeling

depressed and unhappy. The 42 year old farmer quoted earlier summarised his feelings this way: "Despite the loss of my crops and land, I was still hopeful until all my efforts to get work from Ghana Gas and Sinopec proved futile, I then became desperate and almost a frustrated person".

4.4.2 Compensation for crops

As noted earlier, the law that provides for compulsory acquisition of land also provides for fair and adequate compensation which must be paid promptly. Compensation was meant to ensure that farmers in the catchment area of the project did not become worse off than they were at the start of the gas project. Compensation therefore was intended to be fair, adequate and in some cases life enhancing (Larbi, 2008). The processes leading to the estimation and payment of compensation must be seen as transparent, engaging and involving all stakeholders and must be timely too. According to the LVD, compensation was put into two categories. First, there was compensation for crops and that has been paid by January/February, 2013. The second was compensation for the acquired land; this shall be paid after the completion of the necessary processes including legal procedures (interview with LVD).

The three main channels of accessing land I have discussed earlier have implications on how compensations were paid. Land users/farmers received compensation for crops while (not all farmers owned the land on which they farmed). In fact, 21 of the 35 farmers worked on parcels of land which did not belong to their families. Farmers who worked on land accessed through the *abusa* regime were expected to give out a third of the compensation package to their landlords/landladies just as it pertains in the sharing of crops. However, 4 of the 6 farmers under the *abusa* regime explained that, the meager sums received as compensation did not attract any interest from their right holders to the land. The *Omanhene* also did not take homage on the compensation paid to the 14 farmers who had accessed the stool land.

4.4.3 Adequacy of Compensation

What constitutes 'fair and adequate compensation' is a matter of debate. For example, there have been discrepancies in payment of compensation depending on the purpose for which the land has been acquired. Adu-Gyamfi (2012) asserts that, lands acquired for commercial purposes attract higher compensation compared to land acquired for government infrastructural projects. All the

interested groups involved in this study agreed that, it is almost impossible to have 'adequate compensation' especially when it comes to land because different people ascribed different values to land. For example, the Nzema have a notion of the function of land as 'nourishment' (Pavanello, 1995; Personal communication with the elders of Atuabo, 2013). A farmer expressed his perception of this notion in this way: "my land is my identity, and how much money do you think can adequately compensate me?" He did not think there could be any adequate compensation for his crops and land. Both food crop and cash crop farmers did not feel they have been adequately compensated for their crops. Coconut and oil palm farmers felt there should have been an agreed price for each coconut tree and oil palm at different stages of maturity. Such agreement they said would have made the compensation received more engaging, fair and sense of being adequately compensated. The cash crop farmers compared what they had received under the Ghana Gas project and what has been agreed with farmers under the Lonrho Port project. A coconut farmer told me at Assemnda Suazo that "we had tree [coconut and oil palm trees] on our farms, and they were talking about measurement. All I wanted was the counting of my trees and the money paid accordingly". Another farmer noted that, he would have become 'a rich man' if Ghana had used the Lonrho Port system of estimating values of crops.

Lonrho acquired the services of a private valuer who together with the farmers and the traditional authorities have come into an agreement on how much to pay for cash crops per tree depending on the stage of maturity and food crops based on acreage. The ten farmers I had interviewed earlier (which is not part of the 35) felt they had a better deal in comparison to what had been paid to those under Ghana Gas.

Both food and cash crop farmers under the Ghana Gas project not only felt inadequately compensated, but also thought the methods were unfair and not transparent. Coconut and oil palm farmers did not understand why there was not an agreed price for each of the trees at different stages of maturity. Farmers felt cheated and sometimes became emotional when talking about how inadequate the compensation for crops was. For example, a farmer who owned seven acres of coconut and oil palm farm expressed his frustration this way. "Considering how much I earned from my coconut farm alone and what they paid me, the money looks like a peanut. At least they should have asked me how much I earn anytime I collect those coconuts. If they think I

will lie, they could have waited for me to collect and sell them in their presence for them to have an idea. In fact, it's such a great loss, and the compensation; I just don't want to talk about it". The farmer received GH¢ 12, 000 (US\$ 6000) as compensation. According to this he used to earn a little over GH¢ 1000 in every three months; the duration for gathering enough coconuts to sell. He also earned between GH¢ 50 and GH¢200 biweekly from his oil palm trees intercropped with the coconuts depending on the season. The 'copra merchant' whom I shall talk about later in the chapter buys 100 pieces of coconuts for GH¢18.00 (USD 9.00) A big bunch of oil palm sells at about GH¢ 8.00 (US\$ 4.00). While the coconut is collected every three months, the oil palm is harvested every two weeks during the peak season between March and July. The local variety of coconut cultivated in the area has a lifespan of 80 – 100 years (Personal communication with Eastern Nzema Traditional Council, 2013). A coconut tree bears between 70-150 fruits a year depending on the stage of life and care.

Table 4: Incomes of selected coconut farmers and compensation received

Farmers	No of Acres	Monthly income (GH¢)	Amount Received (GH¢)
A	13	1000	15500
В	7	700	12,000
С	5	700	11200
D	N/A	180	1500
Е	N/A	60	650

Source: Fieldwork, 2013

The situation for food crop farmers was not any better. Most informants identified as food crop farmers did not own the land on which they farmed and were tilling the land for 'nourishment' (i.e. subsistence farming). Farmers, however, sell part of their harvest in the nearby markets to take care of other needs. Food crops valued less compared to perennial crops primary because of how long it can be harvested. A woman who received GH¢ 19.00 (less than US\$ 10.00) for her cassava and pineapple farm expressed her shock to me in this manner. "When they mentioned my

name, and I saw that amount [GH¢ 19.00] against it, I thought it was a mistake but that's what they said my crops were worth. It was my farm, and I knew how much I earned from it. I am not exaggerating, but I can tell you the pineapples alone can fetch me in excess of GH¢ 100.00. It was painful and unimaginable but exactly what happened to me". This woman had access to the land on which her farm once stood from the Omanhene. Another female farmer who cultivated cassava and vegetables and also lost her farm to the project and felt badly treated expressed this sentiment "The money they gave me, how many months am I supposed to use it? I had cultivated my land for decades for my survival, now they have taken it and in its place, they gave me this peanut". She had received GH¢ 146.00 for her crops.

Current state of food crop farm in Southern Ghana does not tell the full story of how much the farm would be worth in a year. Either the farmer harvested some crops already, or others are yet to be planted while others manifest on the fields. The farmers practice mixed cropping for variety of reasons of which preventing the risk of crop failure is the most important. This is in line with (Hesselberg and Yaro, 2006) taking steps to minimise risks of crop failure is more important than increasing income through mono cropping. Consequently, it is difficult to correctly place value on farms as seen at any moment in time.

Ghana Gas a provided contrasting perspectives on the 'adequacy of compensation' for crops. One on hand, the amounts paid were estimates submitted to it by a statutory body, LVD therefore, were fair and adequate. On the other, it may fall short of compensating for the lost livelihoods since it is difficult to arrive at 'adequate compensation. Adequate compensation according to the director of finance at the company is a compensation that makes the receiver of the compensation continues to maintain the same level of livelihood prior to the takeover. The Ghana Gas official summarized our discussions on the adequacy of compensation paid to farmers under the company's plan (...) "Yes, in the legal sense, (compensation being adequate) because it is the statutory agency that had determined what we paid out. But adequacy as in the sense, [receiver maintaining the same level livelihood] there was no way it can be. In any case, it was a compulsory acquisition. The people never invited us to come and take their land for compensation because they were tired keeping it. If you even think about intergenerational inheritance, then you can see that no amount of money can compensate people for their land. We

are both Ghanaians, and we know what land means to us. In fact, the monies for crops were peanuts and am sure it's finished long ago" (Director of Finance, Ghana Gas, 2013). Ghana Gas further notes that cash compensation alone is inadequate to compensate for lost livelihoods. "It is for this reason the company will implement its alternative livelihood programme in the project's catchment areas" he added.

The submission from the interview with Ghana Gas was revealing in the sense that, it brought into focus two perspectives; the legal and the livelihood. The justification of the adequacy of the compensation for crops only on the basis of who did the estimation is to avoid the bigger question of whether lost livelihoods were compensated adequately. On the other hand, the admission of inadequacy of the compensation in terms of ensuring fairness and providing alternative livelihoods brings in the issue of the capacity of the state institutions such as LVD to deliver on their mandates. It further casts doubts on the claim of independence of such organisations and whether they have been allowed to do their work without interference.

The LVD points out that their job was to determine the values of crops on the farm at the time of measuring. "You see, what I am saying is that, we estimate, an amount below which no land acquiring entity can pay the farmers, but I can also tell you in most cases, the land acquiring entities, then sit with the farmers and negotiate how much they could add to what we had estimated" - the Western Regional Valuer at the LVD. He explained further that LVD representatives had been at Atuabo at the time of the payment of compensation and the exact amounts as estimated by LVD were paid. "Any payment above the estimates stipulated by the LVD is a matter of negotiation between the community and the company involved", the Director at LVD added. Why should a state body with powers leaves the livelihoods of citizens in the hands on organisation with its own interests to do the right things they have failed to do? I shall discuss this further subsequently.

Farmers received compensation for crops, six months after the farms were taken over and all the informants except two farmers had received compensation for crops. A female farmer who was out of Atuabo at the time Land Valuation Division had carried out the identification and measurement the farms is the first. The second case involves a man who had undergone the processes of identification and measurement, but was also away from Atuabo at the time when

compensations were paid. The two farmers, who were interviewed separately, had a firm belief that I was capable of helping them retrieve their compensation. In their eyes, a researcher is powerful. I contacted Ghana Gas and the Land Valuation Division about the two farmers' complaints. It turned out that the man with a certificate could go to the designated bank to collect his money. When I made him aware of this, he contacted the bank about it, and they were in the process of crediting his account when I was leaving Atuabo.

The photo below shows the certificate of a man who was not paid compensation for his crops after undergoing the necessary process. As discussed earlier, he was about to receive his package at the time I left Atuabo.

PROJECT: AND PHASE GAS INFRASTRUCTURE PROJECT PROJECT

Photo 1: A Certificate of Farm Ownership (Form) Issued by LVD

Photo: Author

I had a fuller understanding of what happened in the woman's situation after my interview with the LVD. According to the LVD, the organization will go ahead to measure farms even when owners are absent. Such farms and marked with unique identification codes with sketches showing who bordered such farms. The absentee owners can come forward to identify their farms and certificates of ownership can then be issued to them. This process sounds rather simple, but the reality is that it involves travelling from Atuabo to Sekondi-Takoradi; the regional office of LVD. The cost implication of making this trip is significant, and explains why this woman may be unable to retrieve her compensation. These two cases out of 35 farmers interviewed have gone to buttress the non-engagement allegation leveled against Ghana Gas by the farmers and the traditional council. It also manifests the low level of community relationship and revealed element of authoritarian tendencies with which the state deals with the voiceless.

4.4.4 Ghana Gas and Community Relations

In today's business environment, it is not enough for companies to obtain the required licenses and permits from appropriate governmental agencies. They also have to obtain what is now termed a 'local license', which means to earn the good will of the communities in which companies operate (IFC, 2000).

During the fieldwork, the farmers interviewed expressed that the relationship between their community and Ghana Gas was not the best. At Assemnda Suazo, an elder of the community complained about how Sinopec trucks rendered their roads impassable and their appeal to them and Ghana Gas to rectify the situation failed until they resorted to demonstration. "They have the trucks; we wondered what was preventing them from repairing the road. What they did was not from their heart, and everyone can see it. A road without a gutter in this place is a joke; in the first place, their trucks destroyed the road. His frustration was to the fact that rains in this part of the country are usually heavy and can render a road without proper drainage impassable within weeks if not days.

Elders, who spoke on behalf of the traditional council, shared similar sentiments about their relationship with Ghana Gas. An elder explained in our discussions that, "We received them well when they came [referring to Ghana Gas] but for reasons known only to them, they decided not to treat us well". He ended that "For us, we will continue as much as possible to create a good working atmosphere for them because other companies are coming here as a result of Ghana Gas and they have seen how good we have been and are ready to help us". To underscore his point, the same elder said in a conversation at the forecourt of the chief's palace when it was being prepared for an important programme that "You see, we asked of them [Ghana Gas] to

level the ground, but they were dragging their feet until the Omanhene sent for another company in Anokyi. They were so happy the Omanhene had asked them for help and readily provided the council with a truck and a bulldozer to level the arena. We are obviously not very happy with the happenings, but we are patient"

Ghana Gas is not oblivious to the company's poor image in the host community. However, the company's diagnosis of the cause of the problem was not in tandem with the reasons given by the community. The farmers attribute the problems to inadequacy of the compensation paid for their crops, lack of information on the start date of destruction of farms and insensitivity of the company in dealing with the community. In addition, there were fewer than expected job opportunities from the construction. The company captured it this way: "To be frank, the relationship with the community is not smooth at all. We are trying hard to improve it. The source of it is that, the company belongs to the state and therefore, the people do not seem to trust Ghana Gas. They do not believe in our promises, hence the unhealthy relationship, but we will develop that soon". It appears Ghana Gas do not fully understand the causes of the hostile relationship with communities in the Atuabo area. The company, however, puts its hopes on reviving the relations through its much talked about an alternative livelihood Programme.

4.4.5 Effect of Ghana Gas project on farmers livelihoods

Thus far, the gas project has mostly negative effects on the farmers whose farms and land were part of the project for a variety of reasons. First, it deprived them of their farms which once served as the main livelihoods. Second, the farmers felt the compensation processes were not fair and transparent. Subsequently, compensations received did not adequately compensate for the lost livelihoods. Third, the gas project at its construction stage failed to provide jobs for farmers and members of the communities. Consequently, affected farmers do not have a secure livelihood. Local businesses however are experiencing mixed fortunes depending on the business. Those businesses dependent on farm produce such as palm nuts and coconuts either as their raw materials or as commodity of trade were affected. Indigenous vegetable extraction from copra and palm fruits is one such industry worse affected, even more so were those who dependent on the family farms for their supply of raw materials. For this last group of people, the situation has a wider ramification for their families as they lost both farms and businesses. As I

will demonstrate in one of the case studies subsequently under the heading; *effect of gas project local businesses*, some entrepreneurs had to expand their scope to be able to meet their supply requirements. On the other hand, the 'buy and sell' (petty trading) which have dominated Ghanaian informal sector since the structural adjustment programme in the 1980s (Songsore, 2003) are, however, burgeoning as more people come to the community in connection with the gas project.

The table below shows how farmers are affected by the Gas project in terms of whether all their farmland has been affected or not. It is to give an idea on immediate effect the loss of farmland has on the informants.

Table 5: Farms under Ghana Gas (GG)

Farm Distributions	Number of Informants
Entire farm under Ghana Gas	22
Entire farm under GG, but not cleared yet	10
Farms affected by both Ghana Gas and	9
Lonrho	
Affected by GG but additional farm	2
elsewhere	
Only parts of farms affected by GG	2
Total No. of informants	35

Source: Fieldwork, 2013

As table 5 shows, 22 of the farmers interviewed revealed that the gas project consumed all their farms, and they do not have any other farmland elsewhere. The second group of farmers (9) had another farm apart from the one taken by Ghana Gas, though; these farms are under the Lonrho Port project. That means these farms too will be taken soon. Two of the farmers had another farm elsewhere not affected by any other project thus far, and two farmers also had parts of their

farms still available to them. Farmers without other farms had to buy food stuffs from the market at the same time; the farms that hitherto gave them the purchasing power were gone. 10 farmers still had their farms untouched after receiving compensations. The benefit, however, depended on the crops they have on the farms. Cash crop farmers deriving greater benefit from such a situation since harvesting was all they had to. The food crop growers were unable to improve their farms because of the uncertainty surrounding the time of destruction even when their farms were still intact. A widow who lost her farm without compensation expressed her feeling: "I am finding things so difficult. At least no matter how small it is, I will be at peace with it, but now I have a bitter pain because I lost my farms without any form of compensation just because I was not there. Things do not vanish that way". This woman now depends on her family (mostly children) for sustenance. Two of these children stay at Atuabo where they farm and look forward to carving a niche within the oil and gas boom.

4.4.6 Effect of the gas project on local businesses

The gas project has implications for businesses that depended on the produce of the farms. Local vegetable oil extraction industry is one such business. Women either sell or process palm nuts into palm oil, which they usually sell at Ikwe and Esiama markets (see map of the study area on page 10). Similarly, copra oil extraction also depended on the ready availability of coconuts. Yet, there is another lucrative business that depends on the copra farmers to thrive. In the following case study, I will refer to such business women as 'coconut merchants'. 'Auntie B' is one such coconut merchants and as I will show, the role of the coconut merchant goes beyond the buying of copra from farmers. This case is an illustration to give more insight into how the gas project and its related businesses affected the local businesses and by extension livelihoods.

Auntie B, who was also my landlady during the fieldwork at Atuabo, trades in copra. She buys copra from the local farmers for export to Nigeria. She has clients in Nigeria whom she said finances her activities. The trade is at a stage where neither Auntie B nor her client in Nigeria needed to travel back and forth. The trusted articulator drivers load, transport and deliver the produce to Auntie B's clients in Nigeria every three months. They also come back with Auntie B's profit for the next purchase. In this way, Auntie B is in a position to continue buying the produce until the next money comes. Over time, demand for the produce increased requiring

Auntie B to expand her range to meet the clients' requirement. She did this by contracting agents in nearby villages who bought the produce for her. Atuabo and its immediate communities remain the most important source region for the copra because, unlike the other districts, where coconut cultivation faces stiff competition from cocoa and rubber, in Ellembelle District, especially Atuabo and its immediate communities, coconut remains the most important crop.

The Ghana Gas project covered approximately 300 acres of land and in addition, the Lonrho Ports will cover 514 acres of land. The two projects will, therefore, destroy mostly coconut plantations along the coast reducing the volume of coconut. Auntie B comments that, "I am already under pressure to supply more to meet demands. Destruction of coconut farms can only add to the pressure. Atuabo area is the best place to buy the produce. Expanding into other territories to buy the produce comes with its own challenges; monitoring becomes difficult and, you know, it is someone's money". 'Someone's money' here explains the pre-financing arrangement she has with her Nigeria business associates. She lamented about how some women she had given credit in Axim were unable to account for the monies.

Auntie B employs a driver, and four other people from Atuabo alone to assist her in the business in addition to the local agents in other communities. Her business, therefore, provides people within the community livelihood opportunities. She is very instrumental in providing credit to coconut farmers in times of distress. However, she prefers advancing money to parents for their wards' school fees in high school and tertiary levels of education. She explained it this way: "(...) I helped many people to pay their children's school fees in the secondary schools and tertiary levels. Although, the coconuts, came eventually, the joy of seeing those children go to school is satisfying. It is a worthy cause". Auntie B only gives out money for reasons she considers was very strong. "Sometimes, I had to give the money to the children myself because education is so important to me", she added. The big house that she had built from her nyasoe (profit from her labour) houses visitors, especially during funerals (Note that, funeral are very important occasion in Ghana). Auntie B is an intelligent woman who sees opportunities before they arrive. The house and a mini truck are assets she uses carefully to gain loyalty (loyalty though not the main reason for her generosity). She explains that since she used money from her trade to build a house, she prefers to use the house to improve the business rather than rent it out,

even though, there has been incessant pressure on her to rent her house. "People talk too much, they think they know more than I do, I have been in this business for more than 20 years and I know exactly when to act. I have done the calculations, and I know what I want".

The point here is that the gas project and others future projects will lead to the destruction of an intergenerational resource with its associated indigenous businesses which will affect the livelihoods of many. Another important aspect of this case study was that, it provides insight into the claims made by some of the coconut farmers on the incomes they earn from the sale of their produce. Although she expressed anxiety over losing farmers who have been loyal to her over the years, she fears that the situation may lead some of these farmers into a state of a complete penury. "I will try hard to meet the current demands by widening where I buy the produce, but I worry about the farmers. Some of them indeed made a fortune from this business". Some farmers make as much as GH¢ 3600 (USD 1800) every three months she explains.

Photo 2: Auntie B's truck load of Copra

Photo 3: Ready Copra for Export to Nigeria



Photo: Author Photo: Author

Another business negatively affected by destruction of coconut and oil palm is the local vegetable oil extraction from copra and oil palm. It is quite a profitable business done by young men and women from which people get *nyasoe* (profit from ones labour). In most cases, the small scale industrialists depend on the family farms for their raw material supply even though

some also buy from farmers who do not produce enough quantities to sell to 'coconut merchants'. In cases where farms belong to husbands, wives make use of the palm nuts and the copra and pay their husbands roughly the market price of the produce and keep the profit. A 40 year old woman who sat through the interview section with the husband expressed her disappointment at losing her raw material base. "I usually give my husband what he would have had selling the copra to buyers (100 coconuts sells at GH¢ 18.00 (US\$ 9) and a bunch of palm nut between GH¢ 5-8 depending on the size) and the profit is mine. I use part to help my husband look after the home and the rest for myself and children. Now the production level has fallen drastically and very soon when the port project starts, it may be the end of my business unless I buy the copra". From the discussion with the coconut and palm oil producers, they are able to make about 30% to 50% profit depending on the season. Of course, labour cost was not subtracted. However, what it is important here is the women add value to the family's crops resource and thereby diversify the income of their families.

4.4.8 Impact on activities not directly dependent on the local environmental resources

Unlike livelihoods dependent on the agricultural produce from the study communities, petty trade/retail segment of the local informal economy has seen increased patronage according to local entrepreneurs in Atuabo. A woman (Nana) who sells provisions/groceries (e.g. soap, rice, biscuits, etc) explained that, she had had to introduce new items into her store carefully, since such items were now in demand by visitors to the community. Nana explained that, business used to be slow prior to the construction of the gas plant in the community. "Even now, things have not changed much and I sell just a bit more than it used to be. My dilemma is that some of the things the visitors asked for may be out of reach of the residents, but I am introducing them gradually". Bottled water, canned drinks and biscuits are items whose demand has risen since the start of the construction. Another business that has seen a bit more patronage was the 'beer bar' operations. That was due to increased number of visitors and workers who come for drinks after work. In the words of the operator, "It was normal not to sell any bottle of beer for weeks, but that cannot happen now. Business is moving up gradually". The rather favourable response to the gas project by the drink business can be explained by the fact that the construction project has been male dominated. The construction workers usually meet after work and spend few

hours with friends at the bar. The increased number of workers in the town with purchasing power expanded the threshold of the drink market.

Huge projects of Ghana Gas plant magnitude have had great impacts on local economies of host communities (Yankson, 2010). However, Chinese construction works in Ghana and elsewhere in Africa have gone in a different trajectory that does not promote the desired local employment opportunities (Adisu, 2010). One reason accounting for this phenomenon is the fact that Chinese contractors usually move to a site with their higher percentage of their workforce who live in camps. At Atuabo, estimate by local workers with Sinopec put the percentage of Chinese workers at about 70% of the work force at the gas processing plant site. They lived in a camp close to the construction site and had almost everything supplied to them including eating arrangement.

The infusion of the Chinese construction workers into the local informal economy at that stage [construction stage] was limited to their purchase of fruits, alcohol and cigarettes. The large number of Chinese workers, therefore, did not make any significant impact in the local economy of Atuabo and had not encouraged people to create livelihood niches from their presence. At the construction site, very few women who sell fruits, water and food did not see the Chinese as their target but the few Ghanaians who work with Sinopec. A fruit seller at the site told me in a conversation, "The Chinese do buy sometimes, but even that is a struggle, they can hardly speak to us but they love to bargain, (mupe adufudie) (apparently talking about how cheap Chinese workers prefer to buy her fruits). They like things cheap; unlike the Italians who previously worked up to the coast, they only buy and then go. Perhaps, the Chinese are not paid well". A provision store owner expressed sentiments depicting non-involvement of Chinese in their local economy when she said "maybe, we do not sell what they need apart from cigarettes".

4.4.9 The Ghana Gas Project and Employment

Unemployment is a very common phenomenon at Atuabo and nearby communities due to lack of opportunities. The situation of the gas project at Atuabo, therefore, heightened the expectations of the unemployed youth in the project's catchment area, who were hoping to change their employment status. Even farmers who had lost their farms to the project had hopes of finding work in the construction stages of the gas plant. As it turns out, only one of the farmers

interviewed has a job in the construction phase of the project. Some of the youth of Atuabo had travelled to Takoradi to learn trades in welding, heavy duty truck driving in anticipation of finding employment. However, most of the youth are unskilled, yet, they did not accept their inability to find work at the construction stage of the gas plant was due to their unskilled status because, they believed that those engaged from other communities did not have any special skills either.

The following explain the lower than expected job opportunities. First, Sinopec has a large Chinese work force that travelled with the company to Ghana. Though official figures on the number of Chinese workers at the project site is unknown, some of the local workers with Sinopec put the figure at 70% of the workforce (that is workers working on the plant site alone excluding the housekeeping that is usually undertaken by Ghanaians). A high percentage of the Chinese workforce leaves about 30% of the places for the locals to fill, and this is where the problems lie. The informants blamed the CEO of Ghana Gas of filling the few positions left for the locals with people from his hometown Esiama (see the map of the study area on page 10). "It all boils down to the Chief Executive Officer of the Ghana Gas Company; he is from Esiama, and brought a lot of them to work here while we watch. Can you imagine even the community relation officer does not come from here, he's from Alabokazo? Those two made sure our people were not employed", a visibly angry and disappointed 43 year old man said in an interview. The two communities mentioned above are in the Ellembelle District; the same district as Atuabo. One would have thought employment of people from other parts of the district should be a healthy development. It brings into sharp focus, the age old problem of nepotism, clientelism that have characterised the politics of Ghana. To counteract the perceived discrimination perpetrated by the CEO of Ghana Gas, some of the youth think that, the Minister of Energy who comes from their village (Atuabo) should have done more in balancing the equation.

There were few informants whose children and siblings had been involved in the construction stages of the gas project by Sinopec. Ghana Gas has a local office at Atuabo, but most of the youth claimed they were unsuccessful in getting cleaning jobs. Those who were successful at getting jobs at Sinopec were paid GH¢ 12.00 (US\$ 6) per day for 12 hours work (2013 minimum wage was GH¢ 5.24 while the maximum working workers per week is 45 hours. 40 hours per

week applies for most unionized labour). The low wages paid by Sinopec did not attract some of the youth in the communities. A young man, who had worked briefly with Sinopec before resigning, said that, a lucky day for him at sea is better than working for Sinopec. If he should go fishing and happens to get a good catch on a particular day of the month, he was more likely to make more money than working with Sinopec for the entire month. Informant explained that, there is no room for forming unions and the regional office of labour in Sekondi-Takoradi did nothing to reports logged at their office regarding low remuneration and other labour violation such as failure to provide protected clothing on time. The workers also worked 72 hours per week instead of the legally permissible hours of 45. Again, this demonstrates inadequate institutional provisions with regards to livelihood options and protecting the interest of the citizenry.

4.5 Compensation for Crops and Alternative Livelihoods

Informants, especially food crop farmers did not think that the compensation received for crops was enough to make them set up other alternative ventures. Food crop farmers interviewed received between GH¢ 19.00 and GH¢ 1000.00 as compensation for lost farms. Paying of school fees and buying of food items were the two topmost uses the compensation money from food crop farmers. There were 3 informants (2 young women and a 42 year old man) who received GH¢ 218.00, GH¢ 263.00 and GH¢ 600.00 respectively used their money to develop on their businesses. A 23 year old mother of one told me, "I sell food here, and I used the money to buy plates, spoons and rice. It is our local food, rice and bean soup. I have plans to expand when the plant starts operations, but then, I may have to improve upon what I do now". The other two were into bread baking and copra oil extraction.

Informants who engaged in coconut farming received between GH¢ 600 and GH¢ 15,500 as compensation for their crops. Though, this group of farmers (coconut farmers who formed 37% of farmers interviewed) received fairly higher amounts compared to food crop growers, the uses to which they put their money were not much different from those of food farmers i.e. paying of school fees and spending on food. A cash crop farmer who happens to be the highest compensated farmer I had interviewed planned to invest his money into building a house to rent

out to workers. I therefore present his case to illustrate how the coconut farmers spent their compensation.

I have lost seven different farms totaling about 13 acres to the Ghana Gas project. They were coconut and oil palm farms from which I earn $GH\phi$ 3000 (USD 1 = $GH\phi$ 2 at the time) every three months from the coconut sales alone. My wife harvests the oil palm and uses the income to look after the home. I have received $GH\phi$ 15,500. Compared to what I earn from those farms every three months, the compensation is woefully inadequate. He wondered how the figures were arrived at "How did they arrive at that, they never asked me anything concerning how much I earn from the farm or whatsoever". This farmer's luck was that; his farm was still intact after he had received the compensation for the crops (there is no certainty regarding how long this farm lasts). You see, I still harvest the coconut and that has allowed me to save the compensation money at the bank. I also have a similar farm under the Port Project; my coconut trees are in very good condition, and they have agreed to pay me $GH\phi$ 35.00 per tree. That means I am going to get much money. Maybe, three times what I had from Ghana Gas. Considering the lifespan of coconut (80 – 100 years for the tall variety cultivated in the area)

"I will put up a building that I can rent out to workers coming to the community to work with Ghana Gas and other companies coming to town. Because I know what is at hand, I make much savings from what I get from the farms. Perhaps, I may just get close to what I was expecting as compensation before the farms are finally cleared, I pray very much it stays a bit longer. If I know the time compensation for the land will come. I would have waited and make the project bigger, but someone told me compensation for land can take a long time, sometimes, it may not come at all. I am getting into my 50s; I cannot work on the port project when it comes, but with my project, I can also benefit from the gas project through what I will earn from renting out my rooms." This farmer also claims ownership of the land on which he farmed and was expecting compensation for the land. He, however, did not factor into his plans compensation for land as such payments can take years.

The last of the three cases was about a food crop farmer. Sauko, as I referred to him is 34 year old farmer who was affected by the Ghana Gas project, thereby losing his livelihood in the process. He has a wife and 3 children. He had accessed the land on which he farmed from the

Omanhene and a woman 'Auntie Agie'. The two farms were both destroyed because of the gas processing plant being constructed. He received a total of GH¢576 as compensation for his two farms. Money he used for his children school fees and as housekeeping money. He experienced a shock when he lost his farm and realised he had no farm to go to and no other place to get food to feed his family. "I realised how fast I had to think to provide for my family, so I tried many things". He also tried unsuccessfully to work with the local office of Ghana Gas and Sinopec; the main contractor. "At this point, I became desperate and quite frustrated". Fishing would have been his next point of call, but he never had fished before and does not intend to go into it. "I knew how to do two other things; coconut oil extraction and palm wine tapping. However, one needs money to start them. Just at that point, a member of the community had asked me to tap his palm trees. In fact, he was my saviour". Sauko used his earnings from the palm wine tapping to finance his new livelihood, copra oil extraction. He told me "this is not what I wanted to do, but at least it saved me. I will leave it to my wife when our son grows up a bit. May be that time, the port project would start have started".

For now, Suako feeds his family from the vegetable oil extraction from copra, a business he financed from palm wine tapping. "The main plan is to work with the port project for which I have registered. We met them [Lonrho Group], and they assured us of the jobs. All I want is for them to begin. It is the main thing every youth in this community and other surrounding villages are waiting for", Souko explained. Souko had no skills apart from farming, palm wine tapping and vegetable oil extraction, but he explained that Lonrho had laid down an elaborate plan to train every willing youth to become employable under the port project. He has a firm believe most of them will become permanent workers after the construction. Souko in response to why he was planning his life towards the port project, instead of towards Ghana Gas' Alternative Livelihood Programme, he explained that, the programme from Ghana Gas is 'hearsay' and they have done nothing about what they heard since then. "I heard they will train people in farming and other skills, but I wonder what they want the people to do. Where do they want the people to go and farm? They can talk; I do not want to believe anything they say". Like Suako, many of the informants who have heard of Ghana Gas's livelihood programme do not believe in it and were planning their lives independent of that programme.

Photo 4: Mr Suako and Daughter at his Coconut Oil Extraction Enterprise



Photo: Author, 2013

Photo 5: Suako's Daughter helping him

4.6 Fishing, an old livelihood with new importance

As mentioned above, fishing has been one of the livelihood activities in the study communities. Though the area has a fairly long coastline, fishing is not a major economic activity as it pertains in other coastal communities. Some informants combined farming with fishing, but in most cases regarded themselves first, as farmers. "Here, fishing is a seasonal affair. It is between August and September and during that time we do much fishing and make money from it. Outside that time, people do fish, but it is not on that large a scale", an informant explained. The fishers use traditional canoes and beach seine without outboard motors. People who come around to help in the dragging of the net share the small fishes while larger fishes are sold to women who process and sell fish locally or use fish in their local catering services (see photo below). However, the loss of land to Ghana Gas and other companies is making people think of taking to fishing on more intensive bases than before. The deliberations notwithstanding, informants were not making any investment into buying fishing gear as at the time of the fieldwork because working with the Lonrho Port project remains their number one hope. Besides, there is uncertainty surrounding where fishers can fish because the Jubilee partners are asking government for exclusive zone around the oil fields for their operations.

Smoking and frying are the two main methods of processing of fish in the area. Availability of coconut shell makes smoking of fish a bit easier. In the same way, local vegetable oil extraction

of coconut provides oil for frying of fish. Some women interviewed combined vegetable oil extraction, and fish processing. The oil and the processed fish are usually sold at the Ikwei market (see map of the study area on Page 10)

Photo 6: Fishers at Atuabo Beach

Photo 7: A fish waiting for pricing



Photo: Author, 2013

4.7 Ghana Gas' Alternative Livelihood Programme

Ghana Gas' Alternative Livelihood Programme had not yet started in the area at the time of the fieldwork. A number of informants acknowledged hearing of the livelihood programme, but were not sure whether or when it will be implemented. A policy document for implementation of Ghana Gas' Alternative Livelihood was approved at the end of October, 2013. Among other things, the programme will train residents of the catchment area of the project in new farming techniques and equipping affected with employable skills. Training of farmers comes with no plans of assisting them to access new land for putting into practice the new farming techniques to be learned. "We are not into that. It is so difficult to get lands in the area, so Ghana Gas does not want to involve itself in that. We will train them; they can go and look for land to farm. They will be encouraged to look for alternatives within our programme for support if getting land becomes a problem", Director of Finance, Ghana Gas.

According to Ghana Gas, this is a programme they intend to use in winning back the confidence of the host communities because it is very detailed and covers a wide range of areas including education, health, community development, scholarship schemes and training of residents in

alternative livelihoods. According to the Director of Finance, the programme comprises alternative livelihood programmes and also Corporate Social Responsibility (CSR). The first is to augment the compensation paid for lost livelihoods and the (CSR) will help in the socioeconomic development of the area. "As I have told you earlier, we do not seem to have any good image in Atuabo because we have not delivered on anything we promised yet, but this programme will prove that we have good plans for the people".

The farmers and the traditional council had made claims of non-involvement in the activities of Ghana Gas including planning the alternative livelihood programmes. Chiefs and traditional authorities play important roles in the economic lives of rural people as the custodians of the land, (an important livelihood asset). The perceived lack of involvement at the developmental stages of the company's ALIPs could have implications for its smooth implementation and actual impact. Ghana Gas' intention of using the alternative livelihood programmes to win the confidence of the host communities makes the programme looks rather like a desperate face saving project than a means of making an impact on the lives of the people.

4.8 The Lonrho Port Project at Atuabo, the representation of hope for the local people

The Lonrho Port project to be undertaken by Lonrho Ghana Ports Limited, and will be known as Ghana Oil and Gas Freeport Service Terminal Complex. It is expected to be in full operation by 2016. It involves the construction of temporary workshops, work areas and material staging areas. It also includes a harbour protected by a rock breakwater to the west and a rock groyne to the east, a dredged approach channel, turning circle, berth pockets and quays. Other components will be service facilities to be located in the port along the quays to provide support services to the off-shore oil and gas industry, including rig repair, waste treatment and management, fabrication and supply facilities (Ghana Oil Watch, 2013). The project will also deliver an airstrip and a helipad to facilitate aircraft and helicopter transportation, as well as other infrastructures like power generation, boreholes, accommodation, offices, naval base, a hydrocarbon fuel storage area and roads (Daily Graphic, 2013). The company has acquired 514 hectares of land at Atuabo (Eastern Nzema Traditional Council, 2013; Daily Graphic 2013). The land acquired by Lonrho Ghana Ports Limited (Lonrho Group) is far bigger than that of the

Ghana Gas which is around 300 hectares (Fieldwork, 2013).). The company has agreed to use the leased land as the Atuabo community's equity in the project (The Ghanaian Times, 2014).

Though, Lonrho Ghana Ports Limited had not paid compensation for crops and land and the project had not started during the fieldwork (June-August, 2013), informants who had farms under both projects (Ghana Gas and Lonrho Ports) immediately compared the compensation methods adopted by Ghana Gas, and Lonrho. According to the farmers I interviewed in the two projects (who had land in both the Ghana Gas and Lonrho Projects), as well as representatives of the Eastern Nzema Traditional Council, Lonrho's compensation processes was more participatory and more transparent. An elder of the Traditional Council put it this way, "I can tell you that they [Lonrho Group] are good. So far, they have engaged the community at every stage of their programmes. We all witnessed the land measurement and everything is on the public notice board. If one knows the size of his/her farm, and depending on the crops you have, you can even calculate your compensation. For example, I will be getting GH¢ 8000 (USD 4000) for my cassava farm alone; this is how transparent they were"

| Company | Comp

Photo 8: Lonrho's Compensation Agreement on a Public Notice Board

Photo: Author

Coconut trees (the tall variety) have a fruit bearing lifespan of 80-100 years and can bear about 150 fruits per year. As I have also pointed out, the local coconut merchants purchase 100 pieces of copra for GH¢18. It is evident that the GH¢35 Lonrho has agreed to pay for a mature coconut tree covers only up to two years value of a coconut tree (one can do the same calculations for other crops with similar or worse results). I can state that, the happiness expressed by the coconut farmers over the agreed amount was not because of its 'adequacy' but the vast improvement it represent in comparison with the amount paid for the crops under the Ghana Gas project. Note that, Ghana Gas did not agree to any price for any crop. The company therefore paid estimated amounts put forward by LVD without indicating how much a particular crop was worth. I will demonstrate in the discussion chapter that the poor handling of the compensation is part of the institutional weakness and the state displays towards it citizens.

Job offers at the construction phase of Ghana Gas project did not match the high expectations of the youth in the communities. Subsequently, they were disappointed and full of thinking. Their disappointment, however, was short lived after Lorho Ports has acquired land to construct an oil servicing port in the area. The Lonrho Port Project generated this 'new wave of optimism' for a number of reasons. First, the perceived transparency with which it engaged the farmers affected by its land acquisition. "The determination of compensation for crops was involving, we dialogued and came to decisions on how much is fair for both [Lonrho and the farmers] parties", an elder told me in Atuabo. It was the kind of engagement the elders described as 'mutual respect'. Second, Lonrho had opened a temporal office at the Omanhene's palace to register the youth of Atuabo for skill training prior to the commencement of the project. "I am not only happy because I know for sure to be working there when the project starts, but because many of my friends who were disappointed by Ghana Gas and Sinopec will finally have a job. I know what I am talking about because I worked with Lonrho to register the youth. I can tell you that, Atuabo, Assemdasuazo and Anokyi cannot provide the number of labourers required", former registration officer, Lonrho Ports said.

The optimism generated got almost all informants who are youthful planning livelihoods along niches they can carve for themselves as their community transform from a tiny rural community into a modern industrial port city. It is as if nothing else matters; the port dominated every

discussion on livelihoods. An elder of the traditional council [45year old] told me, "The day they [Lonrho Ports] move to town, I am a worker just as most youth in this town. Perhaps I should not talk much about this because I know Alex [my interpreter] told you a lot about this by now". Affected farmers and the youth in the community were pursuing livelihoods that could sustain them as they anticipate the coming of the port project.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.0 Introduction

The chapter discusses the major findings by engaging the main theories and concepts which served as a guiding tool for the study. My objective is to provide answers to the research and theoretical questions. First, I discuss the involvement from the perspectives of the interested parties/stakeholders. I engaged the participatory approach using two typologies, as provided by Arnstein (1969) and Pretty (1995). Second, I discuss the land tenure arrangements by which farmers had accessed the land they lost to Ghana Gas through the institutional framework. Further, I also discuss the vulnerability context and the impact of the project on the livelihoods of farmers directly affected by the project in particular and the members of the community in general. Lastly, I discuss the new livelihood strategies available to farmers by engaging Carney's (1998) livelihood strategies.

5.1 The role of institutions in granting and denying access to land

Resource (capital, or asset) is an important concept within the livelihood approach (Scoones, 1998), however, people's access to resources are usually governed by institutions (regularised pattern of behaviour and practices), organisations and social relations (Leach, 1999). Within the social relations, are embedded differences (gender, age and social positions etc). These differences are essential to understanding different ways of accessing land, the type of crops one can grow and consequently, the compensation one can claim.

The study found out that, farmers had accessed land through three main avenues. Land in the community belong to the *Omanhene* but, some families claim ownership for land in the community either through long term usage or as a reward for a role played in the community's affairs by once lived ancestor of the family (Personal communication with elders at Atuabo, 2013). As the 'rule of the game', access to family land is granted through membership of a matrilineal kinship. And as the study found out, gaining access to land through kinship ties made it easier for farmers to cultivate crops without 'institutional restrictions' that exist in other ways of accessing land. Chiefs are important in the lives of farmers, as found out in the study, the paramount chief (*the Omanhene*) is the ultimate owner of land within his jurisdiction. He is,

therefore, influential in granting access or otherwise to this important livelihood access. He is also regarded as the nourisher of his subject, a function that do not connote only access but also, restriction of crops one can cultivate on land accessed from the *Omanhene* to growing of crops just for nourishment. Following Leach (1999) account of institutions as regular patterns of behaviour, provides insight into accessing land under the *abusa* system. The cultural obligations imposed on landowning families to give out land to the landless for nourishment. This brings into sharp focus the role of social relations or social capital in access to land.

The state acquired the land for the Ghana Gas project through the state in accordance with using the land for developmental projects or public interest. Ghana Gas's 'public interest' status is without questions especially considering a vital role it is expected to play in the energy sector. But, the same law that empowers the state to take control of land belonging to individuals and stools also provides for the prompt payment of 'fair and adequate' compensation (Larbi, 2008). The chieftaincy institution becomes prominent in the processes not only because the chiefs hold land in trust for their subject, but also, they are very important in the livelihoods of their people through provision of land for farming which is the main livelihood activity in the study area. As noted by Larbi (2008), over 80% of the land in Ghana is owned by families and stools. In a rural area as Atuabo, where there has not been any major governmental project, the ownership of the land is in the hands of the families and the stool. As explained by the traditional authorities, even though some families owned land in the community, every land originally belongs to the Omanhene and families cannot give out land to outsiders without the knowledge and approval of the chief of the area. This seemingly complicated land tenure arrangement sits into Ubink's description of 'multi-layered customary set' elsewhere in Ghana (2008: 268). Unlike in Ubink's (2007) account that chiefs in peri-urban Kumasi sell parcels of land which families laid claims to, in Atuabo's case, the land owning families, the traditional council and LVD have agreed that the compensation for family land will go to families.

Another organisation that featured prominently in the study is the Land Valuation Division (LVD) of the Lands Commission (LC). An organisation whose task is to value property and determine compensation in times of land acquisition (Kotey, 2012). In this case, they determined compensations by providing estimates the farmers received for their crops on the land acquired

and identified the rightful owners of parcels of land acquired for compensation to be paid out to the deserving families only.

5.2 Involvement in the determination of compensation

It is not uncommon to hear about contestation from stakeholders on a subject of involvement. The contestation of what qualifies as participation in the compensation process is intriguing. Looking at the two typologies of the participatory approach used in this study, I sought to discuss one of the research questions which has to do with the extent to which farmers participated in the determination of compensation for their crops. This ties in well with the theoretical question of whether the participatory approach provides a sound theoretical route for the exploration of the research question. Looking at participation from Arnstein's typology, one thing was evident; that, involvement of farmer ended at the third level (informing) in which Ghana Gas informed the farmers on decisions about the dates for identification of farms; issuance of certificates; and the collection of compensation cash. From the same typology, the elders and chiefs (traditional authority) can be said to have been consulted, and that is just a level above informing and that again does not amount to any meaningful involvement. Arnstein's (1969) participatory typology looks at participation from the perspective of the receiver. According to the farmers interviewed and the traditional authorities, Ghana Gas failed to involve them in any of their dealing apart from informing them and consulting them respectively. Taking participation from the view of the implementer in this case Ghana Gas, in accordance to Pretty's (1995) typology, what happened regarding the involvement of the farmers can best be described as 'passive' participation where Ghana informed the affected farmers of their next decision. From Pretty's point of view, the involvement of the traditional authorities here again is that of consultation (see participation in chapter two)

Farmers and the traditional authority talked about another company (Lonrho Ports) and their methods in the estimation of compensation for each crop. "We agreed on how much the company would pay coconut tree at different levels of maturity", a coconut plantation farmer at Assemnda Suazo told me in an interview. The LVD argued that farmers and the traditional authorities had participated in their work, but what the LVD did was asking which farmers to identify their farms. For the part LVD is expected to play, identification of farm boundaries can be called

participation, but farmers and the traditional authority at Atuabo do not have a problem with LVD, but Ghana Gas, a company that acquired land on which they once farmed.

The low level of participation portrays three things. First, it suggests the state as an authoritarian entity that can take land because it has the power and pay whatever it deemed fit for the livelihoods of people on the land. It further depicts a classic example of top-down approach to dealing with issues. Second, it displays institutional weakness across different levels. At the level of the farmers, it portrays powerlessness and unmatched power relation with the state. At the level of civil society (right groups, media), livelihoods of rural folks do not seem to be their interest as the discourse on Ghana Gas has been dominated by when the gas starts flowing to Aboadze to power VRA's thermal plants to bring stability to the current power situations. The many human right groups in Ghana did not find livelihood issues interesting because they are not the issues that attract donor funding. The media landscape in Ghana is dominated by political discourse to the detriment of livelihood, urban to rural and sensationalism to substance. Finally, the LVD of the Lands Commission, a state agency responsible for determination of values of crops kept too much to itself and was only able to come out with the final figures the affected farmers had without any details. Inadequate resources in terms of trained staffs and funds for the project on the part of the state are to a large extent responsible.

5.2.1 Fair and adequacy of compensation

My second question in the research was whether the compensations paid forthe lost crops adequately in order compensate the lost livelihoods. By that, I sought to establish what Ghana Gas compensated and it was adequate to help find new livelihoods. This study found out that, Ghana Gas did not adequately compensate for the lost livelihoods. What the company tried to pay for was the value of the crops without putting into consideration the lifespan of the crops in terms of cash crops (coconut and oil palm) and the efforts the farmers have put into preparation of the land (addition of manure, clearing of thick vegetation and uprooting of stamps). The study also found out that, Ghana Gas had met with rubber plantation (the rubber plantations were on the path of the pipeline) in Ahanta West District to discuss additional compensation package aside what LVD had proposed. The reason adduced was that this group of farmers took loans from the banks to finance their business. But, this act by Ghana Gas revealed two important

points. First, it buttressed the assertion that LVD did not estimate the real values of the affected crops and that, if they had done that, there would not be a need for Ghana Gas to meet any group of farmers for additional compensation to pay bank loans. The estimates would have considered lifespan of crops which will then take care of any such expenses. The second point is that, the rubber plantation farmers are more powerful compared to food crop and coconut farmers at Atuabo hence their ability to fight for somehow, a better compensation.

As an organisation whose work can have so much bearing on the livelihood of people losing their property, LVD should have been more assertive in doing its work by ensuring that people's lost livelihoods receive 'fair and adequate' compensation, whether the land acquiring unit is the state, or a private entity. As evident in this study, the LVD did not assert itself enough and gave room for Ghana Gas to decide whom it considered entitled to requiring additional compensation.

One interesting development noted was that multi-national companies like Lonrho appeared to have had a better approach in terms of the determination of compensation. Even though Lonrho had not paid compensation at the time of the fieldwork for this thesis, both farmers and the traditional leaders in the study communities felt they were part of what was going to be paid them and felt better about the sums involved. Ghana Gas was set up in July 2011 (Ghana Gas, 2012), as emerging business, they seem lack the experience in dealing with local communities or they had problems with liquidity since the company was in some financial difficulties leading to the postponement of the completion dates severally or the state as represented by Ghana Gas was simply irresponsible for its people. Lonrho, on the other hand, might probably has experience in dealing with local communities globally and have seemed to apply such experience well. By this point, I am not in any way pointing to the fact that the agreed amount between Lonrho Group and the farmers constitute 'adequate compensation' for the crops but rather to say that it represent a vast improvement upon what transpired in the case of Ghana Gas. As I have shown, GH¢35 for a coconut tree with a lifespan of 80-100 year bearing over a 150 fruits a year. (Note that 100 pieces of copra sells at GH¢18).

The conception of the function of land in Ghana makes any compensation paid for inadequate. It is an intergenerational inheritance (Pavenello, 1995). The stakeholder agreed that, arriving at adequate compensation for lost land and livelihoods may be an impossible task. That

notwithstanding, Ghana Gas can manage better the way it handled the compensation. The absence of checks and balances by Civil Society Organisations (CSOs) and the media did not help in ensuring that people who sacrifice their livelihoods for national development were at least well compensated.

5.3 The gas project and the farmers' livelihoods

The final research question sought to find the new livelihood opportunities the Ghana Gas project brings to Atuabo. This I will do using the various concepts of the livelihood framework which are applicable in the context of this study. Carney (1998) incorporates the 'vulnerability context' in the framework and stressed on three main features; shocks, trend and seasonality impact on rural environmental resource dependent livelihoods. The powerlessness of affected farmers in the study area is in line with the framework's assertion that, rural people have limited, or no control at all because most of the factors operating within the vulnerability context are external to them.

The land acquisition by Ghana Gas can be likened to an external influence which appropriates land from farmers in the Atuabo area. The sudden loss of land and associated livelihoods is a shock to most of the farmers, especially with the atmosphere of uncertainty that surrounded the location of the gas plant. Scoones (1998: 7) described a shock as 'a large, infrequent, unpredictable disturbance with immediate impact'. His explanation justifies the attribution of land expropriation by Ghana Gas as a shock to the farmers whose livelihoods depended on it. Two factors buttress this point. First, the late confirmation of Atuabo to replace Bonyere as the location for the gas plant and second, the speed with which Ghana Gas was expected to deliver the plant to avoid gas flaring at the Jubilee field. Farmers in this area have cultivated coconut and oil palm since the 17th century and have developed various livelihood activities around them over the years. Consequently, the loss of the crops came as shock that can be likened to the description given by Scoones (1998) above. The externality of the influence which the farmers had no power to prevent comes from the power of the state to acquire land in any part of the country for projects deemed to be in the 'national interest'.

Farmers' vulnerability does not end with the immediate loss of land and livelihoods, but has long term consequences. The loss of livelihoods means farmers in the area are vulnerable to the risk of landlessness and subsequently poorer as a consequence of losing land which is their most important livelihood asset. But all the affected farmers did not have the same level of shocks and effects, confirming Scoones (1998) assertion that the extent to which people deal with shocks depends on their combined asset portfolios (the combination of all their asset). Bebbinton (1999) stressed the dynamic nature of capitals by which he means, one form of capital can transform into another. One expects that, crops on the farms will transform to the financial asset in the form of compensation received. However, the study found out that, payment of compensations for the crops of the lands acquired came almost a year after the destruction of crops. In some cases farmers were not adequately noticed to harvest their last crops. This made the situation even more difficult for farmers. But the difficulties were as a result of a number of factors. First, whether the farmer has another farm elsewhere (see table 5) and second, whether the farmers combined farming with other livelihood activities. Few farmers who indeed combine other economic activities but to the effect that, they lost farming the main livelihood, it had a significant impact on their incomes. The extent of the effect can also be seen depending on the type of capital lost to the project. Farmers who lost natural capital felt hardest hit while businesses which lost capital asset can adopt by turning to other sources of raw material or better still change their line of business.

At the time of the fieldwork (June – August, 2013), some of the farmers did not know what exactly their next livelihood would be. To the extent that many more oil and gas related businesses are moving to Atuabo in search of land, created eve more uncertainties and livelihood insecurity for farmers who had not lost their farms yet. Those who had lost theirs found out that accessing land had become even more difficult because, land is a scarce commodity in the area even with high level of 'connection' (social capital). Informants below 45 years had hopes of working with the oil servicing port to be built by Lonrho Ghana in the community. For this person, and others like him, any other activity they do now is temporal to feed themselves while waiting for the start of the port project. The livelihood niches farmers had in mind did not match with all the three proposed by Scoones (1998). Scarcity of land in the area does not make

intensification or extensification an option. Migration, another livelihood strategy recommended did not feature in the plans of the respondent for two key reasons. First, the respondents still believed that their community still represents the best growth region in Ghana. Second, Lonrho Ghana assured most of the youth in the community jobs, in the proposed oil servicing port.

5.4 New Livelihoods at Atuabo

One of the most central issues in the livelihoods approach is sustainability. The resilience of people to recover from shocks, enhance livelihood assets and capabilities and maintain livelihood activities for a considerable length of time (Chambers and Conway, 1992: 14-19; Scoones, 1998). Farming, and its related businesses (vegetable oil extraction from oil palm and coconut, coconut trading) at Atuabo were livelihoods handed down from generations and, therefore one could say that they were sustainable. Chambers and Conway (1992) discussed social sustainability in their conceptualisation of sustainable livelihoods and assert that livelihoods are socially sustainable when the livelihood activities (including assets, skills, institutions) are transferred from one generation to another. It is important to state at this point that land, the most important livelihood asset, and coconut; the most profitable assets and skills of turning produce from farms into finished goods were handed down over the years and can be described as 'inherited livelihoods' (Ibid: 8). Aside this, fishing, can qualify for the description above. However, the construction of the gas plants and the subsequent loss of land have threatened the socially sustainable livelihoods. What I seek to present in this section is whether the Ghana Gas project and its related businesses locating at Atuabo can provide jobs and opportunities in the informal sector thereby giving people sustainable livelihoods. I do this bearing in mind the skill level of the farmers and the youth of the communities and the skills required by the companies.

5.4.1 Livelihoods related to oil and gas businesses

Oil and gas business requires technical knowledge, a requirement most of the locals in the study area do not have. I present the employment opportunities in two stages. First, the construction stage and second, the operational stage. I did my fieldwork during the construction stage of the gas plant and found that only 1 of the 35 farmers interviewed was employed by a security company which provides security to Sinopec, the main contractor. Children and other family

members of the affected farmers were employed as well as some of the youth from the community. I found out that, most of the subcontractors (catering services, supply of building sand, gravel and stones) come from the larger nearby communities such as Esiama (refer to map of the study area on page 10). They moved to Atuabo with about 90% of their required staffs. This development leaves very little employment opportunities for the local residents. A situation that leaves the youth and the traditional rulers dissatisfied. Note that, the jobs at construction stage were short term and ends even before the plant is handed over to Ghana Gas. "We are doing the concrete work at the moment and fixing of the machines will begin later, and most people would be laid off especially the labourers" a driver with Sinopec said in a conversation. The expression from the driver sums the unsustainable nature of jobs at the construction stage.

The next stage (operational stage) holds even thinner prospects for the farmers and other community members of Atuabo. The study found that respondents were not looking forward to jobs in the gas plant at the operational stage of the plant, but rather, they tried to think of economic activities within the informal sector. As I have hinted earlier, the situation of the gas plant at Atuabo is attracting several companies in the area. Of outmost importance to this discussion is the Lonrho Oil Servicing Port because, in the first place, many of the respondents in the study were planning their livelihoods in line with port project. Secondly, the plan of the Lonrho Ports to train and absorb the youth in the study communities represents livelihood diversification, and to some degree sustainability because Lonrho promised to absorb the trained youth after the construction.

Atuabo's changing status as a community with less than 1000 residents into an industrial oil city provides opportunities in diverse ways. Increase in population will mean higher demand for food. Residents, however, may not fully explore this due to scarcity of land in the area. Unless the *Omanhene* can follow through his promise to acquiring new land in the nearby Western Nzema traditional council, the farmers' will remain vulnerable. Another area that will create job opportunities is the hospitality industry, but many of the locals do not have the requisite skills to work. The tourism development officer at Benyin (see the map of the sudy area) explains that, "for now, we try hard to train them to meet the standards, but when bigger hotels start

operations, many of the trained ones from Takoradi Polythenic will move in here and operators would prefer working with them. They [local youth] would have to train to be considered". But to present the case as though all residents in Atuabo are at the same level of human capital is to forget Agrawal and Gibson (1999) assertion that, communities are not homogenous and that, differences exist in gender, power, access to productive asset. Some of the youth in the Atuabo area have undergone training in various trades; catering, welding, driving in readiness of the oil and gas industries in Takoradi and many have also acquired similar training from a vocational institute at Benyin. Their training did not have the gas industry in mind at the inception, but graduates from the institution have a better chance of being employed compared to those who have no training. As found out during the study, farmers who lost land to the project, but are too old or not in good health to work on the port project would be the most vulnerable. But in a society where social ties mean a lot and the children look after their parents, one's inability to work at old age do not provide a sufficient ground with which to explain their vulnerability. However, it depends on the ability of the children to provide for their parent because, some of them are in the same quagmire as their parents.

5.5 Ghana Gas' Alternative Livelihood Programme

Ghana Gas's alternative livelihood programme is not clear on who will benefit from the programme. It is difficult to draw the difference between an alternative livelihood programme for people who lost land to the gas project and corporate social responsibility. Though the policy document on the programme was in its final stages during my fieldwork, my interview with the company shows a mix up of the ALIPs for affected farmers and the CSR programmes the company had promised the communities at the start of the project. Engaging the two typologies of the participatory approach once more, I can assert that the involvement of the farmers and the community in the design of these programmes was limited to what Pretty (1995) calls consultation. The company consulted the farmers were consulted through questions. An important aspect of the ALIPs is the skills training which aims at equipping farmers and other community members with employable skill. For the farmers who lost their farms, it is to "serve as additional compensation is recognition of inadequacies of the cash compensation" (Ghana Gas, 2013). The training programmes do not target providing the locals employable skills that make them employable in the oil and gas sector. One important stand out point to note is that,

there is no plan of providing alternate land for farming, but in it a plan to train farmers in new farming methods. The importance of this point is not based on its contribution to the life of the people but rather, the paradox it presents. The paradox has to do with training people in new farming methods when there is scarcity of land on which to farm. It further demonstrates the irresponsiveness of the state to its citizens amounting to social injustice. Kotey (2012: 192) was assertive in stating that "discrepancies and irregularities that result from unfair payment of compensation lead to social injustice".

The acquired lands in Atuabo fell under family lands (freehold) and stool lands. Three different laws therefore governed the acquisition. State Lands Act, 1962 (Act 125) and the State Lands (Amendment) 2005, Act 586 both of which are limited to the acquisition of private lands under which family lands fall. There is also Administration of Lands Act 1962 (Act 123) which regulates the acquisition of stool lands. These laws state that in agrarian communities, alternate land should be provided for the affected farmers. The only reason Ghana provided for not following through with this provision is the excuse of scarcity of land in the area. However, Lonrho Ports was supporting the traditional council to acquire land from a nearby traditional area for farmers affected by its project. Thus far, Ghana Gas' Alternate Livelihood Programme sounded remote to the farmers and the youth in the Atuabo area. None of the farmers in my study made reference to it when discussing their future livelihood strategies. In the same way, the traditional rulers did not make reference to the ALIPs in their plans to help their subject.

The oil and gas business and in particular, the construction of the gas plant in Atuabo is attracting a number of investments either in the form of infrastructure. The road network was being transformed from a gravel road to asphalt road. There are other investment that must necessarily accompany the gas infrastructure such as a hospital for emergency cases, and housing units to accommodate staff. Also, many of the companies locating in the area have planned CSR packages, but the extent these 'token gestures' contributes to making a meaningful impact on the life of the people in the communities and the total development of the area would be interesting. To the point of leaving the study area, the only major CSR project relates to a water project undertaken by Kosmos Energy, one of the Jubilee Partners. These investments Ellis (2000) notes

are in themselves assets and have the capacity to enhance livelihoods. The water project for example, has the capacity to improve health (human asset) while the roads and the health

Photo 9: Kosmos Water Project, Benyin

Photo 10: Water Collection Point at Atuabo



facilities can enhance access to health, and markets.

Photo: Author, 2013

Discussions on CSR with the traditional authorities suggest every company that acquired land in the area promised to undertake certain activities. However, a critical look revealed a duplication of the promises and omission of critical areas too. For CSR programmes to contribute to poverty reduction among the farmers and other members of the communities, its development must emanate from the people with the traditional authority playing an active part. In one instance, the *Omanhene* appealed to an oil company to move its ICT project to another community within his traditional area because, that already exists in Lonrho plans for the community.

5.6 The winners, the losers: the impact of the Ghana Gas Processing Plant

The building of the Ghana Gas Processing plant as demonstrated in the study carries with it huge expectations to provide a catalyst for the development of a petrochemical industry, stablilise supply of gas to VRA for electricity generation, provide quality jobs and subsequently increase the government revenue. As pointed out in the findings also, the location of the gas processing plant is attracting related business thereby put in motion the process of transforming Atuabo into a modern industrial port city. In all these, there are people who will become winners and losers along the way. From the national point of view, Ghana will benefit when Ghana Gas delivers gas

to Aboadze thereby reducing by half the USD 3 million per day VRA spends on crude to fuel its thermal plant (VRA, 2013). Also, many graduate looking for quality jobs within the oil and gas sector become winners once they can have the jobs. The increase in government revenue from profits and taxes is good for the country. At the local level (Atuabo area), the winners are those who had nothing to lose in terms of land and property. For these people, their human capital remains the most important asset, which they can offer for their livelihood. The location of the gas plant and subsequent location of related businesses will help them earn a living by working within the emerging sectors. Another local group who saw this as a gain is those whose farms are not affected by the project or are not very close to it. This group of farmers will cash in on higher prices for food as a result of people moving into the community. This development feeds into Ellis (2000) discussions on how loss of natural asset and diversification of livelihoods can narrow or eliminate the differences in rural incomes, wealth and social statuses. As pointed to earlier, some of the businesses investing in the area are doing CSR project such as the Kosmos water I made reference to. To the extent that these investments contribute to the wellbeing of the members of the community, one can argue that, those who draw them for their livelihoods become winners or at least beneficiaries.

It is evident that farmers who lost land and livelihoods to the project and felt inadequately compensated have been left to feel as losers. This feeling is strongest among farmers who do not own their own land and at the same time, did not find jobs at the construction stage of the gas plant. Again, local businesses that depended on the produce of farmers (coconut, oil palm fruit) for raw materials or a trading commodity may have to look beyond Atuabo. But, the extent of their loss is not comparable to that of the farmers because the farmers have lost 'natural capital' which is the most important asset in a rural setting. For those who depended on the produce from family farms must enter the market place for their raw materials or risk losing their business. Also, the 'coconut merchants' will see a drastic reduction in the supply of copra because, over 800 acres of farms is affected by the Ghana Gas and Lonrho Port projects alone.

5.7 Conclusion

This chapter has discussed the major findings of the research through the theories and concepts which have guided the study. From the beginning, I discussed the roles of institutions and practices in granting and denying access to land. In the subsequent sections, I have discussed participation in the compensation processes using the participatory approach. I particularly linked participation and 'fair and adequate compensation'. Engaging the livelihood framework, I discussed the new livelihood options available the farmers who lost their land. The next chapter summarises the findings of the study and also concludes it.

CHAPTER SIX

SUMMARY AND CONCLUSION

6.0 Introduction

In this concluding chapter, I summarise the findings of the study. Further, it presents answers to the research question which guided the study. Finally, based on the findings and answers, some conclusions are drawn.

6.1 Summary of the research findings

The broad objective of the study is to investigate the livelihood effects of the Ghana Gas project on Atuabo in general and farmers who lost their livelihoods to the project. Through the set out research questions and theories, I tried to answer a number of questions. First, through the institutional framework, I set out to present the role of customary institutions in the project. Further, I investigate the extent to which the farmers and the traditional authorities in the study area were involved in the determination of estimates for the lost crops. I also looked at the involvement of the farmers and the traditional authorities and the formulation of Ghana Gas' Alternative Livelihood Programmes. I have employed two typologies of the participatory approach in exploring the above concerns. From the livelihood perspectives, I examined the adequacy of compensations paid for the crops destroyed and critically examined whether the compensation package paid for the crops was enough to find new livelihoods. I finally present the new livelihoods the farmers pursued.

6.1.1 Customary institutions and access to land

In order to provide answers to the question of compensation, it is important to understand how farmers in the study area had access to the land they have lost. In explaining this, I drew on the institutional framework to explain the role of the customary institution in granting access to land. The study in this case found out that, membership of a matrilineal lineage is important for laying claim of ownership of land. It further explains that, accessing stool land and accessing land from landowning families were other ways of accessing land in the area. The stool land brings into the fore, the role of chiefs in land administration and consequently, his role in the livelihoods of his people. The chief's role is the custodian, who keeps the land in trust for his people. The way a person accesses a land has implication for the crops he/she can cultivate with consequences on

the compensations received. Apart from farmers who worked on their family land, and can lay claims to compensations for the land, people who accessed land from the stool land and other families (on abusa tenure) can only lay claim to crops on their farms. Though land owning families can lay claims to compensation for their parcel of land, ultimately, it is the chief who can give land out for projects and investments as the *Omanhene* (owner of the land). Ghana Gas, in effect, acquired the land from the paramount chief of the Atuabo Traditional Area.

6.1.2 Involvement in the determination of compensation

One of the research questions was; to which extent are the affected residents involved in decisions about compensation? To answer this question, I conducted interviews with various stakeholders in the gas project: the farmer; the traditional authority, the LVD; Ghana Gas. First, the farmers explained the involvement as sitting with Ghana Gas to agree on prices for their crops. Farmers described the extent of their involvement as limited to receiving information from Ghana Gas on what action the company takes next including, the day for identification, the day, certification for farm ownership was ready and the day the actual compensation was paid. The traditional authorities did not see themselves as being involved in the processes leading to the payment of compensation. However, the LVD of the Lands Commission, the state organisation with vested powers to estimate compensations in times of land acquisition claimed farmers' involvement. Finally, Ghana Gas, the land acquiring agency in one part argued from two perspectives; legal and practical. From a legalistic point of view, Ghana Gas claimed the farmers were involved by LVD on its behalf but, in practice, the company only met with rubber plantation farmers from the Ahanta West to discuss additional compensation package aside what the LVD estimated. The study, therefore, found that, various interest groups in the gas project had different expectations of involvement. Farmers did not participate beyond identifying their farms and, therefore, had no input as to how much was paid to them as compensation.

6.1.3 Adequacy of compensation

My second research question was: can the compensation regime adopted by Ghana Gas adequately compensate for the lost livelihoods? The study found out that; Ghana Gas paid compensation for crops several months (6-9 months) after the destruction of farms for the building of the gas plant, but, 2 out of the 35 farmers interviewed did not receive compensation

for crops. Here too, stakeholders narrated what constituted adequate compensation from the perspectives of the interests they represented. First, the farmers did not think their crops for that matter their livelihood was compensated adequately to enable them have a new livelihood. Farmers also did not think there is anything like 'adequate compensation' because of two reasons. First, since the land is for the 'dead, the living, and the unborn', loss of land is a loss of intergenerational inheritance. Second, people place different value on land and its associated livelihood activities. Some farmers see the land and farming as their identity. Ghana Gas looked at the topic from legal and livelihood perspectives. The compensation for crops was adequate from a legal point of view because what the company paid has been determined by the appropriate authority. However, the company accepts that the compensations paid for crops did not adequately compensate lost livelihoods. The company further explained that its ALIPs is in recognition of this inadequacies. The LVD asserts, the organisation did what was expected of it. That is determining estimates thresholds below which Ghana Gas cannot pay farmers. The study found that, LVD did not come out with 'adequate compensation' for lost crops. The estimates only represented values of crops, not more than two year.

6.1.4 Impact of the Ghana Gas Project on Atuabo

In the third research question, I asked which ways do the gas project impact on the livelihoods of those who lost land; are they able to find new livelihoods? I looked at the effect of the land acquisition by Ghana Gas on the farmers through the vulnerability concept of the livelihoods approach. Secondly, I looked at the livelihood impact of the gas project on the farmers and the community. The study found that farming was the main livelihood activity in the researched communities. There were food crop farmers as well as cash crops (coconut, oil palm) farmers. Even though Atuabo is coastal, fishing is not considered a major livelihood activity. The land acquisition by Ghana Gas had a serious effect on the farmers. First, it came as a shock because it was sudden, which meant the farmers did not have any time to prepare for new livelihoods before the takeover of their land. The adverse effect, however, was not equal among respondents. Food crop farmers were most badly affected because the project took over farms they directly fed. The destruction of farms also had implications for some businesses that depended on the produce from farms. The local vegetable oil extraction from copra and palm nuts was affected while coconut export trade to Nigeria also suffered a decline in supply.

I explored new livelihood strategies the affected farmers in Atuabo were exploring. In relation to employment at the construction stage of the gas plant, only one of the affected farmers interviewed was employed. These low employment rates at the construction were due to low skill levels among farmers, but the farmers attributed it to neglect and nepotism. Few other respondents had their children engaged by Sinopec the main contractor. The jobs with Sinopec were not sustainable, and people worked were expected to be released long before the completion of the gas project. Consequently, planned livelihood choices were not linked to opportunities provided by Ghana Gas. Farmers who also engage in fishing decided to take to fishing until the Lonrho Port project starts.

The emerging oil sector in general and specifically the location of the gas plant at Atuabo has attracted a number of oil service businesses, and Lonrho Ports is one of them. Interestingly, male farmers less than 45 years (17 out of 35) and the youth were planning livelihood against the Lonrho Port project. Females were also planning to work in related fields such as catering during the port construction. Lonrho Ports of which the Atuabo community is a partner has registered all willing youth in the community for training towards the construction of the port and beyond. Lonrho's compensation processes appeared to farmers as more transparent and engaging compared to Ghana Gas'. The study further found that Atuabo community will own about 19% of the port project as its contribution of land to the project. Lonrho Ports also agreed to assist the *Omanhene* of Atuabo to acquire alternate land for those who lost their land to the project.

6.5 Conclusion

The study has shown that customary institutions and practices play vital roles in accessing land for livelihoods. The types of crops a farmer cultivate depend on the land tenure under which he/she accessed the land and subsequently affecting compensation received. Land acquisition for the gas project and its related business resulted in the loss of farming and its related livelihoods and also, intergenerational inheritance. Limited land availability means, farmers, will find it difficult to access alternate land for their livelihoods. Consequently, they were experiencing difficulties. The study also concludes that, there is tenure insecurity in the study even among farmers who are not yet affected by the Ghana Gas or the Lonrho projects in providing for themselves. The study also found that, the chief of Atuabo Traditional Area adopted 'no sale of

land' policy but rather tried to use the land to bargain for shares in the businesses seeking for land. This decision by the chief is a novelty in Ghana and many scholarly works have found that chiefs in parts of the country sell land without considering the livelihood effect of their subjects. The importance of chiefs also shown up when I found out that, the affected farmers looked up to their chief for the provision of alternative land for them to continue their farming livelihood, land the chief is in the process of acquiring.

On other institutions of the state, LVD, the study found that, division gave too much freedom to the land acquiring agency [Ghana Gas] for example to decide whom group of people deserve compensation above the minimum threshold estimated by the LVD. Consequently, what they attempted to compensate was the current value of the crops on the farms without much attention to labour put into the preparation of the land by the farmers. The study concludes that, Ghana Gas did not adequately compensate for lost livelihoods of farmers from whom they took the land.

By involving people other than affected farmers in the study, I have been able to demonstrate that, farmers who lost their farms to the gas project were the losers especially the food crop farmers who do not own the land they cultivated. The youth in the community who had jobs at the construction stages of the construction with Sinopec or the local office of Ghana Gas gained because that represent a stable job compared to Sinopec. The youth are expected to gain more when the port project starts. Businesses dependent on the produce of the destroyed farms were affected, but such individuals can diversify their investments carving new niches for themselves within the emerging oil and gas sector or within the informal sector as the village transforms to an industrial port city. To the extent that investments in themselves are assets (Ellis, 2000), investments made in providing infrastructure to support the oil and gas industry and CSR projects will enhance capabilities of the residents and expand livelihood choices for the people.

Ghana Gas Processing plant location at Atuabo increased farmers' vulnerability and exposed them to insecure land tenure which will push them into poverty. Despite the gloomy picture as it may look for the farmers in particular and the Atuabo Area in general under the gas project, there is another model that provides Atuabo with hope. The Eastern Nzema Traditional Council's decision to adopt 'no outright sale of land policy' implies the community will own share in companies operating in the area. This development represents different trajectory of land

transaction in Ghana. Though, sustaining the future of the community is the brain behind this novelty, it is too early to assess its outcome. So much expectation is placed on the Lonrho Ports to provide jobs and livelihoods for the members of the Atuabo communities, it would be interesting to investigate later how the project unfolds especially as it relates to the management of the Atuabo Community's stake in the Lonrho Port project to benefit the entire populace within Atuabo area.

BIBLIOGRAPHY/REFERENCES

Aase. T.H. (2007) Interpretation of Categories: Observation, Concept and Categories. Translated by Pedersen S. From Fossaskaret, Tuglestad, O.L and Aase T.H. (1997) (eds), Metodisk Feltarbeid: Produksjion of Tokning av Kvalitative Data. University of Press. Oslo.

Adu-Gyamfi, A. (2012). An Overview of Compulsory Land Acquisition in Ghana: Examining Its Applicability and Effects. *Environmental Management & Sustainable Development*, *1*(2).

Adisu, K., Sharkey, T., & Okoroafo, S. C. (2010). The Impact of Chinese Investment in Africa. *International Journal of Business & Management*, 5(9).

Agbosu, L., Awumbila, M., Dowuona-Hammond, C and Tsikata, D. (2007). Customary and Statutory Land Tenure and Land Policy in Ghana. *ISSER Technical Publications*, No.70. Institute of Statistical, Social and Economic Research (ISSER), University of Ghana, Legon.

Agrawal, A and Gibson, C.C. (1999). Enchantment and Disenchantment: The Role of Community in Natural Resource Conversation. *World Development*, Vol.27, No.4, pp 629-649.

Agrawal, A. (2001). Common Property, Forest Management and the Indian Himalaya. *Contributions to the Indian Sociology*, 35, 2, pp 181-212.

Agrawal, A., & Gibson, C. C. (Eds.). (2001). *Communities and the environment: ethnicity, gender, and the state in community-based conservation*. Rutgers University Press.

Aitken, S and Valentine, G. (2006). Ways of Knowing and Ways of Doing Geographic Research In: Aitken, S and Valentine, G. (Eds.). *Approaches to Human Geography*. SAGE Publications Ltd., London. Pp 1-12.

Altheide, D. L., & Johnson, J. M. (1994). Criteria for assessing interpretive validity in qualitative research.

Amalric, F. (1998) The Sustainable Livelihoods Approach. General Report of the Sustainable Livelihoods Project 1995–1997. Rome: SID.

Amanor, K. (2008). The Changing face of Customary Land Tenure. In: Ubink, J. M and Amanor, K. S (Ed.) *Contesting Land and Custom in Ghana: State, Chief and the Citizen*. Leiden University Press, Amsterdam. Pp 55-79.

Amoako-Tuffour, J., Owusu-Ayim (2010). An Evaluation of Ghana's Petroleum Fiscal Regime. *The Ghana Policy Journal*, Vol. 4, Special Issue, 7-34.

Arce, A. and P. Hebinck (2002) 'Life Styles and the Livelihood Framework: Problems and Possibilities for Development Studies'. Wageningen: Department of Social Sciences, Rural Development Sociology (unpublished paper).

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of planners*, 35(4), 216-224.

Asafu-Adjaye, J., (2010). Oil Production and Ghana's Economy: What Can We Expect? *The Ghana Policy Journal*, Vol.4, Sepcial Issue, 35-49.

Attafuah, K.A., (2010). Managing the Political and Social Expectations from Ghana's Oil and Gas Resources. The Ghana Policy Journal, 110-118.

Bailey, C. A. (2007). A guide to qualitative field research. Pine Forge Press.

Bebbington, A. (1999). Capitals and capabilities: a framework for analyzing peasant viability, rural livelihoods and poverty. *World development*, 27(12), 2021-2044.

Berger, P., & Luckmann, T. (1992). The social construction of reality. NY-1966.

Binns, T., & Smith, D. W. (2008). *Geographies of development: an introduction to development studies*. Pearson Education.

Blaikie, N. 2000. Doing Social Research. Cambridge, Polity Press/Blackwell

Boafo-Arthur, K. (2003). Chieftaincy in Ghana: Challenges and Prospects in the 21st Century. *African and Asian Studies*, Vol. 2, No. 2, pp 125-153.

Brundtland, G. (1987). Our common future: Report of the 1987 World Commission on Environment and Development.

Bryman, A. (2012). Social research methods. Oxford university press.

Bryman, A. 2004. Social Research Methods (2nd Edition). Oxford, Oxford University Press

Bryman, A. and Burgess R. (1994) Analyzing Qualitative Data. London: Routledge

Burgress, R. G. 1984. In the Field. An Introduction to Field Research. London.

Carney, D. (1998). Implementing the Sustainable Rural Livelihoods Approach. In: Carney, D. (Ed.). *Sustainable Rural Livelihoods: What contribution can we make?* London: Department for International Development. Pp 3-23.

Carney, D. (ed.) (1998) Sustainable Rural Livelihoods. What Contribution can we Make? Nottingham: Russell Press Ltd., for Department for International Development.

Chambers, R. (1994). Participatory rural appraisal (PRA): Analysis of experience. *World development*, 22(9), 1253-1268.

Chambers, R. (1983). Rural development: putting the first last. Essex: Longman Scientific & Technical.

Chambers, R and Conway, G. (1992). Sustainable Rural Livelihoods: Practical Concepts for the 21st Century. *IDS Discussion Paper 296*. Brighton: Institute of Development Studies

Clark, A. 1985. Longman Dictionary of Geography: Human and Physical. Harlow Essex. Longman.

Clark, J., & Carney, D. (2008). Sustainable Livelihoods Approaches—What have we learnt?: A review of DFID's experience with Sustainable Livelihoods. In *ESRC Research Seminar Paper*.

Clark, J., & Carney, D. (2008, October). Sustainable Livelihoods Approaches—What Have We Learnt?. In *Economic and Social Research Council Research seminar paper*. Coffey (2006) in The SAGE Dictionary of Social Research Methods.

Cornwall, A. (2000). Spaces for transformation? Reflections on issues of power and difference in participation in development. *Participation: from tyranny to transformation*, 75-91.

Cornwall, A. (2002). Locating citizen participation. *IDS bulletin*, 33(2), i-x.

Cornwall, A. (2008). Unpacking 'Participation': models, meanings and practices. *Community Development Journal*, 43(3), 269-283.

Creswell, J. W. (2009). Research Design: Qualitative, Quantitative and Mixed Methods Approaches. Third Edition. SAGE Publications Ltd, London.

Creswell, J.W. 2003. Research Design: Qualitative, Quantitative and Mixed Methods.

Daily Graphic (2013). Parliament passes Local Content Bill for oil (http://graphic.com.gh/news/general-news/5135-parliament-passes-local-content-bill-for-oil-sector.html)

De Haan, L and Zoomers, A. (2005). Exploring the Frontier of Livelihoods Research. *Development and Change*, 36 (1), pp 27-47.

Denzin, N. K. 1989. The Research Act. A Theoretical Introduction to Sociological

Denzin, N.K. and Lincoln, Y.S. (Eds) Handbook of Qualitative Research. 1994.

Ellis, F. (2000). The determinants of rural livelihood diversification in developing countries. *Journal of Agricultural Economics*, *51*(2), 289-302.

Fraser, H. (2004). Doing narrative research analysing personal stories line by line. *Qualitative Social Work*, *3*(2), 179-201.

Frynas, J. G. (2001). Corporate and state responses to anti-oil protests in the Niger Delta. *African Affairs*, 100(398), 27-54.

Gatrell, A. C., & Elliott, S. J. (2009). *Geographies of health: an introduction*. John Wiley & Sons.

Ghana Statistical Service (2013). 2010 Population and Housing Census: Regional Analytical Report, Western Region, Accra.

Ghana Statistical Service (2013). 2010 Population and Housing Census Report: Men and Women and Ghana, Accra.

Giddens, A. (1979). Central problems in social theory: Action, structure, and contradiction in social analysis (Vol. 241). Univ of California Press.

Glasser, I. (1983). Guidelines for Using an Interpreter in Social Work. *Child Welfare*, 62(5).

Grix, J. 2004. The Foundations of Research. London, Palgrave.

Grottanelli, V. L. (1988). *The python killer: Stories of Nzema life*. Chicago, IL: University of Chicago Press.

Guba, E. G. and Lincoln, Y. S. 1994. Competing Paradigms in Qualitative Research.

Guba, E.G. and Lincoln, Y.S. 1985. *Naturalistic inquiry*. New York: Sage. Hartsock, N. (1987). Rethinking modernism: Minority vs. majority theories. *Cultural Critique*, 7(1), 187-206.

Hesselberg, J., & Yaro, J. A. (2006). An assessment of the extent and causes of food insecurity in northern Ghana using a livelihood vulnerability framework. *GeoJournal*, 67(1), 41-55.

Holt-Jensen, A. (2009). *Geography - History and Concepts: A Student''s Guide*. Fourth Edition. SAGE Publications Ltd., London.

Homan, R. (2001). The principle of assumed consent: the ethics of gatekeeping. *Journal of Philosophy of Education*, 35(3), 329-343.

International Finance Corporation (2000). Investing in People: Sustaining Communities through Improved Business Practice, New York.

Kapborg, I., & Berterö, C. (2002). Using an interpreter in qualitative interviews: does it threaten validity?. *Nursing inquiry*, *9*(1), 52-56.

Kasanga, K and Kotey, N. A. (2001). *Land Management in Ghana: Building on Tradition and Modernity*. International Institute for Environment and Development, London.

Kitchin, R., & Tate, N. (2000). Conducting research into human geography: theory, methodology and practice Prentice Hall.

Larbi, W. O. (2008, September). Compulsory land acquisition and compensation in Ghana: searching for alternative policies and strategies. FIG/FAO/CNG International Seminar on State and Public Sector Land Management, Verona, Italy, September 9 th–10 th.

Larbi, W. O., Antwi, A., & Olomolaiye, P. (2004). Compulsory land acquisition in Ghana—policy and praxis. *Land Use Policy*, 21(2), 115-127.

Leach, M., Mearns, R and Scoones, I. (1997). Environmental Entitlements: A Framework for Understanding the Institutional Dynamics of Environmental Change. *IDS Discussion Paper*, 359. Institute of Development Studies, University of Sussex.

Leach, M., Mearns, R and Scoones, I. (1999). Environmental Entitlements: Dynamics and Institutions in Community-Based Natural Resources Management. *World Development*, Vol.27, No.2, pp. 225-247.

Linton, R. (1936). The study of man: an introduction. Appleton-Century, New York. Long, N. (2001). *Development sociology: actor perspectives*. Routledge.

Longhurst, R. (2003). Semi-structured interviews and focus groups. *Key methods in geography*, 103-116. SAGE Publications, London.

Longhurst, R. (2010). Semi-structured Interviews and Focus Groups. In: Clifford, N., French, S. and Valentine, G. (Ed.) *Key Methods in Geography*. Second Edition. SAGE Publications Ltd., London. Pp 103-115.

Mikkelsen B. (2005) Methods for Development Work and Research. A new guide for Practitioners.

Miller, T., Mauthner, M., Birch, M., & Jessop, J. (Eds.). (2012). *Ethics in qualitative research*. Sage.

Miller, T., Mauthner, M., Birch, M., & Jessop, J. (Eds.). (2012). *Ethics in qualitative research*. Sage.

Mullings, B. (1999). Insider or outsider, both or neither: some dilemmas of interviewing in a cross-cultural setting. *Geoforum*, 30(4), 337-350.

Norman, D. W. (2002). The Farming Systems Approach: A Historical Perspective. *The 17th* North, D. (1990) Institutions, Institutional Change and Economic Performance. Cambridge: Cambridge University Press.

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press, Cambridge.

Nukunya, G. K. (2003). *Tradition and Change in Ghana: An introduction to Sociology*. Second Edition. Ghana Universities Press, Accra.

Obeng-Odoom, F. (2012). Natural resource abundance and eminent domain: A case study from Africa. *Local Economy*, 27(4), 319-325.

Pavanello, M. (1995). The work of the ancestors and the profit of the living: some nzema economic ideas. *Africa*, 65(01), 36-57.

Pretty, J. N. (1995). Participatory learning for sustainable agriculture. *World development*, 23(8), 1247-1263.

Rakodi, C. (2002). A livelihoods approach—conceptual issues and definitions. *Urban livelihoods:* A people-centred approach to reducing poverty, 3-22.

Reeves, C. L. (2010). A difficult negotiation: Fieldwork relations with gatekeepers. *Qualitative Research*, 10(3), 315-331.

Republic of Ghana. The 1992 Constitution. Ghana Publishing Corporation, Accra.

Rice, P.L. & Ezzy, D. (1999). Qualitative research methods. Melbourne: Oxford University Press.

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field methods*, *15*(1), 85-109. Sage

Rupp, S. (2013). Ghana, China, and the Politics of Energy. *African Studies Review*, 56(01), 103-130.

Sanders, T. (2006). Sexing up the subject: Methodological nuances in researching the female sex industry. *Sexualities*, *9*(4), 449-468.

Scoones, I. (1998). Sustainable Rural Livelihoods: A Framework for Analysis. *IDS Working Paper 72*. Brighton: Institute of Development Studies.

Scoones, I. (2009). Livelihood Perspectives and Rural Development. *The Journal of Peasant Studies*, Vol. 36, No.1, pp 171-196.

Seale, C. (1999). Quality in qualitative research. *Qualitative inquiry*, 5(4), 465-478.

Sen, A. (1981). *Poverty and Famines: An Essay on Entitlement and Deprivation*. Oxford University Press, Oxford.

Sen, A. 1981. *Poverty and Famines. An Essay on Entitlement and Deprivation*. Clarendon Press, Oxford.

Small, L. A. (2007). The sustainable rural livelihoods approach: A critical review. *Canadian Journal of Development Studies/Revue canadienne d'études du développement*, 28(1), 27-38.

Silverman, D. (200) Interpreting Qualitative Data: methods for analyzing talk, text and interaction (3rd Edition). London, Thousand Oak, California, New Delhi, Sage.

Silverman, D. (2006) Doing Qualitative Research 2nd Edition Sage Publication

Silverman, D. (2010). *Doing Qualitative Research*. Third Edition. SAGE Publications Ltd., London.

Silverman, D. 2000. Doing Qualitative Research: A Practical Handbook. London.

Smith, J. K. (1983). Quantitative versus qualitative research: An attempt to clarify the issue. *Educational researcher*, 6-13.

Solesbury, W. (2003a) Sustainable Livelihoods: A Case Study of the Evolution of DFID Policy. London: Overseas Development Institute.

Songsore, J. (2003). Regional development in Ghana: The theory and the reality. Woeli Pub. Services.

Swift, J. (2006). Why are Rural People Vulnerable to Famine? In: Devereux, S and Knowles, C. (Ed.). Challenging Orthodoxies, Influencing Debates. *IDS Bulletin*. Volume 37, Number 4, pp 41-49.

The Petroleum Commission Act, 2011.

Twumasi, P. A. (2001). *Social Research in Rural Communities*. Second Edition, Ghana Universities Press, Accra.

Ubink, J. (2007). Traditional Authority Revisited: Popular Perceptions of Chiefs and Chieftaincy in Peri-Urban Kumasi, Ghana. *Journal of Legal Pluralism & Unofficial Law* 55, pp 123-161.

Ubink, J. (2008). Struggles for Land in Peri-urban Kumasi and their Effect on Popular Perceptions of Chiefs and Chieftaincy. In: Ubink, J. M and Amanor, K. S (Ed.) *Contesting Land and Custom in Ghana: State, Chief and the Citizen*. Leiden University Press, Amsterdam. Pp 155-182.

Ubink, J. M and Quan, J. F. (2008). How to combine Tradition and Modernity? Regulating Customary Land Management in Ghana. *Land Use Policy*, Vol. 25, Issue 2, pp 198-213.

Ubink, J. M. (2008). Negotiated or Negated?: The Rhetoric and Reality of Customary Tenure in an Ashanti Village in Ghana. *Africa*, Vol.78, No.2, pp 264-287.

Ukiwo, U. (2007). From "pirates" to "militants": A historical perspective on anti-state and anti-oil company mobilization among the Ijaw of Warri, Western Niger Delta. *African Affairs*, 106(425), 587-610.

Volta River Authority (2013) Ghana Power Outlook, Accra.

Watch, C. (2006). What's wrong with corporate social responsibility?. Corporate watch.

White, S. C. (1996). Depoliticising development: the uses and abuses of participation. *Development in practice*, 6(1), 6-15.

Wisner, B. (2009). Interactions between Conflict and Natural Hazards: Swords, Ploughshares, Earthquakes, Floods and Storms. In *Facing Global Environmental Change* (pp. 245-256). Springer Berlin Heidelberg.

Yankson, P. W. (2010). Gold mining and corporate social responsibility in the Wassa West district, Ghana. *Development in Practice*, 20(3), 354-366.

Yaro, J. A. (2004). Theorizing food insecurity: building a livelihood vulnerability framework for researching food insecurity. *Norsk Geografisk Tidsskrift-Norwegian Journal of Geography*, 58(1), 23-37.

Yaro, J. A. (2010). Customary Tenure Systems under Siege: Contemporary Access to Land in Northern Ghana. *GeoJournal*, Vol.75, No.2, pp 199-214.

Yin, R. K. (1982). Studying phenomenon and context across sites. *American Behavioral Scientist*, 26(1), 84-100.

Yin, R. K. (2003). *Applications of Case Study Research*. Second Edition. SAGE Publications Ltd., London.

Yin, R.K. (1994) Case Study Research: Design and Methods, Second Edition

Young-Hee, Y. (1998) Translation and validation of nursing interventions (NIC) in English and Korean. *Image Journal of Nursing Scholarship* 30(3): 261-4.

Websites

Daily Graphic (2013) Lonrho to construct oil, gas terminal at Atuabo http://graphic.com.gh/business/business-news/14081-lonrho-to-construct-oil-gas-terminal-at-atuabo.html (Accessed 10 January 2014).

Ghana Oil Watch http://ghanaoilwatch.org/index.php/ghana-oil-and-gas-news/439-construction-of-processing-plant-a-onshore-pipelines-ghana-gas-awards-contracts-in-january (Accessed 15 September 2013)

Ministry of Energy (2012) Relocation of Gas Processing Plant in National Interest. http://www.energymin.gov.gh/?p=496 (Accessed 25 October 2012).

http://www.ghanagas.com.gh/en/the-project/financing-plan.php (Accessed 15 September 2013).

http://www.ghanagas.com.gh/en/posts/technical-studies-sway-project-site-to-atuabo-15.php (Accessed 15 October 2012).

GhanaDistrict.com (2006) Western: Ellembelle District.

http://ghanadistricts.gov.gh/districts/?r=5&_=181&sa=7064 (Accessed 20 November 2013).

http://piazzadcara.wordpress.com/ (Accessed 20 April 2014).

Appendix 1: Interview guide for affected farmers

Vincent Kofi Asamoah (Student)

M.Phil, Development Geography, University of Bergen, Norway

Topic: The Emerging Oil and Gas sector in Ghana; Livelihood impact of the Ghana Gas project in Atuabo

Section A: Background Information 1. Age	No	1	Date	Location	
 Sex A. Male [] B. Female [] Marital Status A. Married [] B. Single [] C. Divorced [] D. Widow/er E. Others, specify	Section	n A: Background Info	rmation		
A. Male [] B. Female [] 3. Marital Status A. Married [] B. Single [] C. Divorced [] D. Widow/er E. Others, specify	1.	Age			
 3. Marital Status A. Married [] B. Single [] C. Divorced [] D. Widow/er E. Others, specify	2.	Sex			
A. Married [] B. Single [] C. Divorced [] D. Widow/er E. Others, specify		A. Male []	B. Female []		
A. Married [] B. Single [] C. Divorced [] D. Widow/er E. Others, specify					
E. Others, specify4. Number of children if any5. Educational Background	3.	Marital Status			
4. Number of children if any5. Educational Background		A. Married []	B. Single []	C. Divorced []	D. Widow/er []
5. Educational Background		E. Others, specify			
	4.	Number of children i	f any		
A Primary[] R ISS/MSLC[] C SSS/O/A" Levels[] D Ter	5.	Educational Backgro	ound		
71. Timmay [] D. Job/Mode [] C. Sos/O/A Levels [] D. Tel		A. Primary []	B. JSS/MSLC []	C. SSS/O/A" Levels	[] D. Tertiary [

6.	Place of Birth			
7.	Nationality			
8.	How long have you live here, why?			
9.	Members of your household			
Sectio	n B: Compensation and Compensation Regime			
1.	How did you gain access to the land you have just lost to the Ghana Gas Project?			
2.	How long have you been working on the land?			
3.	What kind of crops did you have on your land?			
4.	How much did you earn from your farm every month? GH¢			
5.	Did you lose other properties, can you name them?			
6.	Did you receive compensation for your crops, land and property?			
7.	When did you receive the compensation?			
8.	What form did it take?			
9.	How would you describe the compensation you received for the lost crops?			

10. V	Vhat in your view constitutes adequate compensation?
	Can you say that the compensation and your new livelihoods give you more income than efore?
 12. V 	What about other members of your household do they have improved income?
Section (C: involvement in the processes of compensation
Section	c. involvement in the processes of compensation
13. V	Vere you involved in determining what you received as your compensation?
14. F	Iow did the participation in the process take place?
15. V	What describes participation in the compensation process for you?
16. V	What did you suggest/would you have suggested as your ideal compensation for lost
	rops?
17. H	Iave you heard about Ghana Gas' Alternative Livelihood Impact Programme (ALIP)?

18	What have you received under this programme?
Sectio	n D: livelihoods, livelihood strategies and capabilities
19	How are you coping with the lost land, livelihood and property?
20	Do you think the compensation you received can enable you continue life as before the
20	farms were destroyed?
21	Has the compensation enabled you to find new types of work?
22	What skills do you have aside works relating to farming and fishing?
23	Do these skills help you find new works (income generating activity)?
24	Has the Ghana Gas provided you directly or indirectly with new work opportunities?
25	. Has Ghana Gas employed any member of your household or siblings?
26	What is your plan now, what work are you doing to earn a living now?

27.	What are do you plan to do in the near future?
28.	You might have had several expectations of this project, what are they, and to which
	extent have they been met at this stage?
29.	Can you expectations be met at a point in time?
30.	In general terms, how beneficial is the gas project to your community?

Appendix 2: Interview guide, Ghana Gas

- 1. How many people have been affected by the Ghana Gas Project (especially the early phase)?
- 2. What land area are we talking about?
- 3. What form of compensation did Ghana Gas pay to affected residents?
- 4. Who determines what is paid?
- 5. Do you think the compensation paid so far constitutes 'adequate compensation' for the lost livelihoods (crops-livelihoods and land-intergenerational inheritance.
- 6. To what extent were the affected farmers involved in the determination of what is paid?
- 7. How different is Ghana Gas' compensation regime from others associated with big projects in the country often criticized for being inadequate?
- 8. How would you describe the relations between your company and the host communities so far?
- 9. Do you think you have met the expectations of the communities at this stage?
- 10. Can we talk about Ghana Gas' Alternative Livelihood Project (ALIP), what exactly is in this package?
- 11. What about providing alternate land for affected farmers who want to continue farming as their livelihood?

- 12. To which extent were assets and priorities of the affected locals put into consideration in the design of the ALIP?
- 13. At which stage is the ALIP now?
- 14. Would you like to share with me other issues we have discussed?
- 15. Are you aware that some people did not receive compensation?

Appendix 3: Interview guide for Land Valuation Division of the Lands Commission

- 1. What is the total land size acquired for the Ghana Gas project at Atuabo?
- 2. How many people farmers have been affected?
- 3. What determines the value of a land?
- 4. How does the Division come to conclude on how much people are paid for their land?
- 5. Can you please take me through the processes of acquiring land compulsorily?
- 6. Now, let's concentrate on crops. How do you value crops/farms?
- 7. Do you think what your organization estimated constitutes 'adequate compensation' considering the loss of generational inheritance?
- 8. In your view, what constitutes 'adequate compensation?
- 9. In the case of Ghana Gas, do you think the amount the farmers received is adequate bearing in mind different types of crops we are talking about?
- 10. Often, we hear people who have received compensation complain about its inadequacy particularly when the acquiring agency is the government. What is wrong with Ghana's compensation regime?
- 11. Can one suggest you do as the government pleases?
- 12. To what extent would you say the farmers and the traditional authorities participated in the determination of the compensation?
- 13. Let us put it this way, the farmers believed your outfit do not understand the worth of their crops?

- 14. Who recommends if the farmers deserve an alternate land?
- 15. Where did your work end in the case of Ghana Gas?
- 16. Please can we talk briefly about the Lonrho Ports, what role is your organization playing in determination of compensation there?
- 17. Any other comments?

Appendix 4: Interview Guide for the Traditional Authorities

- 1. What is the role of the elders and the traditional council?
- 2. What role did the *Omanhene* and the traditional council play in bringing Ghana Gas to Atuabo?
- 3. Please I would like to know more about the land tenure system in the community
- 4. What is the arrangement between Ghana Gas and the Atuabo traditional area?
- 5. What is the view of the Omanhene and the traditional council about the compensation process (compensation for crops)?
- 6. What stage is the compensation for land?
- 7. What plans do you have for the money you will be receiving for the land?
- 8. Please what do you have to say about people's lost livelihoods?
- 9. What about other companies coming to Atuabo, How many so far?
- 10. The Lonrho Port Project sounds really interesting, can we talk about it?
- 11. In what ways is Lonrho Different from Ghana Gas in handling issues of compensation?
- 12. Can we please talk about employment avenues so far, how have your people fared?
- 13. What is the relationship between Ghana Gas and the traditional council?
- 14. So far, what benefit can you point to as coming to Atuabo because of the situation of Ghana Gas here at Atuabo?
- 15. Have you discuss the Ghana Gas' Alternative Livelihood Programmes with them, what inputs have you made?

16. How do you see Atuabo in the next five years?